Framing Sustainability in the Dutch Agricultural Context

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Summary

The Dutch government has introduced legislation surrounding the promotion of sustainable agriculture within the Netherlands as a result of climate change and international agreements to combat the consequences of this climate change. These policies have created confusion and frustrations among a large part of the agricultural sector and the environmentalist movement. As a result of a passive stance of the government, unclear wording in public statements by the government and conflicting interests within society, large disagreement has arisen in Dutch society about what sustainability in the agricultural context means and what should or should not be done to achieve sustainability. This disagreement is the result of different understandings of the same concept, something which Goffman (1974) dubbed “frames”. Through these different frames, the meaning of sustainable agriculture is contended, with these differing interpretations leading to tensions between farmers and environmentalists, culminating in the farmers' and environmental movement’s protests that have been happening for the last few years. Different framings of sustainable agriculture have clear effects on the political landscape of the Netherlands, beyond the protests. Previous research has shown that frame deployment can be used to influence public opinion to the point it can influence voting behaviour. Against the backdrop that current polling predicts that the BoerBurgerBeweging (a political party formed as a direct result of farmers feeling unheard in the societal debate on the future of agriculture) will win a large amount of seating in the upcoming House of Representatives election, this research set out to gain an understanding of which frames are present within the dutch agricultural discourse and to what extent these frames are dominant. This insight can bring a better understanding of the disagreements at the centre of the increasing polarisation of Dutch society around the future of Dutch farms.

We analysed the policy documents of 39 of the most influential voices in the debate, as identified by the Commission Remkes during the selection process for the government roundtable talks between Remkes, the agriculture sector and the environmentalist movement. Four differing frames of sustainable agriculture and their construction were identified as being particularly dominant among these 39 organisations. The “birds and bees” frame emphasises environmental sustainability as the cornerstone of sustainable agriculture, while the “future for farmers” frame emphasises economic sustainability. These two frames are particularly dominant within the discourse, with most of the 39 organisations subscribing to at least one of these frames to some extent. Most arguments used to construct or contest these framings are of economic or scientific background, with all camps presenting scientific or rational evidence of why their

understanding of sustainable agriculture is the correct one. But despite these strong arguments to support their claims, little debate is actually held. Most voices within the wider discourse are reluctant to engage in high-level arguments that attempt to discredit opposing frames, yet tensions between the four camps nevertheless persist. Despite a certain level of tension, with several attacks and constant contestations, between these two frames, there is also a strong force that is trying to connect these two camps into one. Organisations like Greenpeace and Natuur & Milieu try to connect the two frames by acknowledging the concerns for environmental and economic sustainability as being of equal importance. These organisations focus on trying to find common ground and promoting cooperation across the board to find a solution to the present-day problems of polarisation and frustration surrounding the wider agricultural issue.

These results are consistent with other research that similarly found that sustainable agriculture is commonly defined as a form of agriculture that meets the requirements for environmental, economic and social sustainability at the same time, with slightly less concern for social sustainability compared to the other forms. Given the correspondence of the results with previous research, the results can likely be reliably generalised to the border discourse. Despite the solid results, we still conclude with recommendations for further research to confirm our results and to analyse how the discourse is going to change as a result of the ongoing protests, court cases and election run-up.

A common understanding of sustainable agriculture should be possible. Practically, this suggests that if any frame can win over a large number of supporters, they may be able to create a common ground frame and a policy plan that appeals to both farmers and environmentalists. But given the impasse we're in right now, this is still a long way off.

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Chapter 1: Introduction

The way we grow and consume our food influences human health as well as the health of the world we live in (Seguin et al., 2007). If farmers grow crops through monoculture or intensive cropping regimes then the soil becomes depleted of micronutrients (Dala et al., 1997) and those lands lose their fertility not just for crops, but for all plant life (Harvey & Pimentel, 1996). If the farmers make extensive use of fertiliser to offset nutrient depletion, then this can lead to run-off of nitrogen-rich particles into groundwater or river water systems, causing eutrophication (Dokulil & Teubner, 2010). This leads to the growth of certain algae in water systems that drain the water of oxygen which in turn causes mass starvation of plankton, other microorganisms, plantlife and the fish that depend on them for nourishment (Carpenter (2005). Industrial farming practices specifically are responsible for high levels of greenhouse-gas emissions (EEA, 2022), groundwater pollution through eutrophication (Withers & Haygarth, 2007) and soil depletion (Dala et al., 1997). As a result of the latter foodstuffs are becoming less nutrient-dense, meaning people have to consume more to get the same levels of sustenance as time goes on (Davis et al., 2004), further increasing the pressure on the environment. Agriculture is thus intrinsically linked to the health of the planet and the humans and non-human beings who live on that planet (Hawkes & Ruel, 2006).

In 2015, the United Nations adopted the Sustainable Development Goals (SDGs) as a set of 17 worldwide goals to work towards as a global community, to build a better world for all. The goal of these SDGs was to ensure the world we live in will be characterised by a healthy and sustainable environment and society. Sustainability is defined as “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987). As farming strongly impacts the health of the environment and the humans and non-human beings living in that environment, the United Nations paid a lot of attention to agricultural practices in defining their 17 SDGs. SDG 12 (Responsible Consumption & Production), SDG 15 (Life on Land) and SDG 2 (Zero Hunger) are directly linked to agricultural practices (amongst other things), while SDG 11 (Sustainable Cities & Communities), SDG 12 (Responsible Consumption & Production), SDG 13 (Climate Action) and SDG 6 (Clean Water and Sanitation) are indirectly linked to agricultural practices as well. This means that farming practices are related to 7 of the 17 SDGs, which shows the importance of achieving a sustainable agricultural system for the world. But, while there is some consensus on the targets set out by the SDGs, what types of food system interventions will help achieve these goals are less clear and politically contested.

When examining the Brundtland definition of sustainability adopted by the UN and the EU (through the EU's adoption of the UN framework) of "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987) it becomes clear that sustainable agriculture is already a multifaceted concept. This is visible in the SDGs as well, where there is a contrast between SDGs 2 (Zero Hunger) and 15 (Life on Land) (Van Soesbergen et al., 2018); one aims to ensure the needs of future generations in terms of food are met (e.g. increasing agricultural production), while the other aims to ensure the environmental impact of agricultural practices is minimised. This means there is a dilemma of whether sustainable agriculture should prioritise citizens or climate.

Most Western countries, who face fewer internal problems with hunger and see SDG 2 (Zero Hunger) as more of an affair in the rest of the world (Yang et al., 2020), prioritise SDG 15 (Life on Land) and see sustainability as very much an environmental affair. This is further evidenced by the 2015 adaptation of the Paris Agreement at the 21st United Nations Conference of the Parties (COP21) on the 12th of December 2015. This, legally binding, agreement between 196 countries, of which the Netherlands are a part, aims to fight global warming and works towards achieving the climate-related SDGs in an international context. As a signatory of the agreement, the Netherlands are required to work towards several goals. One of them is the decarbonisation of land use (agriculture), which was further explicated in the 2021 COP26 meeting in Glasgow (UNFCCC, 2021). Through the EU adoption and integration of the Paris Agreement, the Netherlands are required by European Law, through the Farm-to-Fork strategy of the European Green Deal (European Commission, n.d.) and the Fit for 55 Package (European Commission, 2021), to ensure net-zero emissions in the Land Use, Land Use Change and Forestry (LULUCF) sector by 2030. These commitments suggest a large reduction in net greenhouse gas emissions related to land use, including agricultural land use. However, plans like the farm to fork strategy and the landbouwakkoord are continually contested which highlights the importance that while objectives remain somewhat neutral, the pathways to change are deeply fraught.

Achieving a state of sustainable agriculture, and sustainability more broadly in society too, are important policy goals of the Dutch government (Adema, 2022). Climate change has made it clear that current practices of intensive, polluting forms of bio-industry are not sustainable for the environment or the people, and the Paris Agreement and the European Green Deal and Farm-to-Fork Strategy legally require the Netherlands to decarbonise agricultural practices. From a legal perspective, the Netherlands are free to decide for themselves how to achieve these climate targets; either by increasing forest coverage to increase GHG intakes or by reducing agricultural GHG emissions. Effectively,

the Dutch Government has decided to reduce agricultural GHG emissions by subsidising various possible practices within agriculture that allow farmers to decarbonise their yields (this includes subsidisation for closing down carbon-intensive pig farms, subsidisation for turning small parts of farmland into biodiversity havens amongst many possibilities) (Ministerie van Algemene Zaken, 2023b). The core logic of the current Dutch sustainable agriculture policy promotes freedom for farmers to choose how to achieve GHG emissions reductions and to assist them in doing so (Ministerie van Algemene Zaken, 2023a). However, this freedom might pose a threat to the ability of the country to reach its objectives if this freedom continues to allow farmers to engage in practices that are ultimately counterproductive to the Dutch climate targets.

The Dutch government has held a very broad view of what sustainable agriculture is, as evidenced by numerous governmental reports and publications (Ministerie van Economische Zaken, 2014; Ministerie van Algemene Zaken, 2023a; Adema, 2022). As a result of these internal unclarities on what sustainable agriculture specifically means, and the Dutch government's decision to give farmers the freedom to choose for themselves how to achieve sustainable agricultural practices (as long as they decarbonise their production), sustainable agriculture has become a contested concept. These contestations have served to divide the agricultural community and have served to agitate some farmers who felt confused about what was expected or demanded of them (Grinwis, 2022). This has made it unclear what forms of sustainable agriculture farmers are working towards or should be working towards to stay in line with the Dutch government's policy of making Dutch farms "more sustainable" (Adema, 2022), and in turn with the legally binding Dutch climate goals under the European Green Deal. The Dutch government has, however, faced multiple court cases from various actors accusing the government of actually failing to productively work to achieve the climate targets of a sustainable agricultural sector. These accusers have stated that the government's policies on GHG emissions, particularly of nitrogen (Urgenda, 2023), have been so hesitant and aloof that they are not contributing to a sustainable future through emissions reductions in amongst other land use practices (Urgenda, 2023). One of these major court cases is still ongoing as of July 2023 (Bolle, 2023). Another court case in 2019 was decided in favour of the accuser, which forced the government to amend its laws on nitrogen emissions to much stricter policies regarding agricultural practices (Raad van State, 2019).

As a result of these agricultural policies, the Netherlands has experienced a series of farmers' protests, as well as a series of environmental protests over the last few years. Farmers have been calling the push for GHG emissions reductions a threat and an injustice to farmers (ZLTO, 2022), often claiming that there are other ways to achieve environmental goals (such as emissions reductions in sectors like construction or

transport (Bestuur FDF, 2020)). Environmental groups have criticised the current Dutch policies from the opposite side, by claiming that the government should make clearer and stricter rules to force the Dutch agricultural sector to reduce emissions (Urgenda, 2023).

These voices have become loud parts of the wider agricultural discourse, with the farmers' protests becoming almost a daily part of news media publications at the height of the protests in 2022. Through the attention given to these voices, they have a real effect on the future of the Dutch agricultural sector. Previous research by Jensen & Singh (2014) concluded that the way agricultural policies are framed as either negative or positive for farmers influences the broader public support for pro-farmer politicians and policies. Policies or politicians that claim to want to improve the conditions for farmers gain support by framing current policies as being less favourable to farmers. Similar research by Kangas et al. (2013) concluded that the framing of broader political issues can have a clear effect on policy formation and change. Kangas et al. stated that by simplifying issues and appealing to moral sentiment, (political) actors can shift public opinion on certain issues and garner that public support to enact or prevent political reforms (Kangas et al, 2013). Both studies thus show that framing particular policies as ‘problems’ or ‘solutions’ have a real and observable effect on public opinion of policies and politicians. Public opinion in turn influences voting behaviour, which has a real effect on future policies. In the Netherlands, we have possibly seen this effect after the large farmers’ protest of 2022, as the BoerBurgerBeweging (a political party formed in 2019 for the specific purpose of promoting farmers’ interests (BoerBurgerBeweging, 2023)) became the largest party of the Dutch Senate (Eerste Kamer) in the elections of 2023 (Kiesraad, 2023). The BBB currently polls at about 20 to 26 seats for the House of Representatives (Peilingwijzer, 2023), which could make it the biggest party of both houses of parliament at the next election (upcoming on the 22nd of November of 2023). The political power of framing in the agricultural discourse is therefore quite visible.

1.1 Power and Relevance of Framing

Research by Rust et al. (2021) has previously researched the effect that the framings of sustainable agriculture had in the UK. They noted that British farmers were influenced in their views and practices to a large extent by the way certain agricultural practices were framed by other farmers (Rust et al., 2021). Rust et al. (2021) set out to uncover the effects of media framing of sustainable agriculture practices on the adaptation of said practices by farmers. However, they found that rather than relying on press coverage, most farmers primarily relied on other farmers for information and experience on which they would base their decision to (not) adopt certain farming practices. This demonstrates the influence that framings of sustainable agriculture can have on the agricultural system, and thus the importance of understanding the way these framings are enacted.

Strongly related to this, Hofstra (2021) has previously researched the way the framing of intensive livestock farming in the Netherlands has evolved between 2017 and 2021. She found that from 2017-2021 the dominant discourses and frames surrounding intensive livestock farming have made a consistent shift towards a dominance of sustainability frames and discourses. Her conclusion that sustainability frames were a dominant presence in the agricultural discourse left a clear gap in the literature, it proved that “sustainability” had become an important goal for Dutch (livestock) farmers but what sustainability exactly meant in this debate was left open. This research, therefore, set out to build upon these findings and expand the understanding of the dominant discourses and framings within the Dutch agricultural sector.

Understanding the framing present within the agricultural discourse is a first step towards understanding the broader political implications on the politics and the practices of farming in the Netherlands. In this research, we, therefore, set out to come to a basic understanding of the dominant framings present within the discourse on sustainable agriculture, specifically the discourse on what sustainable agriculture even is. Uncovering these prevalent framings surrounding sustainable farming is highly relevant. Gaining insight into the contestations and framings in the discourse about sustainable agriculture helps to build an understanding of the voices within the discourse. It helps create an understanding of why farmers are faced with what Weituschat et al. (2022) called “cognitive lock-ins”. According to this research, these lock-ins occur when certain farming practices are perceived or framed to be at odds with a farmer’s goal (why he is a farmer; making a living, improving the world or something else) (Weituschat et al., 2022). Practices that are perceived to be at odds with goals are rejected. This rejection based on merely a perception, or framing, of these practices creates lock-ins when it keeps farmers

from adopting new practices and strongly holding on to old and tested methods (Weituschat et al., 2022). Understanding the framings and perceptions at the basis of these lock-ins serves as a first step to building an understanding of the debate around sustainable agriculture and the disagreements about what practices should be adopted. Consequently, this same insight can also serve as a frame of reference that can be used to analyse specific discursive utterances, media publications or political statements themselves. This foundational insight thus gives people a better understanding of the voices and arguments within the broader agricultural discourse, which can help nuance the debate and combat the polarisation that is increasingly being seen as a problem by Dutch public organisations (Lohman & Boersma, 2019; Haukes, 2023).

1.2 Research Set-Up

This research aimed to discover how the concept of sustainable agriculture is framed and contested within the Dutch agricultural discourse, and how these framings and contestations are constructed and defended in the same discourse. By uncovering the framings within and behind the popular discourse on sustainable agriculture in the Netherlands, a first step is made towards understanding the forces that determine the very future of the Dutch agricultural sector.

To help uncover the framings that lay at the foundation of the debate and discourse surrounding the meaning and implementation of sustainable agricultural practices in the Netherlands, this research used the following research question:

How is sustainable agriculture framed in the Dutch farming context?

To help answer this question we looked at three important aspects of frame construction that shape the overall framing of sustainable agriculture within sustainable agriculture discourse. This discourse takes place across Dutch society, but its primary stage is the government-led talks surrounding the nitrogen crisis, the landbouwakkoord and the Dutch climate goals. Because of the focus on agriculture, this research specifically looked into the statements put out by the voices that are part of the talks about the landbouwakkoord. First, we looked at which frames were constructed by these organisations within the discourse on sustainable agriculture, and to which extent each of these frames has become widespread or dominant within the discourse. Second, we looked at the extent to which these frames were (dis)similar to each other. Researching to which extent different frames relate to one another helped to demarcate where there is conflict and where there is consensus between frames and thus between the actors that deploy these frames. Last, we looked at the way these frames are constructed and defended as well as how

opposing frames were attacked. By discovering the arguments and tactics used by actors to situate their frames within the national discourse, we could place the frames within the specific Dutch context and draw conclusions about the interactions and relations across different frames and actors. This gives a better understanding of the agricultural discourse, which can potentially be the first step of moving to a solution to the current stalemate in the debate.

In the following sections we first present an overview and brief discussion of the literature on the framing of agricultural practices. Then we describe the theoretical framework and the methods employed by this study. We then discuss the results of the research, followed by a discussion of the results and lastly a conclusion and suggestions for further research.

Chapter 2: Theory & Literature

The central theory of this theory was framing theory. The sociologist Goffman introduced Frame Analysis in 1974 (Goffman, 1974). In sociology frame analysis is used as a tool to get an understanding of how people construct the world around them, how they give meaning to their practices and routines and how they make sense of the world (Cacciatore et al. 2015). Frames are in essence glasses through which people look at certain situations or states of being. Frames can affect how individuals understand and interpret news stories, political messages, social issues, and various forms of communication. They help individuals organise complex information and make it more manageable by highlighting certain aspects while downplaying others. Communication researcher Jim A. Kuypers defined framing (as a verb) as the construction of these frames that filter information or perceptions in specific ways.

> *Framing is a process whereby communicators, consciously or unconsciously, act to construct a point of view that encourages the facts of a given situation to be interpreted by others in a particular manner. Frames operate in four key ways: they define problems, diagnose causes, make moral judgments, and suggest remedies. Frames are often found within a narrative account of an issue or event, and are generally the central organizing idea. (Kuypers, 2007, page 8)*

But this definition of framing in itself is already contested. Some authors believe the meaning of framing has become so ambiguous that it is best to drop the term altogether (Cacciatore et al., 2015). In his 2001 research into framing, Duckman found multiple definitions in the contemporary literature of the day; from *principles of [information] selection to the way a story is written* (Druckman, 2001, n.p.). This shows that it is incredibly important to establish a clear definition of framing and related terms in regard to the way this research will be using them.

Because this research made use of the sociological version of framing analysis as first developed by Goffman, related concepts were defined as closely to Goffman's original theory as possible. In his book, Goffman defined a frame as a *schemata of interpretation that can be called primary* (Goffman, 1974). With primary meaning that it does not depend on earlier interpretations; it does not twist the meaning of a thing, but rather it gives new meaning to a previously meaningless thing. Goffman considered frames to be a very broad concept; ranging from entire systems of rules to mere perspectives on things. In this research everything in that range was regarded as constituting a frame. A frame is thus a narrative or interpretation of something or multiple somethings. Different frames will interpret or see a certain concept or object in different ways, and it is through observing

these different interpretations that a frame can be uncovered. As a result, frame analysis consists of both uncovering where frames exist as well as uncovering how they are constructed, defended and adjusted. This means that frames need to be analysed not just on their prevalence and power over the structures of society, but also on their ontological and normative grounds. What claims do the frames in question make? How do they justify these claims? How do they discredit other frames or promote their own claims as the right ones?

Framing serves to define and convince others of what is or isn't a problem, and what possible causes or solutions can be assigned to these problems. When these frames get spread around and more people adopt them, they become influential. Beyond shaping broader discourse through their reach, frames have a real influence on the world. The earlier mentioned research conducted by Jensen & Singh (2014) highlights that how agricultural policies are presented, as positive or negative for farmers, impacts public support for supposedly pro-farmer politicians and policies. This influence occurs when policies aiming to enhance farmer conditions (policies framed as solutions) gain backing by contrasting them with less favourable current policies (policies framed as a problem that needs to be solved). Similarly, Kangas et al. (2013) found that framing broader political issues can significantly shape policy development and change. Simplification of issues and appealing to moral sentiment enables political actors to influence public opinion, thus gaining support to enact or prevent political reforms. Both studies emphasise the significant role of framing policies as `problems' or 'solutions' in shaping public opinion, subsequently affecting voting behaviour and future policies. This influence of framing on public opinion and consequently on public policy is corroborated by the broader research on framing theory (Chong & Druckman, 2007; Homar & Cvelbar, 2021; Mossler et al., 2017). The broader literature suggests that the link between framing and policy is salient in climate-related policies, where framings create narratives about what situations are or are not problematic and what possible solutions exist.

Given this understanding that there is a clear and strong link between framing on one hand and policy on the other hand and that the goal of this research was to gain a specific understanding of the dominant framings in the Dutch sustainable agriculture discourse as a first step to understanding this link, we looked at studies that have previously identified and analysed particularly dominant framings of sustainable agriculture in broader contexts. Particularly, two important studies have analysed the different framings of what sustainable agriculture means within the sustainable agriculture literature and academia (Gan et al, 2022) and within sustainable agriculture evaluating mechanisms in the European Union (Slätmo et al, 2017). The research by Gan et al. focused on framings in the context of a debate surrounding Controlled Environment

Agriculture (CEA), while the research of Slätmo et al. focused on framings in the context of European sustainability-assessment frameworks and the assumption and claims that serve as the basis of these frameworks. These two studies were thought to be highly relevant because they provide an 'outside' and expert view on the agricultural framing-policy interlink. These outside, expert views would form the basis of narrowing down the search for similar framings from within the specific Dutch agricultural discourse within the confines of this research.

Research by Gan et al. set out to analyse the way sustainable agriculture is framed, specifically how Controlled Environment Agriculture (CEA) was framed as belonging to this sustainable agriculture in the scientific literature. Their research involved a frame analysis of 346 scientific articles divided into three groups to reflect the three different parts of their research. 49 articles were used to analyse the framing of sustainability as a holistic concept, 189 articles were used to analyse the framing of CEA as a form of sustainable agriculture and 108 articles were used to analyse the perception of CEA and its sustainability by consumers. Gan et al. concluded based on these articles that sustainability in regard to agriculture was dominantly framed based on a so-called "three pillar conceptualisation of sustainability "(Gan et al., 2022, page 5). The three pillars of sustainability were explained as environmental/ecological sustainability (*situation where human activity is conducted to conserve functions of the Earth's ecosystem* (page 5)), economic sustainability (the long-term *ability of production systems to provide goods and services* (page 5)) and social sustainability (*equity within and between generations, and within and between diverse ethnic and social groups* (page 6)). A fourth pillar, cultural sustainability (*maintaining cultural vitality and preserving cultural identities for future generations through the protection of cultural heritage* (page 7)), was identified as an emerging and relatively new framing of sustainability. This research concluded that the narrative surrounding sustainable agriculture was primarily built on the need to increase agricultural inputs under increasing input constraints (page 12). The three primary pillars of sustainability in agriculture identified within the research were later used as an anchor point during the data analysis phase of this research.

Analysis by Slätmo et al. (2017) discussed the increasing interest in steering European agriculture towards a sustainable future in the scientific community. A shift in governing practices from a focus solely on production maximisation to a more diverse approach that includes promoting alternative farming values such as organic and ethical standards is supported within policy and scientific documents. Consequently, this shift requires a new way to assess the current sustainability of farms and the possible options to improve this sustainability. Slätmo et al. believed that the different frameworks that currently exist for these tasks operated in a potential arena for competition (page 378) and

that the different ways in which they frame sustainable agriculture should be scrutinised. Their research set out to accomplish this by using frame analysis to uncover the framings of sustainable agriculture within three specific frameworks for agricultural sustainability assessment (Durabilité des Exploitations Agricoles (IDEA), Response-Induced Sustainability Evaluation (RISE), and Sustainability Assessment of Food and Agricultural systems (SAFA)). Similarly to the research by Gan et al, this research concluded that all three frameworks define sustainable agriculture as a combination of environmental (low-climate impact), economic (low risk and decent financial returns) and social (equity) sustainability. Slätmo et al. concluded that of these three parts of the common framing of sustainable agriculture, the social sustainability aspects were given much less attention than the other two. They argued this might be the result of a reductionist approach to research (page 380).

Both Gan et al. (2022) and Slätmo et al. (2017) researched the way sustainable agriculture is framed within the contexts of respectively Controlled Environment Agriculture policy and sustainable agriculture assessment in Europe. Both studies came to the same conclusions of sustainable agriculture being framed as a trio of ecological sustainability, economic sustainability and social sustainability; three sides of the same coin. These studies were both conducted on scientific articles published by experts in the fields. Therefore the results of these studies served as a frame of reference for this study's research into framing being done by non-experts in the Dutch agricultural context. Based on the findings of this previous research into the framing of sustainable agriculture, it was hypothesised that in the Dutch context, the same framings of sustainable agriculture would be found: economic sustainability, environmental sustainability and social sustainability are all important and required parts of sustainable agriculture. Additionally, it was expected that agricultural organisations would identify more strongly with the aspect of economic sustainability, which impacts farmers more directly than the other two forms, while environmental organisations were expected to identify more strongly with environmental sustainability.

Based on these findings from the studies of both Gan et al. (2022) and Slätmo et al. (2017) and the expectations these findings led to, we set out to perform similar research in the context of the Dutch sustainable agriculture discourse. Similar to the previous research, we used frame analysis to do so. The following chapter provides a comprehensive overview of the research design, data collection method and analytical techniques used to perform this research.

Chapter 3: Methods & Data

To discover which frames are deployed in the sustainable farming debate, how these frames are supported and defended, by whom they are contested and to what extent they overlap or oppose each other, this research made use of frame analysis, a form of qualitative approach. Frame analysis is a research method with broad applicability (Björnehed & Erikson, 2018). Framing analysis gives insight into the communication of ideas on multiple levels, as compared to the single-level methods of discourse analysis or linguistic analysis (Goffman, 1974; Skillington, 2023). This allows for a deeper understanding of the ideas and beliefs present within the discourse than would be possible with other, similar methods (Goffman, 1974; Skillington, 2023). Thus frame analysis was judged to be the best-fitting methodological approach for answering the main research question of our research.

Frame analysis consists of discovering the crucial components of a frame, how these components relate to one another, and how the total frame affects how people perceive a certain subject. To discover these elements all manner of communication can be analysed; political speeches, media statements, public debates or policy documents. The use of frame analysis helps to *conceptualise the relevant documents into operationalizable dimensions - syntactical, script, thematic, and rhetorical structures—so that evidence of the news media's framing of issues in news texts may be gathered (*Pan & Kosicki, 1993). That is to say, that frame analysis is a constructivist way of analysing discourse in order to uncover the meaning that people give to certain phrases, concepts or words. Analysis of the different discursive elements (themes, concepts, rhetorical devices and arguments) present within a text thus makes it possible to construct a broad understanding of the framings present within that text.

In order to best analyse the framings of sustainable agriculture present within the agricultural discourse, we looked at statements produced by big and influential voices within the larger debate. By looking at statements directly produced by the very actors whose framings we want to analyse, we ensure that there is no third-party interference that might be present within for example media publications. Compared with the previous research by Gan et al. (2022), which served as an aggregate review of scientific publications with less control for bias and selectivity by the publications, by directly analysing primary data we can minimise issues of bias or missing information that occur when the data is filtered through a third-party publicist with its own frames on the issue. This way data quality is maximised and validity is ensured.

The primary data used for this research consisted of two groups of documents. The first group consisted of policy documents from a certain number of agricultural and

environmental organisations that were either themselves involved in informal talks with the Dutch national government about the nitrogen crisis or the landbouwakkoord, or that were related to or represented by these former organisations. The talks between agricultural and environmental organisations and the government were led by Johan Remkes (Adviescollege Stikstofproblematiek, 2020)) who was interested in co-producing a solution to the nitrogen crisis (these talks produced a governmental report on the nitrogen crisis that while in itself unrelated to this research, still serves as an argument for the relevance of the organisation involved (Remkes, 2022)). These talks, held in August of 2022, aimed to create a mutual understanding of the future of Dutch sustainable agriculture and to foster cooperation in working towards this future (Van Rooijen, 2022). The participating agricultural and environmental organisations were selected by the Government based on representation (together these organisations represent the majority of Dutch farmers). The LTO not only represented their own members but also a handful of other agricultural organisations that let the LTO represent their voices in the talks. As such the participants of these roundtables represent big players in Dutch agriculture and the way they frame sustainable agriculture has a wide reach. In the confines of this research, it was therefore believed that these organisations represent the dominant voices in sustainable agriculture discourse.

The second group of documents consisted of the mission & vision statements of 12 provincial coalitions of environmental organisations, Greenpeace and MilieuDefensie. These represent a number of environmental organisations that were involved in talks about the future of land use in the Netherlands with Johan Remkes around the same time as well. Selection by Johan Remkes for these talks was again judged as a testament to the reach and influence of these organisations in the wider discourse. In the case of MilieuDefensie, who have not published a document or web post clearly outlining their views about sustainable agriculture, a selection of 3 articles explicating their views about the subject (acquired through searching their website for articles about *duurzame landbouw*) was used instead.

To complete the data, document/discourse analysis of the notes made during a conference of sustainable farmers (Toekomstboeren) on the 17th of February in Amsterdam was used to supplement the above-mentioned documents. This resulted in the following end list of organisations

Organisation	Documents	Description
LTO	D45, 44, 43	LTO is a farmers' interest group that represents 35.000 Dutch farmers and horticulturalists. It has represented farmers in policy discussions since 1995.
Farmers Defense Force (FDF)	D13	FDF is a farmers' interest group created in 2019 to advocate for farmers rights in the wake of the nitrogen crisis.
Nederlandse Akkerbouw Vakbond (NAV)	D7	NAV is a labour union for Dutch crop farmers.
Agractie (AGRA)	D23	Agractie is a farmers' interest group created in 2019 to advocate for farmers rights in the wake of the nitrogen crisis.
Nederlandse Melkveehouders Vakbond (NMV)	D35	NMV is a labour union for Dutch dairy farmers.
Bionext (BION)	D10	BioNext is an advocacy and interest group for biological farmers in the Netherlands.
BoerenNatuur (BONA)	D1	BoerenNatuur is an umbrella organisation assisting a total of 11.000 farmers in practising nature-inclusive agriculture.
Caring Farmers (CAFA)	D36	CaFa is an advocacy and interest group for nature-inclusive farming in the Netherlands.
Demeter (DEM)	D27	Demeter is an advocacy group for biodynamic farmers, well-known for their animal rights quality mark they give to animal-based consumer goods.
Federatie Agro-Ecologische Boeren (AEB)	D22	FAEB is an advocacy and interest group for agro-ecology in the Netherlands.
Sectorraad Paarden (SEPA)	D40	SePa is an interest group for all Dutch organisations that work with horses from horse farmers to horse riding schools.
TransitieCoalitie Voedsel (TCV)	D41	TCV is a coalition of private and public entities that cooperate in working towards the sustainable agriculture transition.
Vereniging Agrarisch Landschap Achterhoek (VALA)	D30	VALA is a cooperative group of 900 farmers in the Achterhoek-region working together to practise nature-inclusive agriculture.
Netwerk GRONDig (GRO)	D42	Network GRONDig is an advocacy group for non-intensive/free range dairy farming.
Toekomstboeren (TB)	D24	TB is an advocacy group for agro-ecology and social justice in the Dutch agricultural context.
Dynamisch Perspectief (DS)	D26	DS is the newspaper for the members of the biodynamic farming advocacy group BD-Vereniging.
Wij-Land (WL)	D21	Wij-Land is a network of over 150 farmers and experts in the area between Amsterdam and Utrecht, who cooperate on matters of sustainability.

Plattelandscoöperatie Peel & Maas (PPM)	D20	PPM is a cooperative of 400 farmers in Limburg who work towards profitable and sustainable agriculture.
Wikifarmer Nederland (WFN)	D5	WFN is an advocacy group and knowledge vault for all farmers that distributes knowledge to and about farmers.
Innovatief Platteland (IP)	D19	IP is an advocacy group for sustainable agriculture in Limburg.
Landbouw met Natuur (LMN)	D38	LN is a knowledge vault for farmers who (want to) practise nature-inclusive agriculture or agroforestry.
Natuurinclusieve Landbouw Limburg (NLL)	D2	NLL is a network of private and public organisations that work towards nature-inclusive agriculture in Limburg.
Coöperatie Natuurrijk Limburg (CNL)	D18	CNL is a cooperative of nature-inclusive farmers in Limburg.
Natuur & Milieu (NM)	D17	NM is an environmentalist organisation that considers a sustainable agriculture transition one of its main goals.
Natuur- & Milieufederatie Gelderland (NMG)	D4	NMG is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Gelderland.
Natuur- & Milieufederatie Noord-Holland (NMNH)	D6	NMNH is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Noord-Holland.
Brabantse Milieufederatie (BMF)	D8, 11	BMF is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Brabant.
Natuur- & Milieufederatie Utrecht (NMU)	D12	NMU is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Utrecht.
Zeeuwse Milieufederatie (ZMF)	D14	ZMF is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Zeeland.
Natuur- & Milieufederatie Flevoland (NMF)	D28	NMF is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Flevoland.
Natuur- & Milieufederatie Drenthe (NMD)	D29	NMD is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Drenthe.
Natuur- & Milieufederatie Groningen (NMGro)	D31	NMGro is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Groningen.
Natuur- & Milieufederatie Overijssel (NMO)	D32	NMO is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Overijssel.
Natuur- & Milieufederatie Zuid-Holland (NMZH)	D33	NMZH is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Zuid-Holland.
Natuur- & Milieufederatie Limburg (NML)	D34	NML is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Limburg.
Friese Milieufederatie (FMF)	D37	FMF is a coalition of environmentalist organisations working on environmental preservation and sustainable land use in Friesland.
Greenpeace (GP)	D9	GP is an environmentalist organisation that advocates for the rights and future of nature and the environment.
Milieudefensie (MD)	D3, 15, 25	MD is an environmentalist organisation that advocates for the rights and future of nature and the environment.
Duurzaam MBO (DMBO)	D39	DMBO is an advocacy group that advocates for educating people about sustainability in MBO education.

Through document analysis relevant frames were discovered, identified and quantified. The documents were first coded through open coding in Atlas.ti 23.1.1 in two rounds of coding. Firstly all documents were coded with dummy codes reflecting which organisation had authored them (see code group “Organisations”). This helped identify which organisation was linked to which frames later on. The second round of coding consisted of identifying thematic and rhetoric elements within the texts and using open coding to identify these themes/concepts and rhetorics. Some common themes found include: “agriculture”, “environment”, “sustainability” and “biodiversity”. Some themes such as agriculture, environment and sustainability were very common in the documents (being present in nearly every document), while other themes were very specific such as “human manure” which was only mentioned in 2/44 documents. The codes created and assigned in this second round of coding were all descriptors of either broader themes such as “farmers’ interests” or specific concepts directly mentioned as being either a problem or a solution to a possible problem. Afterwards, emergent concepts were refined, resulting in the merging and splitting of certain redundant codes. For example, codes relating to ‘fairness’, ‘human health’, ‘biodiversity’ or ‘fair prices for farmers’ were all combined into singular codes, while codes such as ‘environmental health’ and ‘environmental healing’ were separated into two independent codes to be more precise. A third round of coding then took place with all the final codes. Afterwards, several documents were added to the analysis, grouped together in the document group “Extra”. These documents constitute policy documents of related agricultural or environmental organisations that were mentioned either within the first set of documents as important players in the field or were mentioned as important partners on the websites of the organisation within the first document group. This second group of documents served to confirm that a proper level of saturation of concepts was reached before proceeding to the frame analysis proper. These documents (grouped under the document group “Extra Documents”) were then coded with the final codes that arose out of the coding of the original documents.

Afterwards, codes were grouped into multiple layers of code groups based on subject. Just shy of 40 codes were left ungrouped afterwards. With an average groundedness of less than 4 (meaning these codes were used on average less than 4 times each), these codes were judged to be less relevant for the analysis. All the left-over codes and code groups were analysed on co-occurrence and connections to determine which codes were related to each other in substance (whereas the relations indicated by code groups are based on subject, rather than substance). On the resulting data, frame analysis was performed.

Chapter 4: Results

4.1 General Results

The agricultural sector in the Netherlands is highly productive, but it also has issues with environmental sustainability. Discussions frequently centre on the use of pesticides and fertilisers, soil health, greenhouse gas emissions, water management, and the effects of intensive farming techniques on the environment. Agriculture production and environmental protection have been the subject of continuous discussions. The various farmers' and environmentalists' protests that have been occuring are testament to this. Organisations linked to the LTO (LTO, FDF, NAV, AGRAC and NMV (Van Rooijen, 2022)) have been protesting against environmental policies, which they perceive and frame as being mistaken and dangerous for farmers (Bestuur FDF, 2020), while environmentally aligned (agricultural) organisations such as Greenpeace have been protesting these same policies for not being effective enough (Bolle, 2023). The anger in the agricultural community was palpable at the Toekomstboeren conference in Amsterdam on the 17th of february. Farmers on all sides are angry at the current state of things and do not believe that present policies are effective in making Dutch farms more sustainable. It is against the backdrop of this anger and disagreement that most of the policy documents we analysed were drawn up, and it is against this backdrop that these organisations framed their own understanding of what sustainable agriculture means.

Analysis of the documents resulted in 379 codes and 816 quotations, varying in size between a sentence and a whole paragraph (the full list of codes and the list of quotations referenced in the body of this research are listed under appendices A and B). Not surprisingly the most common codes are “Agriculture” and “Environment” with 466 and 372 occurrences respectively. That means that between 40% and 50% of all quotations directly mentioned or referred to either agriculture or the environment. These two codes co-occur only 95 times, however. Looking at the code groups “Environment” and “Agricultural System”, which served as aggregators of all codes related to respectively the environment and agriculture, occurrences grew to 769 and 580, while co-occurrence grew to 560. This means that within the data about 60%-70% of all quotations are related to farming practices (code group: Agricultural System) and the way these practices relate to and impact the environment (code group: environment). Based on these numbers it was deducted that the data was sufficiently related to the subject at hand and therefore relevant to answer the research question.

Before moving on to the results of the research in regards to the research questions, it is relevant to acknowledge a few general observations about the data. To start off it was observed that large parts of the documents contained wording that could still be considered to be rather vague. For example, defining sustainable agriculture as a form of agriculture that ensures a good quality of *Health for soil, plantlife, animals, humans and the planet* (quotation 10:3), is still open for interpretation. In this example a concept like soil health was not explained, and this was a common occurrence within the data. The contingent concept of "sustainable agriculture", was commonly defined and framed by using other contingent terms such as "health" and "fairness", which still left a lot of room for uncertainty, interpretation and in the end: debate. It is therefore important to understand before the results are explicated in this paper, that there is still a certain level of subjective interpretation within these results. This will be further explained in chapter 5 as well, but it is important to mention before the results section as well.

Another observation to make is the importance of cooperation and a sense of community within the data. Codes relating to cooperation between organisations and peoples, to network building and to togetherness as a necessity for bringing about sustainable agriculture (whatever it is framed to be) occurred over 200 times. This relates to the philosophical concept of "Plurality" (Arendt, 1958). Philosopher Arendt held that human Action (the means through which people express themselves; so this includes beliefs and the way people frame those beliefs) was always grounded in the relations between humans as Action by definition occurs *between* people. Therefore the plurality, meaning the multiplicity of beliefs and conditions, of mankind conditioned the Actions that humans partake in (Arendt, 1958). Community/cooperation between different and unique people (or groups of people) thus determine the beliefs/frames they express. In terms of this research it is therefore important to note how the high occurrence of cooperation codes evidenced that cooperation and finding solutions together were important parts of framing sustainable agriculture. The frames discussed in the following chapters are products of a community of people that might have disagreed on what sustainable agriculture is, but agreed on its importance and interacted with each other. There is no right or wrong way to frame sustainable agriculture, and it is important to look at what brings people in the sustainable agriculture discourse together as much as at what separates them.

4.2 Frame Formation

The first sub-question of this research was: What frames are deployed about sustainable agriculture within Dutch agricultural and environmental discourse? To which extent are these frames widespread?

Through analysis of code and the level to which certain codes tended to co-occur and relate to each other there were two dominant frames defined within the data. The first frame was named the “future for farmers” frame, and the second was named the “birds and bees” frame. These frames were by far the most dominant framings of sustainable agriculture as most organisations aligned with these to at least some extent, showing how pervasive these frames are within the wider discourse. A few less dominant frames were found as well; the animal rights frame and the inclusion frame. Due to their low occurrence these weak frames were not analysed as thoroughly as the two dominant frames, and as such they will be discussed to a much lesser extent in the following chapters. General information about these weak frames is included at the end of this chapter however. After defining the dominant frames, further analysis was performed to determine which organisations fit more strongly into which frame. Not all organisations were clearly aligned with a single frame, as some organisations dangled the line between multiple frames, perhaps showing that frame overlap is possible. These cases are discussed in a separate category.

Future for Farmers

The first dominant frame identified was given the name “future for farmers”. This frame stresses the long-term survival of farmers and meeting the needs of farmers both now and later. Generally speaking the future for farmers frame defines sustainable agriculture as agriculture that ensures the economic interests of farmers and society as a whole are met over the long-term to ensure future viability of agriculture/food systems and thus humanity. Organisations aligned with this frame considered fair prices and economic sustainability for farmers as some of the most important goals to work towards in regards to sustainable agriculture. The two codes most fundamental to this frame, “Fair prices for Farmers” and “Farmers Interests”, show the importance of economic security and sustainability for the organisations that support this frame. The former code was used to code all quotations that expressed discomfort with the current economics behind owning a farming business, from the disdain for a global free market that forces Dutch farmers to compete internationally (quotation 15:6) to the power of Dutch food distributors to set the prices for agricultural products (quotation 15:6). The latter code had a broader application, being applied to every quotation that talked about the necessity of improving the lives of farmers

beyond the economics of agriculture, such as the wish for farmers to be heard by Dutch politicians (quotation 3:12) and understood and respected by the Dutch public (quotation 23:4). The future for farmers frame is thus mostly engaged with furthering the interests of farmers as a class in economical, political and social terms. The future for farmers frame was identified through the statements of six organisations in particular:

- Milieudefensie, a traditionally environment-oriented organisation that was invited to the roundtable talks held by Johan Remkes as an environmental interest group (and whose name literally translates into English as “Environmental Protection”).
- Farmers Defence Force, a farmers’ interest group established in 2019 for the express purpose of *protecting farmers from environmental-activists* (NOS, 2020, para. 2) after a group of anti-livestock farming protestors had occupied a pig farm for ten hours (NOS, 2020).
- Nederlandse Akkerbouw Vakbond, a medium sized farmers interest group representing over 600 farmers throughout the country (Wiepkema, 2018). The Nederlandse Akkerbouw Vakbond (NAV) represents only crop farmers and its members are not involved in livestock farming.
- Nederlandse Melkveehouders Vakbond, an interest group for dairy farmers in the Netherlands, meaning farmers who keep milk cows, sheep and goats. Other livestock farmers are unable to become members of the NMV, as the NMV represents only dairy farmers, which is reflected in their vision and mission statement, that focus on issues such as manure law and animal rights.
- Sectorraad Paarden, the primary interest group for the equine industry, this includes equine sports organisations, horse breeders and businesspeople involved with any facet of equine sports or equine farming (Home - Sectorraad Paarden, 2023). While it is technically neither a real agricultural organisation (horses are not usually farmed for meat in the Netherlands) nor an environmental organisation, Johan Remkes considered them an important player in the talks about the future of farming in the Netherlands anyways. Members of the Sectorraad Paarden (SEPA) still have to contend with laws and policy regarding land use, which causes them to feel similar problems (animal excrement) as members of the NMV above, though to a much lesser degree.
- Agractie, an organisation that is quite similar to Farmers Defense Force; their primary concern is protecting farmers and they are well known for the farmers protests. Agractie was responsible for organising a protest of 2.200 farmers in the Hague in 2019 (NOS, 2019) together with the FDF.

The two codes at the foundation of the future for farmers frame ("Fair prices for framers" and "Farmers' interests") were common themes in the policy and views of all these organisations. Current market situations were considered to be problematic for the interests of farmers. Milieudefensie argued that a sustainable revolution in Dutch agriculture is being prevented by the financial pressures put on farmers. They argued that farmers are *caught* (quotation 25:1) between ecological pressures to work towards low-environmental-impact farming on one hand, and financial pressures in the market as a result of unfair competition from farmers in foreign nations. The FDF argued in a similar vein that the solution to the problems in the agricultural sector needed to at least include: *cost-effective prices* (quotation 13:24), *enough compensation for mink farmers* (quotation 13:25) (during the COVID-pandemic mink farmers were forced to kill 2.6 million minks due to being infected with COVID (De Graaf, 2020)), *No more unfair trade deals* (quotation 13: 27) and an *end tot unfair trade practices* (quotation 13:28). The NAV also considered *fair prices* (quotation 7:14), *market protection for farmers* (quotation 7:16) and an end to unfair trade practices (quotations 7:10, 7:11 and 7:21) to be the most important goals for the future of agriculture in the Netherlands. The NMV defined sustainable agriculture similarly as *sustainable for the dairy farmer and their business* (e.g. economic sustainability) (quotation 35:6), clearly framing the basis of a sustainable agricultural system as a fair income for the farmer. Similar to the NMV, the SEPA also defined sustainability agriculture in terms of economic sustainability for farmers foremost, listing the growth of the equine industry in a way that is economically feasible (quotation 40:3) as their most important concern.

Farmers' interests more broadly, beyond the concerns of unfair markets, were similarly argued to be an important part of what sustainable agriculture means. Agractie considered a *re-evaluation of farmers* (quotation 23:3) an important mission and they argued that rather than being condemned by the media, farmers should be applauded for their accomplishments (quotation 23:4).

The focus on the interests of farmers' did not mean that the future for farmers camp denied the existence of environmental concerns or dismissed environmental aspects of sustainability entirely. For example, Milieudefensie criticised traditional/intensive farming techniques for being polluting by stating that *big Dutch meat- and dairy companies are responsible for huge amounts of greenhouse-gas emissions* (quotation 15:2), and stressed that sustainability does in part mean a clean environment (quotation 25:5). But economic sustainability was framed as the foundational and essential first step towards broader sustainability concerns in agriculture. Milieudefensie criticised the government for essentially forcing farmers to become large-scale polluters by not protecting them from unfair foreign competition *who produce with much lower*

environmental and animal wellbeing regulations, thus forming unfair competition (quotation 25:2), meaning *they can only survive by growing, investing and intensifying production* (quotation 15:5). As a result of these pressures, and the government leaving farmers no other choice, agriculture in the Netherlands has become more polluting and environmentally destructive than *all cars and trucks in the Netherlands every year* (quotation 15:2), so argued Milieudefensie. Therefore they voiced the belief that the first, and arguably most important, step of introducing a sense of "sustainability" into Dutch agricultural practices, would be to relieve these pressures on farmers to scale-up and intensify. Fair prices and market protection were considered essential components of reducing environmental pressures, because they give farmers the opportunity to reduce their environmental impact (quotation 3:12). The NAV stressed the importance of environmental sustainability as well, though much less strongly. The NAV believes in the importance of ensuring that future generations are *not burdened with the results of the current (intensive) agricultural production* (quotation 7:6). They explained this as meaning that farmers need to use resources in an efficient way and reduce greenhouse gas emission as much as possible, within the bounds of economic possibility. The NMV backed this up by stating that a decent income for the farmer is the key to *being able to take steps in policy areas or to fulfil requests from society* (quotation 35:6). While Agractie stated that *[achieving a] sustainable Netherlands is not solely the task of farmers* (quotation 23:7), insinuating that environmental sustainability is important but that this can not be realised without first looking at the economic interests of farmers.
Noteworthy to mention is that while economic sustainability was often framed as the first and most important step for achieving any sense of sustainable agriculture, even environmental sustainability, the FDF argued that environmental sustainability was not a goal or solution to any real problem at all. The FDF did not acknowledge environmental concerns in the broader discourse as relevant at all. In line with this, board member Jeroen van Maanen stated that the FDF exists explicitly to protect farmers against the voices in the Dutch agricultural debate that concern themselves solely with environmental sustainability concerns.

> *Many farmers feel backed into a corner by environmentalist clubs, animal rights activists and laws that they themselves have no influence on. And this is what we want to protect them from. (NOS, 2020, para. 2)*

While the other organisations within the future for farmers camp mostly defended their position on the basis of priority (meaning that they don't necessarily deny the need for environmental sustainability, but rather argue that is at best a second priority after economic sustainability for farmers), the FDF clearly defended their position based on a

denial of the very idea of environmental sustainability. The organisation framed environmentalism as a threat to farmers that needs to be dealt with. The FDF does not shy from threatening violence to accomplish this either, with board member Jeroen van Maanen explaining that the pitchfork in the FDF's logo can be understood both as a symbol of agricultural/peasants, but also as a symbol of (violent) revolution, by stating that *in times of need [a pitchfork] can be used for more [than farming]* (NOS, 2020, para. 14). It was therefore quite clear from both the data and other statements made by the organisation that the FDF considers farmers' interests to be the sole definition of what sustainable agriculture means.

Meanwhile, Agractie believed that Dutch agriculture is already top-of-the-class when it comes to resource-efficient and low-environmental-impact agriculture (quotation 23:5), insinuating that Dutch farmers are already doing a lot for the environment. Furthermore, Agractie stressed that Dutch farmers are important players in the international food markets (quotation 23:9). So while they did acknowledge the importance of environmental sustainability, they believed that Dutch agriculture was already sustainable in this way and only economic sustainability was still a goal that needed to be achieved to make Dutch agriculture truly sustainable.

Out of the statements and definition of sustainable agriculture put forth by these six organisations, the first dominant framing emerged: the future for farmers frame. Common to the future for farmers frame was the concern for the economic wellbeing of individual farmers and farmers as a class. The frame defined sustainable agriculture as a form of agriculture where farmers are paid fair prices and do not have to deal with unfair competition or pressure from the government. According to this frame some of the big problems Dutch agriculture currently faces are global free market, unfair internal markets and environmental policy. The solution for the future would then be to enact policies that protect farmers' economic survival, with Milieudefensie, the NAV and the NMV all stating that this would also improve environmental sustainability of Dutch agriculture in the long term as well, as farmers are given the ability protect protect the environment when they are no longer caught between economic concerns on one hand and environmental concerns on the other (quotation 25:1).

Birds and Bees

The second dominant frame identified was given the name “birds and bees”. This frame stresses the long-term survival of the environment (meaning the flora and fauna within the environment). Generally speaking the birds and bees frame defined sustainable agriculture as agriculture that ensures biodiversity, environmental improvement, good soil health, low-pollution, animal lives, and balanced nutrient/resource cycles are achieved and/or protected in the long-run. This means support for forms of agriculture such as biological farming, biodynamic farming, low-impact farming, agro-ecology. This frame considered protection of biodiversity, preservation of the environment and low-impact farming important goals to work towards in regards to achieving a sustainable agricultural system. Some of the codes strongly aligned with this frame were “Biodiversity”, “Environmental Quality” and “Circular Agriculture”. This evidence showed that this frame strongly believes in the need to ensure long-term protection of birds and bees. The birds and bees frame is thus mostly concerned with environmental sustainability. Statements by five organisations in particular helped to identify this frame:

- Various Environmental Federations, provincial organisations that serve as sector-wide representatives of most environmental organisations within their respective provinces.
- Dynamisch Perspectief, a monthly newspaper of an organisation representing Biological-Dynamical Farmers (a specific subset of biological agriculture) (BD-Vereniging, n.d.).
- Landbouw met Natuur, a big promoter of nature-inclusive agriculture. Which they believe to be the future of Dutch agriculture, and the best sustainable way forward
- Demeter, an organisation active in the biological farming sector.
- Coöperatie Natuurrijk Limburg, a cooperative of Dutch farmers in Limburg that works together to achieve a high level of biodiversity in the province of Limburg (quotation 18:2

Johan Remkes invited a variety of environmental organisations to the roundtable talks about the nitrogen crisis to be a voice for nature, with several of these organisations taking their role to heart. The codes “biodiversity”, “circular agriculture” and “environmental quality” were common themes. Sustainable agriculture was commonly equated with nature-inclusive agriculture, which was then itself defined as a form of agriculture that *has a minimal impact on the environment, maintains soil health and protects biodiversity* (quotation 38:7) and *that protects and promotes biodiversity* (quotations 18:9 and 18:11). The NMF of Brabant has even been directly involved with local farmers in attempts to

promote *nature-inclusive agriculture* (quotation 8:3) which they defined as agriculture that *cooperates with nature and promotes biodiversity* (quotation 8:4). LMN also considered circular agriculture (quotation 38:6), climate neutral agriculture (quotations 28:8 through to 38:10), precision agriculture (quotation 38:12), agro-ecology (quotation 38:13), agroforestry (38:17) and biological farming (quotations 38:18 through to 38:21) as forms of sustainable farming (quotation 38:22)

Biodiversity was an especially common part of the meaning of sustainable agriculture for a lot of voices in the discourse. Demeter considered love and respect for all *living creatures* (quotation 27:1) to be their core value, with the organisation actively promoting diversity on their member farms (quotation 27:6). In the same way, the CNL stated that *the identity of the CNL has formed itself over the last few years in striving for more biodiversity on agricultural lands* (quotation 18:9). The NMG also considered *a rich biodiversity* (quotation 4:1) to be one of their core goals, with the BMF corroborating this by also listing *a vital and rich nature* (quotation 11:1) and *biodiversity restoration* (quotation 11:7) as important aspects of sustainable agriculture. Biodiversity is mentioned another 49 times by various organisations, showing how widespread the belief is that biodiversity is an integral part of sustainable agriculture.

Circularity was another common theme in the discourse. For example, the BMF stressed the importance of *closing nutrient loops and resource cycles* (quotation 11:8). DS defined the conditions of sustainable agriculture to be *closed loops* (quotation 26:7), meaning resources and nutrient cycles need to be circular and that *waste streams of organic material have to return to the land* (quotation 26:9). Circularity (be it of resources, nutrients or other related things) and biodiversity was stressed by the NMF of Limburg (quotation 34:9), Friesland (quotation 37:15), Flevoland (quotation 28:6) and Gelderland (quotation 4:3). Decreasing waste production by reusing and recycling nutrients and resources was a common goal of various other organisations as well, with the code “circular agriculture” occurring 37 times.

More general environmental quality was often mentioned in combination with biodiversity and/or circularity. The BMF mentioned *reducing environmental footprints* (quotation 11:10) and *protecting the environment* (quotation 11:12) as important goals,while LMN stood for an agricultural sector that *has a minimal impact on the environment and maintains soil health* (quotation 38:7). The currently rather high impact that agriculture in the Netherlands has on the wider environment was condemned as a problem, with reduced environmental impact as a solution. For the most parts the actual suggestions for solutions stayed at promoting *low input agriculture, without use of pesticides or fertilisers* (quotation 26:14)

Nearly all organisations mentioned at least biodiversity, good soil health, water quality or air quality (coupled under the “environmental quality” code) to some extent as a goal or as something important/needed to achieve a sustainable agriculture at least once (with “biodiversity” being mentioned at least by 23 out of the total 39 organisations).This combination of concerns for biodiversity, circularity and environmental quality is evidence of a framing of sustainable agriculture that puts environmental sustainability at the foundation. Sustainable agriculture is then a form of agriculture where farmers care about and respect the concerns and interests of the environment . This frame considered environmental destruction and climate change as some of the most important problems facing Dutch agricultural practices of the future. The solution to this problem would be the promotion of low-impact farming methods such as biological farming, which would lower emissions and prevent more environmental destruction. While the future for farmers camp did not necessarily deny concerns over environmental sustainability, the birds and bees camp on the contrary did not concern themselves with matters of economic sustainability. The birds and bees frame very much identified sustainable agriculture very strongly with only environmental sustainability.

Other Frames

There were two other, much less prevalent, frames identified within the discourse outside of the two dominant frames of future for farmers and birds and bees. These frames can be identified as the “Animal Rights Frame” and the “Inclusion Frame”. Neither of these frames had a strong presence within the data in the first place, but organisations that aligned with either of them always aligned with at least one other frame as well, meaning that an organisation never aligned with just the inclusion or just the animal rights frame. Both of these frames co-occurred a few times with the Birds and the Bees main frame, which might lead to suspicion that they are just part of this dominant frame. But there is clearly a distinction between the three, demonstrated by the observation that they don’t co-occur all the time. As such, these frames were separate enough from the birds and bees frames to be considered their own separate frames.

Animal rights and the interests of animals are partially included in the birds and bees frame through the concept of biodiversity and care for animal lives, but some organisations showed a much stronger interest in animal rights than others. The animal rights frame defines sustainable agriculture as a form of agriculture that puts animal lives at the top of the pyramid, alongside humans. This frame is characterised by codes such as “animal rights” and “Protect animal species”, as well as concepts such as “animal voices” (see for example quotation 24:17). Organisations that aligned with this frame often aligned with either the future for farmers or the birds and bees frame as well. For example

both SEPA and the NMV aligned with the future for farmers frame as explained above, but they also (albeit more weakly) identified with animal rights concerns. Considering that both organisations represent farmers that are involved in animal farming, this was not an unreasonable find. The animal rights frame was identified in part by SEPA's statements on the importance of protecting equine health (quotations 40:5 and 40:11), as well as the NMV's statements on the importance of *animal wellbeing* (quotation 35:59) and *cooperation with veterinarians* in working towards good animal health (quotation 35:57). These two organisations considered animal welfare important in itself, but also important in relation to the financial security of the farmer. A healthy animal produces higher quality products which a farmer can sell for higher prices, thus the animals' interests are also the farmers' interests according to the NMV (quotation 35:51). Two other organisations whose statements also gave rise to the animal rights frame are the Toekomstboeren and Greenpeace. The position of Greenpeace within the discourse is discussed separately in the next sub-heading. The Toekomstboeren were aligned with the animal rights frame primarily through their belief that animal voices deserve to be an important part of the discussion on the future of Dutch agriculture (quotation 24:17). A lot of other organisations did stress the importance of thinking about the interests of animals, but not to such a high extent that this could be seen as evidence of the dominance of an animal rights frame.

The inclusion frame can be defined by the goals of inclusivity and diversity. Through this frame, sustainable agriculture is defined as a form of agriculture where everyone's needs are met now and in the future. The Inclusion frame is built around the themes of social sustainability. Concepts of food security and human rights are related to this frame as well. Natuur- & Milieufederatie Overijssel expressed this sentiment clearly by stating that they *want for everyone to be included in the transition to a sustainable province* (quotation 32:10). The Toekomstboeren whose statements were most indicative of the inclusion frame. They believed in the need to *look further than rich white people* (quotation 24:10) and they regarded *healthy food as a human right* (quotation 24:9). However, the inclusion frame was not a strong or prevalent frame within the discourse of large agricultural and environmental organisations in the Netherlands, as most voices focused clearly on matters of economic or environmental sustainability rather than social sustainability. This was in line with the findings by Slätmo et al. (2017), who found that social sustainability is generally given much less attention than economic and environmental sustainability.

Frame Overlap

A number of cases of possible frame overlap were present within the discourse as well. While the future for farmers and the birds and bees frames were mostly mutually exclusive (in the sense that organisations either put the economic sustainability of farmers or the environmental sustainability of the land as the highest priority), in a select few cases the two frames were intertwined by an organisation that cared for both these goals. In two cases these two frames even overlapped with the animal rights frame and in one case with the inclusion frame. This means that while the frames are generally supported by separate camps of organisations that are clustered along ideological lines, there are some cases where the gap is bridged and the different frames can be connected. Finding common ground could potentially be the solution to the current deadlock in the agricultural discourse and to the tensions between farmers and the Dutch government more broadly. Rather than being enemies or contesting each other, the two separate camps supporting the dominant frames can come together to work to a solution that is acceptable to all. The organisations Greenpeace, the previously mentioned Toekomstboeren, Natuur & Milieu, LTO, Wij-Land and Caring Farmers are the organisations that were most visibly able to close the gap between the frames and come close to finding somewhat of a common ground.

Greenpeace Identifies sustainable agriculture both from an economic and an environmental point of view, showing alignment with both the future for farmers and the birds and bees frames. As an environmental organisation the alignment with the birds and bees frames was expected, but the alignment with the future for farmers frame was a surprise. Greenpeace formulated their definition of sustainable agriculture in response to the ongoing nitrogen crisis in particular (organisations such as FDF, Agractie and NMV preceded Greenpeace in formulating their views of sustainable agriculture as a reaction to the crisis as well). As a result of this, the definition of sustainable agriculture that Greenpeace formulated was strongly connected to the context of the nitrogen crisis. Greenpeace considered *reduction of greenhouse gas emissions* (quotation 9:5) and *fair prices for farmers* (quotation 9:11) to be important parts of achieving sustainable agriculture. To achieve these goals the organisation believed that the government should play a facilitating role. Greenpeace called on the government to invest time, attention and money in providing farmers with the necessary resources to *reduce their environmental footprints in an economically sustainable wa*y (quotation 9:10). By the dual focus on both the necessity for farmers to protect the environment and decrease their ecological impact (birds and bees) and the necessity for the government to financially assist farmers in

achieving this (future for farmers), Greenpeace straddled the line between the two dominant frames. Greenpeace reflected on this as well by stating:

> *The supposed contradiction between environment and farmer, and the path-dependency of the individual agricultural business, paralyses the discussies about nitrogen and the possibility to see this crisis as an opportunity to develop an ecological food system* (quotation 9:30)

Rather than treating the two dominant frames as radically opposed to each other, Greenpeace claimed that this false dichotomy needs to be overcome before a meaningful debate about achieving any sense of sustainable agriculture can be had. The way Greenpeace reflects on the connection between the two interests (ecological vs economic sustainability) is further explicated in chapter 4.3

Natuur & Milieu was quite similar to Greenpeace. The organisation aligned with both the birds and bees and the future for farmers frame to a certain extent, showing no clear priority for either economic or environmental sustainability. The organisation stated to be working towards sustainable agriculture that produces food in such a way that neither environment, nor farmers are harmed (quotation 17:9). Their goals were also defined as practising agriculture with *care for animals, farmers, nature and environment* (quotation 17:8). To achieve these goals Natuur & Milieu mentioned working together with a number of other organisations, such as the LTO and Innovatief Platteland (both part of this research) as important strategies (quotations 17:10, 17:11 and 17:14). This role as bridge builder and connector between different organisations might be the reason they aligned with both of the dominant frames.

The large agricultural interest group LTO aligned with both of the dominant frames as well. The LTO considered low-environmental-impact farming and biodiversity (quotation 44:3) as an important societal value that farmers should strive to reach. At the same time the LTO also considered a fair price for farmers (quotation 44:4) and proper valuation of the services that farmers already deliver for free (quotation 43:6) as important goals to strive for. This showed that the LTO, like Greenpeace, straddles the line between the two dominant frames. But where Greenpeace was invited by Johan Remkes to participate in the nitrogen roundtable as an environmental organisation, the LTO was tasked with representing farmers' interests (FDF, Agractie, NAV and NMV let the LTO represent their interests in the talks as well). Considering that these individual organisations all strongly prioritised economic sustainability over environmental sustainability, it is remarkable that the LTO acknowledged the equal importance of both. Whether this acknowledgement is a result of the viewpoint of the other farmers the LTO represents (they represent 35.000 members outside of the aforementioned organisations (LTO, 2022)) or a result of the LTO

aligning their views with the broader population of the Netherlands (which the LTO believed to be more closely aligned to the birds and bees frame than the future for farmers frame as evidence by quotation 44:3) is unknown. It is still of considerable importance to note that the LTO as the largest representative of farmers in the Netherlands is quite willing to support the efforts of both the government and the birds and bees camp to work towards environmental sustainability in the Dutch agricultural system, as long as it happens in an economically sustainable way. The LTO shows that the two dominant frames in the discourse are not intrinsically mutually exclusive, and that with some effort common ground can be found.

Wij-Land, an organisation that represents farmers that are willing and inspired to protect the environment, shows the possible overlap of the two dominant frames in a similar way. Just like the LTO, this organisation represents farmers that are willing and inspired to protect the environment. The core of Wij-Land's vision was described as *a healthy, biodivers and resilient environment that creates ecological, economical and social value for the environment* (quotation 21:1), showing clear concern for environmental sustainability. In line with the future for farmers frame, Wij-Land also included the goal of creating an agricultural system with *a good financial perspective [for the farmer]* (quotation 21:5) in their statement. Implicitly Wij-Land held the viewpoint that environmental sustainability and economic sustainability go hand-in-hand, and are both crucial parts of sustainable agriculture.

The nature-inclusive agriculture interest group Caring Farmers aligned with the birds and bees frame, the future for farmers frame and the animal rights frame. Caring farmers defined their understanding of sustainable agriculture as follows:

> *Our food system needs to be socially and ecologically as efficient as possible, making sure we can feed as many mouths as possible with as little input from soils and resources as possible, no inputs from outside and where there is no negative, preferably even a positive, impact on biodiversity, nature, climate and animals.* (quotation 36:3)

The elements of soil health, biodiversity and low-input agriculture are related to environmental sustainability similar to the birds and bees frame, while the element of no negative impact on animals is indicative of the animal rights frame. Lastly, Caring Farmers also stressed the importance of society helping farmers achieve these goals (quotation 36:4) by *rewarding farmers who perform well* (quotation 36:10), evidently showing that Caring Farmers considered economic sustainability to be important as well.

The Toekomstboeren were the only organisation that considered all "three pillars of sustainability" (Slätmo et al., 2017). At the Toekomstboeren conference of the 17th of

february 2023 amongst the various speeches and activities the Toekomstboeren gave a workshop in caring for the soil and a workshop in building a financially strong biological farm. This insinuates that the Toekomstboeren care both for the environment (birds and bees) and the farmers themselves (future for farmers). This was reflected in the discourse as well. The Toekomstboeren stressed both the need to reduce chemical inputs and to protect soil health (quotation 24:33) as well as the need for fair prices for farmers (quotation 24:7). The Toekomstboeren also gave attention to social sustainability by stressing the need to *look further than rich white people* (quotation 24:10) and they regarded *healthy food as a human right* (quotation 24:9). It can be said that the Toekomstboeren were characterised by a radical inclusion of all viewpoints; they aligned with all four of the identified frames to some extent. They were unique in this position, as most organisations either aligned dominantly with one frame, or with two frames. With inclusion being one of the foundational values of the organisation (quotation 32:10), this inclusive approach to defining sustainable agriculture fitted the organisation well.

Non-aligned Organisations

A few organisations had very unique understandings of what sustainable agriculture means, subscribing to their own unique frames that were not supported or shared by other voices in the debate. This was partially caused by the data on those organisations being so limited that it was hard to understand their complete definition of sustainable agriculture. Organisations that did not align with any widespread frame were filtered out and no longer considered in the later parts of the analysis to answer sub-questions 2 & 3 because these micro-frames were so high in number but limited in scope. The organisations that had their own micro-frames were:

- Federatie Agro-Ecologische Boeren (Sustainable agriculture cares for environmental interests, farmers' interests but also local interests).
- Bionext (Sustainable agriculture cares for environmental interests, farmers' interests, fairness and inclusion).
- Innovatief Platteland (Sustainable agriculture cares for environmental interests and recreational value for humans in the long run).
- Wikifarmer Nederland (Sustainable agriculture cares for environmental interests, quantity of yields and farmers' interests).

Two organisations did not frame or define sustainable agriculture in any way, only ever stressing the importance of sustainability without explaining what sustainability meant to them; Duurzaam MBO and NAtuur- & Milieufederatie Drenthe only defined sustainable agriculture as agriculture that is "sustainable".

4.3 Frame Comparisons

The second sub-question of this research was: What are the similarities and the differences between framings of sustainable agriculture and how do they relate to each other?

To answer this question the four identified frames were analysed to find what set them apart from each other and on what grounds they agreed and overlapped with each other. Special attention was paid to the organisations that aligned with multiple frames, which thus represented the connection between the frames. Overall more similarities than differences could be observed. As discussed earlier, most organisations aligned more dominantly with one of the two main frames, but almost every organisation expressed some support for multiple frames on a tacit level. This was seen as an argument for the different frames not being mutually exclusive (especially the future for farmers and the birds and bees frames). Overlap between the frames was already evident in the initial demarcation of the dominant frames, and similarities were thus expected to outnumber differences. After an analysis of the similarities followed by the differences between the frames, this chapter ends with a careful interpretation of what this means for the relation between the different frames.

Similarities

All four identified frames had at least some similarities to one another. The most noteworthy similarity between frames was the similarity between the birds and the bees frame and the animal rights frame, which had strong similarities. Other strong similarities could be seen between the two dominant frames, and between the trio of birds and bees, future for farmers and animal rights. The inclusion frame had some similarities to the birds and bees frame (both frames include care for the health of people as a part of what sustainable agriculture is), but these similarities were rather low-level.

The similarities between the birds and the bees frame and the animal rights frame rested on their shared advocacy of animal lives/voices (through the concept of biodiversity in the birds and bees frame). Three of the organisations that aligned strongly with the birds and bees frame also aligned, although more weakly, with the Animal Rights frame at the same time (see figure 1). These organisations were the Brabantse Milieufederatie, Coöperatie Natuurrijk Limburg and Landbouw met Natuur.

	Animal Rights 87	Birds and Bees 263
BMF 23	5	15
CNL 15	4	7
LMN 22	5	18

Figure 1: Co-occurrence table of the birds and bees frame with the Animal rights frame filtered to only show the Brabantse Milieufederatie, Coöperatie Natuurrijk Limburg and Landbouw met Natuur.

In total, the animal rights frame co-occurred 60 times with the birds and bees frame, out of a total of 87 quotations aligning with the Animal Rights frame in total. This made the Animal rights frame more similar to the birds and bees frame than different.

The two dominant frames (birds and bees and future for farmers) also shared a number of similarities independently from the shared similarities with the animal rights frame. These similarities have already been touched upon previously in chapter 4.2. To reiterate and to expand upon these observations: both frames are opposed to global trade creating a race to the bottom that forces farmers to intensify production (and thus pollution) in order to survive (quotation 9:130). This race to the bottom combined with *path dependency* (quotation 9:58), is both harmful for the environment and for the farmer. As a result of this, both frames expressed that fair international trade is a cornerstone of achieving sustainability in agriculture. Milieudefensie, an environmental organisation expected to align with the birds and bees frame but in the data more closely aligned with the future for farmers frame, signified the link between the two frames by stating that “fair prices for farmers are needed before farmers are capable of taking steps towards environmentally-friendly practices” (paraphrased from quotation 3:12).

The three most prevalent frames (birds and bees, future for farmers and animal rights) shared some important similarities with each other as well. These similarities arose from shared care for the health and well-being of animals. While all three frames shared this belief in the importance of animal health advocacy in regard to achieving sustainable agriculture, the underlying arguments were not necessarily similar. The future for farmers frame considered animal health important because *healthy livestock is the basis of a good income for the farmer* (quotation 35:51), whereas the other two frames argued for the

importance of animal interests on the basis of the intrinsic value of animals (quotations 8:4 and 24:18). Regardless of the difference in justification, the similarities between these three frames and the agreement on the value of animals between the organisations that align with either of these three frames served to align the interests of several organisations. Animal interests were common ground between close to half of the organisations in this analysis.

Differences

All four frames also differed from each other to a certain extent. While all four frames differed from one another in multiple ways, these differences were mostly differences of scope (e.g the birds and bees frame advocated for all living beings, while the inclusion and the animal rights frames advocated specifically for human and non-human living beings respectively) or differences of order (e.g. the birds and bees frame and the future for farmers frame were similar in their support for less-polluting agricultural practices, but the future for farmers frame put this hierarchically behind the need for economic sustainability). In general the similarities were bigger and more pronounced than the differences. But differences of scope and differences of order still served to keep the frames separate from each other.

Differences of scope were visible between both the birds and bees - animal rights frames, and between the future for farmers - inclusion frames. The difference in scope between the Bees and Birds frame and the Animal rights frame became clear through the observation that the birds and bees frame (despite the name) looked beyond animals and also placed importance on plant life (quotation 28:9) whereas the Animal Rights frame only considered the interests of animals. This difference can also be explained the other way around; whereas the birds and bees frame looked at all life, the Animal Rights frame focussed on animals. Regardless of form, these differences could be characterised as the animal rights frame falling within the scope of the birds and bees frame. The difference in scope between the future for farmers frame and the Inclusion frame can be explained in a similar way. Whereas the future for farmers frame advocated for the interest of farmers as a class, the Inclusion frame advocated for rights and inclusion of all people, regardless of class. As such these two frames shared in their advocacy of the interests of people as a condition of achieving sustainable agriculture, but the Inclusion frame had a much broader scope of who is included in “people”.

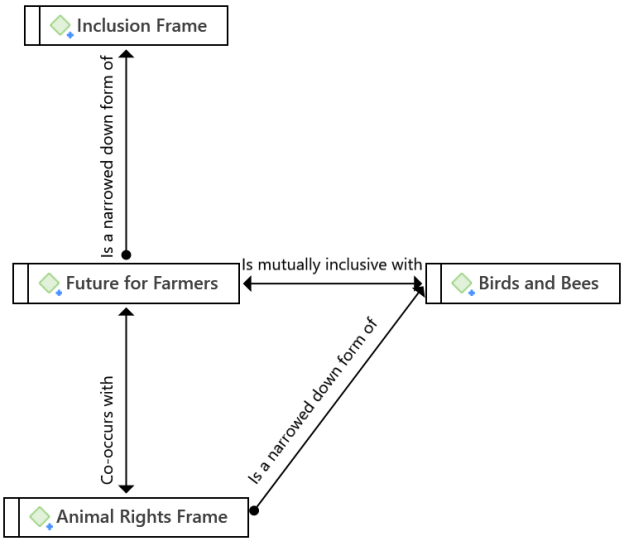
Differences of order were visible between the birds and bees frame on one hand and the future for farmers frame on the other hand. With a difference of order is meant a difference in the hierarchical order of importance of different concepts. Both frames consider low-environmental-impact as important parts of what sustainable agriculture is, but the future for farmers frame stresses that such a thing is only possible to achieve after fair prices and market protection for farmers are achieved first (quotation 35:6). In this way the future for farmers frames economic sustainability as a condition to environmental sustainability. It insinuates that environmental sustainability can not exist without economic sustainability. But the birds and bees frame treats environmental sustainability and economic sustainability as concepts of the same order. Looking specifically at the way Greenpeace (an organisation that seemed to be aligned with both of these frames to a certain extent) relates economic sustainability and environmental sustainability to each other, this conditional relations is defended in the following way: path dependencies and high-investment costs (quotation 9:29) remove the possibility for farmers to invest in a transition towards a form of agriculture that promotes biodiversity and environmental quality (quotation 9:28), as a result of this financial assistance farmers (quotation 9:10), market protection and fair prices for farmers are a necessity for achieving a sustainable agricultural transition in line with the birds and bees frame of the concept.

General differences outside of the differences in scope and order were found as well. Most of these differences were the basis of the very identification of these four frames, it is what set them apart and allowed them to be identified as separate frames in the first place. As such they were expected to be present. These general differences between the four frames can be summed up as a focus on different aspects of a rather similar understanding of sustainability. Every frame stressed the importance of long-term thinking. However quotations aligned with the future for farmers frame stressed the long-term survival of farmers and farming businesses, while quotations aligned with the birds and bees frame stressed the long-term survival of the ecosystem and humanity/society as whole beyond the agricultural context, and lastly the Animal rights frame stressed the long-term interests of the diverse species of animals in the Netherlands both on as well as outside of the farm.

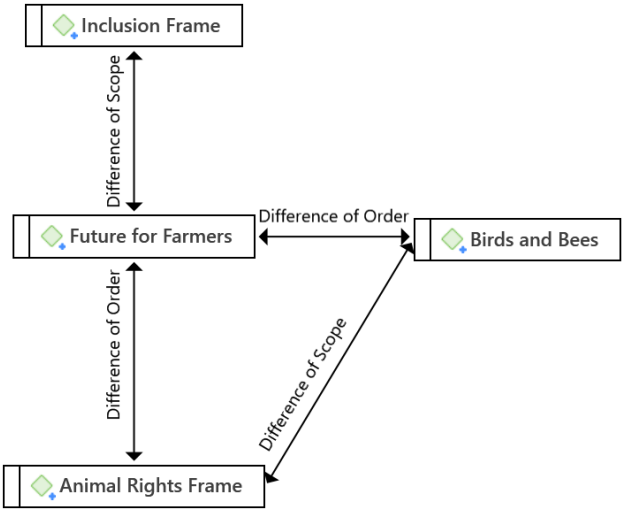
So the differences between the four different frames can be expressed by differentiating the focus of these frames on different aspects of a shared broader understanding of sustainability. Expressed through fitting these frame to the Brundtland definition of sustainability, which is: “meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987), these differences can be illustrated as follows:

- *future for farmers frame*: Meeting the needs of **farmers** without compromising ~~the ability of future generations to meet their own needs~~.
- *birds and bees frame*: Meeting the needs of the **environment** without compromising the ability of future generations to meet their own needs.
- *Animal Rights frame*: Meeting the needs of **animals** without compromising ~~the ability of future generations to meet their own needs~~.
- *Inclusion frame*: Meeting the needs of **everyone in the present** without compromising the ability of **everyone in the future** to meet their needs.

Relations



Graph 1: Displaying the similarities between the different frames. This graph is an adaptation of the results discussed within the previous "Similarities" header.



Graph 2: Displaying the differences between the frames. This graph is an adaptation of the results discussed within the previous "Differences" header.

Based on the similarities and the differences between the four most common framings of sustainable agriculture (discussed in detail in the previous 2 headers and summarised in graph 1 & 2), a few relations between the different frames were evident. Based on the interplay of the different framings that were most clearly visible within the organisations that aligned in a non-dominant way with multiple frames (Toekomstboeren, Greenpeace, LTO and Natuur & Milieu), the following relations were perceived in the discourse:

- The animal rights frame arises from the birds and bees frame as a reaction to the future for farmers frame.
- The inclusion frame arises as a reaction to the future for farmers frame.

Arguments and evidence for the former relation were visible within the discourse through the statements made by Greenpeace, the NMV and Toekomstboeren. Greenpeace aligns with the Animal Rights frame in a number of points, most relevant in this context was the beliefs held by Greenpeace that farmers are to blame for large-scale decreases in wild animal populations (quotation 9:40). Greenpeace uses the word “bad” (quotation 9:40) to describe this decrease, as a result of farming practices. The NMV, weakly aligned to the Animal Rights frame, acknowledges that part of their support from this frame is connected to increasing attention for the interests of animals in a broader societal context (quotation 35:59). While this was never expressed in a direct accusation of: *You claim to care for animal lives, so why don't you show it?*, both Greenpeace and the NMV expressed sentiments that can be described as a similar accusation. Greenpeace directly blamed farmers for not doing enough to protect animal interests, while the NMV inferred the existence of outside voices claiming these same things. The Toekomstboeren reinforced this by expressing that animal rights are being violated within current agricultural settings (quotation 24:17), and that to achieve a sense of sustainable agriculture means to protect these rights better. As the Animals Rights frame was considered to be narrowed down version of the birds and bees frame (on the basis of shared affinity with biodiversity and non-human lives, where the former framed focused on non-human animals specifically), this reaction to the future for farmers frame was

A relation between the Inclusion and the future for farmers frame was evident in the claims made by Toekomstboeren. The Toekomstboeren were the only organisation that aligned strongly with the future for farmers frame and the Inclusion frame (being the only organisation altogether to strongly associate with the latter frame). The Toekomstboeren specifically claimed that sustainable agriculture should look further than just white people (quotation 24:10), implying that while farmer’s interests are important it is important to include all farmers or other people into strategies and policies to work towards a sustainable future for agriculture, rather than just caring for the (white) farmers in the future for farmers camp.

4.4 Frame Contestation

The third sub-question of this research was: What arguments and tactics are used to construct and contest these frames within the broader discourse?

To answer this question the four identified frames were analysed to find what arguments are used to define and defend these frames, as well as what arguments are used to potentially attack or discredit other frames. As frame definition is strongly linked to frame formation on a conceptual level, this chapter strongly focuses on the analysis of frame contestation. Further information about frame definition can be found under chapter 4.2.

In order to analyse frame construction and frame contestation, the texts were first analysed to identify where in the discourse framings were created and contested, afterwards the arguments used to do so were identified and analysed. This two-step analysis resulted in the creation of two sets of codes, grouped under a code-group within Atlas.ti: Moves and Tactics. In this analysis three different moves and seven different tactics were identified.

Moves:

- Define: This code was used for instances of discourse directly defining what sustainable agriculture is, or what is needed for agriculture to be or become sustainable. This code reflected instances of frame construction.
- Attack: This code was used for instances of discourse directly referring to organisations, policies or broad framings of sustainability in agriculture as either unsustainable, standing in the way of sustainable agriculture or being in the wrong about what sustainable agriculture means. This code reflected instances of frame contestation.
- Defend: This code was used for instances of discourse directly referring to one's own organisation, policies or broad framings of sustainability in agriculture as either sustainable or an important/necessary part of creating a sustainable agricultural system. This code reflected instances of frame contestation.

Tactics:

- Appeal to Emotion: This code was used when arguments were based on emotions. These arguments used discursive utterances of a subjective nature that relayed strong emotions in an attempt to convince people of their correctness. For example, the use of: *sweeping away farmers of their own land* (quotation 13:17) when talking about the government's sustainable agriculture policy.

- Appeal to Popular Support: This code was used when arguments were based on popularity. These arguments legitimised claims based on the notion that things that are common or popular, are therefore good things. For example: the argument that uses cow manure for fertilisation of one's own lands is sustainable because *farmers are increasingly seeing the benefits* (quotation 35:34).
- Authority Arguments: This code was used when arguments were based on statements by authority figures, that being either government-related people or experts in the field. These arguments legitimised claims based on them being backed up by laws or expert opinions. For example: the argument that a reduction in livestock size is needed to achieve sustainable agriculture according to market research (quotation 9:87).
- Economic Arguments: This code was used when arguments were based on the financial and economical consequences of certain policies, ideas or practices. These arguments legitimised or delegitimised claims based on the financial profits or losses it would incur, or based on the financial (in)feasibility of an idea. For example: the argument that there needs to be more consideration for the income of farmers because they are currently being pressured to engage in unsustainable practices as a result of financial pressures (quotation 15:5).
- Ethic/Moral Arguments: This code was used when arguments were based on normative values. These arguments legitimised their claims through concepts such as fairness or justice. For example: the argument that farmers need to be financially supported by market parties because they have a "responsibility" to do so (quotation 9:123).
- Factual/Scientific Arguments: This code was used when arguments were based on either fact or scientific data; meaning they build on provable, but not necessarily proven, statements. These arguments legitimised their claims based on the claim that it fits best with the objective reality. For example: the argument that the current Dutch agricultural system is unsustainable because it *is responsible for 45% of the national nitrogen-emissions* (quotation 17:5).
- Rational Arguments: This code was used when arguments were based on logical reasonings, meaning they use rhetorics to convince readers of the truthfulness of their claims. For example: the argument that closing the nutrient loops in agriculture is a necessity to achieve sustainable agriculture because there is currently *too much manure, particulate matter, ammonia and foul smells* (quotation 34:9).

Frame Construction

The identification of frames has been discussed in more detail under chapter 4.1. The manner in which the identified frames were constructed was pretty similar across the board. Sustainable agriculture was mostly framed (e.g. the way organisations defined what sustainable agriculture meant to them) through use of "we believe…"- or "it means…"-style phrases that commonly expressed opinions or beliefs rather than scientifically substantiated statements.

Defining what sustainable agriculture meant to an organisation usually took the form of a list of goals that they were working towards, or a list of changes needed in society according to them. Common goals included for example the end of unfair trade practices, fair market prices for farmers, low-pollution agriculture and restoring the biodiversity of the Dutch natural environment. These goals were often backed up by arguments of either an ethical/moral nature (presenting something as being just or fair) or of a factual/scientific nature (presenting something as being a fact).

The future for farmers frame was most commonly constructed through the use of moral arguments. Sustainable agriculture was argued to be a form of agriculture where farmers received “fair” payments for their products and services as opposed to the currently unfairly low prices they receive for products. Sustainable agriculture thus was framed as conditional on a fair agricultural system first and foremost. FDF (quotations 13:17 and 13:28), Milieudefensie (quotations 15:9 and 15:11) and the NMV (quotation 35:83) all called for fairer prices for farmers as one of the most important parts of defining what sustainable agriculture means to them.

The birds and bees frame was commonly constructed through the use of factual/scientific arguments and arguments based on authority. Sustainable agriculture was argued to be a form of agriculture that does not contribute to environmental degradation or to climate change (for example quotation 17:9). Soil health and biodiversity were considered to be important conditions for a sustainable agriculture as well. Wij-land (aligned with both the birds and bees frame and the future for farmers frame) claimed that soil health was ultimately the foundation of any form of sustainable future (quotation 21:7). The argument Wij-land used to construct this claim was the argument that the Commonland Philosophy believed this to be true as well (argument based on the authority of Commonlands). Meanwhile, Dynamisch Perspectief used factual arguments to support a similar claim. DS argued sustainable agriculture is a form of agriculture where soil health and air/water quality is protected and enriched because current pollution caused by agriculture and chemical inputs into agriculture are a drain on scarce resources (quotation 26:2) that can not be maintained indefinitely (scientific argument).

Frame Contestation

Frame contestations are the discursive utterances that either discredit opposing frames, viewpoints or organisations, sometimes through the use of counter-framing, or defend a frame by presenting arguments in its favour. Within the analysed documents these contestations came primarily in two forms: attacking and defending. Numerically, attacks were more common than defensive arguments. Particularly the Dutch government, or sometimes specific policies or members of the government, was a common target of attacks. Defensive utterances were less common, only Greenpeace commonly used arguments to defend their vision of what sustainable agriculture meant to them and how it can be achieved.

Frame contestation through so-called attack moves involved discursive utterances that discredited, debunked or defamed other framings of what sustainable agriculture is, the arguments presented to supported these framings, or people and organisations that were perceived to be a blockade to achieving any form of sustainable agriculture. The three primary targets of these attacks were the Dutch government (or specific government-related entities), the European Union/global community or farmers. The former two were attacked by organisations in the future for farmers camp because they identified both national and European policies as threats to their framing of sustainable agriculture as a form of agriculture where farmers' interests in the long-run are protected. Attacks on farmers, and the perceived threat they posed to sustainable agriculture with their current practices, mostly originated from the birds and bees camp but the Animal Rights camp attacked farmers as well.

The Government was often attacked and framed as a barrier to achieving sustainability. These attacks came most often from organisations that strongly aligned with the future for farmers frame, such as the Farmers Defense Force and Milieudefensie. These organisations framed sustainable agriculture as a form of agriculture where the farmer as an individual or farmers as a class are secure and protected now and in the future. Because economic sustainability of farming as a practice is a cornerstone of the future for farmers frame, these organisations most often attacked the government policies that were perceived to be detrimental to the financial health of farmers. FDF attacked the government's sustainable agriculture policies on the basis that it is *eliminating agriculture as we know it* (quotation 13:15) and that these policies are *shrinking the agricultural sector at a murderous speed* (Paraphrase: quotation 13:14). It was implied by FDF that the government of the Netherlands (and to a lesser extent the European Union as well) is the main barrier to achieving sustainable agriculture, which they frame as making *irrational* policies (quotation 13:6) that do not contribute to achieving any sense of

sustainability in agriculture. The FDF also touched on the observation that the government itself seemed to align more with the Bees and Birds frame (through their policies aimed at eliminating pollution and excess nitrogen depositions to protect the environment). The FDF attacked the government for *sacrificing* (quotation 13:15) the economic safety of farmers to protect other polluting industries from having cut down on emissions to protect the environment. Lastly, the FDF criticised the government for on the one hand wanting to de-intensify Dutch agriculture, but at the same time making this impossible by making Dutch farmers compete with international competitors in a race-to-the-bottom (quotations 13:27 and 13:28). Milieudefensie shared some of these views as well. Milieudefensie discredited the Dutch government's dedication to sustainability by arguing that the government is ineffectual in making policy that protects either the environment or farmers. Specifically, Milieudefensie called the government a *barrier to sustainable agriculture* (quotation 3:1), that *neither prioritises farmers nor combating climate change* in its agricultural policies (quotation 3:11). Similarly to the FDF, Miliedefensie blames the government for partaking in trade agreements with foreign countries that force Dutch farmers into a race-to-the-bottom that is neither beneficial for farmers (future for farmers frame) nor the environment (birds and bees frame). These statements were co-signed by representatives of the NAV and NMV as well. Generally speaking, attacks on the government for standing in the way of sustainable agriculture came mostly from organisations strongly aligned with the future for farmers frame (FDF, MD, NAV and NMV). Most of these attacks were justified through the use of economical arguments; national policies are unsustainable and/or pushing farmers towards a form of unsustainable agriculture, because these policies represented a financial risk and burden for farmers. Most of these arguments were stated ex nihilo without any data or references backing them up. For instance, the NMV argued that the possibility of an economically sustainable milk-industry relies on a stable market and thus market stabilisation policies from the European Union (quotation 35:14), without going into depth. The general argument used to attack the Dutch governmental policies could be summarised as: the economic ramifications of governmental policies cause environmental degradation through the resulting need to intensify production as well as cause economical destruction of farmers through the high costs they incur on farmers, therefore the Dutch government is a threat to achieving any semblance of sustainable agriculture.

The European Union was another common target for attacks. Numerous organisations blame European policy for pushing Dutch agricultural practices towards a system that is neither sustainable for farmers (future for farmers frame) nor for the environment (Bees and Birds frame). Both Milieudefensie (quotation 25:2) and the NMV (quotation 35:83) criticised the European Union for engaging in trade agreements with the

USA, Mercosur (Southern-American trade bloc) and Canada. These trade agreements were claimed to be threats for the economic sustainability of Dutch agriculture, and through the initiation of a race-to-the-bottom they are claimed to be threats for the environmental sustainability of Dutch agriculture as well. Elsewhere these trade agreements were called “unfair” (quotation 13:17). European trade and agricultural policy were perceived to be at odds with each other, similarly to Dutch national policy. The European Union on one hand wants to decrease agricultural pollution and emissions as part of their Fit-for-55 policy to achieve the European Green Deal goals, but on the other hand wants to open up the European market to foreign agricultural products that (unintentionally) force farmers to intensify their production. The NMV went as far as to claim that the EU does not protect their farmers against unfair market relations, stating that *free trade and high (sustainability) standards don't fit together* (quotation 35:84). Farmers felt torn between their demands for decreasing the environmental impact of their practices on one hand and on the other hand the market pressures that threaten the farmer’s financial safety if they do so. Like the attacks on the Dutch national government, these attacks were often justified by economical arguments that pointed to the financial pressures that European policy put on farmers that forced them to engage in unsustainable (for both farmer and environment) practices.

Attacks on farmers as individuals or as a class were prevalent as well. The usage of chemical agents for fertilisation or pesticide purposes among farmers and the purported necessity of doing so was heavily attacked by the Birds and the Bees camp. For instance, rampant use of broad-targeting pesticide by farmers, without considering other forms of pest-control, was stated to be *irreconcilable with sustainable agriculture* (quotation 5:7). Intensive/industrial agriculture was also a common target of attack. This form of agriculture was considered to be unsustainable and a direct cause of environmental degradation (quotation 9:117). Organisations like Greenpeace and Natuur & Milieu directly blamed industrial farming for large amounts of pollution and environmental destruction that prevent the Dutch agricultural system from being identifiable as sustainable. Intensive agricultural practices were blamed for decreasing biodiversity in the Netherlands (quotation 9:40), Industrial livestock keeping was blamed for turning life in rural areas unhealthy for humans (quotation 9:46), and the use of fertiliser and pesticide by farmers was blamed for polluting the water (quotation 9:53). The agricultural sector was also criticised for making empty gestures in their self-made policy plan on solving the nitrogen crisis in a sustainable manner (quotation 9:27). This policy-plan, written up by the LTO and co-signed by amongst others the NMV, Agractie, FDF and ten other agricultural organisations, was attacked by Greenpeace for not seriously contributing to emissions reductions in the agricultural sector (quotation 9:27), thereby not actually working towards

a sustainable solution for problems in the agricultural sector. However, in the case of Greenpeace these accusations and attacks against farmers were often paired with an understanding that governmental policy pushed farmers to intensify production. Greenpeace acknowledged that insufficient and unclear government policies are the cause of the nitrogen crisis specifically (quotation 9: 23) and that governmental policy has put farmers in a *stranglehold* (quotation 9:57) that pushes them towards intensive and unsustainable forms of agriculture (quotation 9:119). The Animal Rights camp attacked farmers as well by claiming they ignored the voices/interests of animals (quotation 24:15), which directly contradicted their assertion that animal rights are the most integral part of what sustainable agriculture is. These attacks were often justified through scientific arguments, with Greenpeace commissioning an entire market-research rapport to back up their claims. The rational and scientific arguments used to discredit the sustainability of current farming practices in regards to environmental sustainability (birds and bees frame) were sometimes carefully supported through references to official reports, scientific articles or official databases.

Frame contestation through so-called defend moves involved discursive utterances that supported one's own framings of what sustainable agriculture is or the arguments presented to support these framings against the (perceived) attacks on these framings or arguments as made by 'hostile' actors in the discourse. Within the discourse defensive moves mostly responded to perceived possible arguments of opposing camps, and less so of responses to actual attacks such as the ones described above. It seemed that most organisations were unwilling to use their official statements to further the debate on.

One of the organisations that belonged to both of the dominant camps, Greenpeace, was the most active in defending their vision from counter-arguments. Through use of authority, economical, scientific and rational arguments they defended both the future for farmers and the birds and bees frames as equally important parts of what sustainable agriculture means to them. In order to break the *stalemate* (quotation 9:30) between environment and farmer (between the environmental birds and bees frame and the future for farmers frame) they defended both of these framings from counter-arguments. For example, Greenpeace stated that both the need for emissions reductions (quotation 9:35) and a better consideration of farmers interests (quotation 9:113) were needed to achieve what they called a sustainable form of agriculture. Both of these claims were formed through factual arguments based on observations of the current agricultural system in the Netherlands. Greenpeace argued that economic sustainability and environmental sustainability needed each other; one could not do without the other.

Salient Arguments

The most salient arguments used to attack opposing frames were factual/scientific arguments, rational arguments, economical arguments and ethical arguments. While the most salient arguments used to defend frames were factual/scientific arguments, economical arguments, rational argument and authority arguments. Factual/scientific, economic and rational arguments were thus used both to discredit or support frames, while authority arguments were only used to defend and ethical arguments were mostly used to attack other framings.

Ethical arguments used to attack other framings of sustainable agriculture often defined these frames as based on lack of care for the justice of certain humans or non-humans. The Toekomstboeren implicitly seemed to attack the future for farmers frame based on its lack of considerations for the v*oices* (quotation 24:17) of animals. The Toekomstboeren strongly believed in animal rights being an important part of what sustainable agriculture is, as a result of this the future for farmers framing of economic sustainability primarily for the farmer was argued to be immoral and implicitly unsustainable as well. In other cases similar arguments were used to implicitly attack the birds and bees framing of sustainable agriculture. The organisations FDF, NMV and Greenpeace (all aligned with the future for farmers frame, where Greenpeace was double-aligned with the birds and bees frame as well) used ethical arguments to attack the birds and bees framing of sustainable agriculture as a form of agriculture that foremost was low-impact on the environment and biodiversity of the Netherlands. Greenpeace, for instance, criticised the idea of leaving “unsustainable” farmers (herein meaning unsustainable according to the birds and bees frame) to fend for themselves (*leave them to their fate*, quotation 9:123). The lack of consideration for the rights or interests of farmers (quotation 13:16) within the birds and bees framing was criticised as being unfair towards farmers. Implicitly this injustice, which was unsustainable on an economical level for farmers, was criticised as not being representative of truly sustainable agriculture.

Authority arguments were primarily used to defend framings and support them. These arguments can be typified as “but the experts agree with us” response to (perceived) attacks on framings of sustainable agriculture. Authority arguments were most often used by Greenpeace to defend their vision of what sustainable agriculture meant (a vision that aligned with both the future for farmers and the birds and bees frames). The authority that Greanpeace relied on were the consultancies Ecorys and Ethical Growth Strategies, whom Greenpeace had asked to research the viability of their vision on sustainable agriculture. Greenpeace then used the statements of these consultancies as arguments to defend both the future for farmers and the Birds and Birds from criticism.

Greenpeace argued that based on the findings of these experts that their vision was indeed the right one, moreover they argued based on this authority argument that the sustainable agricultural revolution they envisioned was both *feasible and affordable* (quotation 9:3). The argument that Greenpeace's vision was the correct way to define sustainable agriculture and the right way to go about achieving it as backed up by these experts, was repeated throughout their entire report. Greenpeace used these arguments based on the findings of experts to both argue for the need to protect biodiversity, soil health and environmental quality, in agreement with the birds and bees frame (for example quotations 9:21 and 9:53), and argue for the need to assist and protect farmers, in agreement with the future for farmers frame (for example quotations 9:57 and 9:115).

While authority and ethical/moral arguments were only sparsely used to either defend or attack framings, factual/scientific arguments, economical arguments and rational arguments were commonly used for both purposes. The most salient factual/scientific argument was the 'climate-science argument'. This argument can be summarised as the argument that climate scientists consider current agricultural practices to be environmentally destructive and therefore unsustainable, meaning that sustainable agriculture is a new, possible form of agriculture that is not environmentally destructive (birds and bees frame). Variants of this argument were used by a wide variety of organisations such as Greenpeace (quotation 9:36), Natuur & Milieu (quotation 17:5) and Dynamisch Perspectief (quotation 26:4). These factual/scientific arguments were most often used by organisations within the birds and bees camp, both to directly support their own framing as well as discredit the future for farmers frame for not taking these scientific 'truths' into consideration.

The most salient economical argument was the 'farm finances argument'. This argument can be summarised as the argument that, economically speaking, only a shift in agricultural policies towards policies that align with farmers' interests can be sustainable in the long term. Meaning that sustainable agriculture is a new form of agriculture that protects farmers as a class from (financial) ruin (future for farmers frame). This argument was used by most of the organisations within the future for farmers camp such as Greenpeace (quotation 9:115), FDF (quotation 13:12), Milieudefensie (quotation 25:1) and the NMV (quotation 35:73). This argument served both as a defence against claims from the birds and bees camp that economic sustainability was less important than environmental sustainability (quotation 9:113) and as an attack on the birds and bees frame for not considering the economic viability of their visions (quotation 3:12).

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Chapter 5: Discussion

	Birds and Bees Frame	Future for Farmers Frame	Animal Rights Frame	Inclusion Frame
Archetypical definition of Sustainable farming:	Agriculture that ensures biodiversity, environmental improvement, good soil health, low-pollution, animal lives, and balanced nutrient/resource cycles are achieved and/or protected in the long-run	Agriculture that ensures the economic interests of farmers and society as a whole are met over the long-term to ensure future viability of agriculture/food systems and thus humanity	Agriculture that puts animal interests and lives at the top of the pyramid, alongside humans	Agriculture where everyone's needs are met now and in the future
Principal organisation lagged with this frame:	Various Environmental Federations, DS, LMN, Demeter, CNL, Wij-Land	MilieuDefensie, FDF, NAC, NMV, SEPA, Agractie, Wij-Land	NMV, SEPA, Toekomstboeren	Toekomstboeren
Associated codes:	Biodiversity,Soil Health, Reduce Environmental Footprint	Farmers Interests, Farmers First, Fair Prices for Farmers	Animal Interests, Animal Rights,	Inclusion, Diversity, Justice
Broad goal for the future of Dutch agriculture	Increased biodiversity and better preservation of the environment through stricter agricultural policies on emissions and pollution.	Increased income for farmers through elimination of unfair competition and giving farmers better compensation for environmental regulations that harm their business.	Better animal welfare in the Dutch livestock farming sector.	Social inclusion and justice for all farmers and non-farmers.

Figure 2: Summary table listing the four most widespread framings in the discourse.

This research set out to gain a basic understanding of how sustainable agriculture is framed within the Dutch agricultural context. Unclarity and disagreements on what sustainable agriculture means have caused it to become a contested concept that is subject to various framings that have caused tensions to rise in Dutch society, culminating in a long series of protests by farmers and environmentalists groups in the last few years. Looking through a series of policy documents published by major farmers and environmental organisations that were all invited to participate in a high-level roundtable conversation with the Remkes Commission about the nitrogen crises and the landbouwakkoord, we found the presence of four broad framings of sustainable agriculture within the discourse (see figure 2).

The four most widespread frames of sustainable agriculture in the Netherlands all had their own visions about the future of sustainable agriculture in the Netherlands. The future for farmers camp was in favour of improving the economic sustainability of farming businesses, either as a stand-alone goal or as a first step to making environmental sustainability possible. Should this frame achieve hegemony in the discourse and influence the elections of politicians, it can be expected that the Netherlands will advocate for a reduction of the free market and stricter import control on foreign agricultural products while environmental regulations are combined with government grants to farms that adhere to these regulations in order to reimburse farmers for the costs. The birds and bees camp is in favour of promoting environmental sustainability by increasing biodiversity, circularity of resource chains and improving the state of the Dutch environment. Should this frame achieve hegemony in the debate and influence the elections of politicians, it can be expected that economic concerns are pushed to the side and politicians are elected to enact stricter policies to limit the environmental impact of agriculture. The animal rights camp advocates for better animal welfare as the most important step towards sustainable agriculture. Should this framing achieve hegemony in the debate and influence the elections of politicians, it can be expected that regulations for livestock farms will increase, which will make livestock farming a less profitable business as operating costs increase. This in turn could potentially lead to a further pressure to scale up agricultural production, or to a reverse pressure that sees livestock farmers restructure their companies.

The four dominant frames that have been found in the discourse on sustainable agriculture, had both similarities and differences. The birds and bees and Animal Rights frames were similar in that they both emphasised animal rights although through different rationales. While both the birds and bees and future for farmers frames emphasised a need for fair global trade and denounced unsustainable market systems. The Brundtland definition of sustainability was shared by all frames, but each one differed in how it

addressed the question of "Whose needs?" These connections highlighted the discourse's ongoing evolution as frames influenced and competed with one another. While these differences were mostly small and only matters of priority order, they still formed sharp and clear boundaries between different camps that often denounced each other's understanding of sustainable agriculture.

Different types of argumentation were used to define and contest these frames. The main way that frames were constructed was through plain statements of targets or desired societal changes, or subjective expressions of norms and values. The future for farmers frame emphasised fair payments to farmers as a moral necessity. Several organisations argued that the current system is unfair and disadvantages farmers. The birds and bees frame emphasised environmental preservation, biodiversity, and soil health as an objective need for agriculture according to scientific research or legal requirements. Several environmental and agricultural organisations argued that environmental sustainability should be the foundation of sustainable agriculture because that is simply what the Dutch government agreed to by signing various agreements such as the Paris Agreement. However, the government was also criticised for signing these agreements. The government was accused of making irrational and unsustainable decisions by groups that supported the future for farmers frame. These groups criticised government policies that endangered farmers' financial security. Farmers were believed to be at risk economically as a result of the government's alignment with the birds and bees frame, which emphasised environmental protection. Government criticism emphasised the importance of having ethical agricultural policies and trade practices and the lack of such ethical policies at the current time. Similar criticism was levelled at the European Union for signing trade agreements that endangered the long-term viability of Dutch agriculture from an economic and environmental standpoint. The EU's push for reduced pollution clashed with its opening of markets to imported agricultural products, forcing farmers to engage in unsustainable practices due to financial pressure. The future for farmers frame used these arguments to claim that the sole focus on environmental sustainability therefore actually made for an unsustainable form of agriculture, discrediting both the Dutch and Eu governments and the birds and bees frame for upholding that idea. The birds and bees camp, in turn, targeted farmers for their use of chemical agents and industrial/intensive farming methods. Due to their negative effects on the environment, including pollution, biodiversity loss, and water contamination, these practices were deemed incompatible with sustainability. Neither camp presented any strong defensive arguments against these attacks. Defensive moves were mostly used to defend one’s framing against perceived attacks or possible counter-arguments, rather than against the actual arguments presented by other actors. The majority of organisations resisted participating in the

discussion in public. However, Greenpeace, a member of both camps, actively defended their claims by citing expert opinions, logical reasoning, and economic and scientific arguments. They argued that in order to have a sustainable form of agriculture, it was necessary to address both farmers' interests and the reduction of emissions. They emphasised the significance of both the future for farmers and the birds and bees frames. Direct observations of the current Dutch agricultural system were used to substantiate these claims. Greenpeace argued that environmental and economic sustainability were intertwined and that achieving sustainability required both. So despite these frames criticising one another, there was also a certain degree of common understanding. Most of the supporters of the future for farmers frame did not deny that environmental sustainability is an important and a good thing to work towards, but they merely felt that economic sustainability should be prioritised. Organisations such as Greenpeace bridged the gap between the two dominant camps by researching how both goals of economic and environmental sustainability could be achieved at the same time.

The level of common understanding and agreement between the dominant frames and the organisations that supported them can possibly mean that there is a possibility of frame alignment in the future. The two most dominant framings, the environmental sustainability of the birds and bees frame and the economic sustainability of the future for farmers frame, are not necessarily mutually exclusive and multiple organisations actively try to incorporate both frames in their own understanding of what sustainable agriculture means. These findings imply that the debate surrounding the sustainable future of Dutch agriculture is built on differences in priorities, but not necessarily irreconcilable differences in normative views. There is room for reconciliation between the different camps, and organisations such as Greenpeace or Natuur & Milieu show that there is a possibility of a shared future that fulfils the demands of all camps. So despite the division within the discourse there is a lot of common ground between the camps and they share a few ideas as well. A common understanding of sustainable agriculture should be possible. Practically, this means that if these voices can get widespread support they might be able to construct a framing and a policy plan that is satisfactory to both farmers and environmentalists. But under the current *stalemate* (quotation 9:30) this is still far away. Some developments in agricultural policy during the course of this research (Ministerie van Landbouw, Natuur en Voedselkwaliteit, 2023) and the upcoming elections might shift this stalemate, however. The newly enacted policy includes more financial help for farmers that are looking to become more environmentally sustainable. Since the lack of financial stability and the high costs of these changes formed the basis of the future for farmers camp, this new policy might have a strong impact on the standoff between

economic sustainability and environmental stability. Future research to analyse possible changes in the discourse is therefore recommended.

The results were mostly in line with the expectations based on the literature review. Both Gan et. al (2022) and Slätmo et al. (2017) found that sustainable agriculture is most often framed as a form of agriculture that fits the three criteria of economic, environmental and social sustainability. In this research, the future for farmers frame emphasised economic sustainability while the birds and bees frame emphasised environmental sustainability. Similar to the finding of Slätmo et al (2017), the concept of social sustainability was less prevalent within the data. Social sustainability was included to a certain extent in both the birds and bees frame (which included the concept of human health as important) as well as in the future for farmers frame (which emphasised fairness), and the inclusion frame was focused entirely on social sustainability. But social sustainability nonetheless was much less present than both environmental and economic sustainability, which is in line with the previous research.

The reliability and validity of these results are relatively strong. The validity of this research has been protected through careful selection of the data. By including all the organisations that are considered to be important voices in the discourse by the Remkes' commission on the future of Dutch agriculture, as well as organisations that cooperated closely with these relevant organisations, external validity has been protected. Further research on a larger database of more organisations should be done to confirm the generalisability of these findings, however. Through careful and critical analysis of the data as well as multiple rounds of coding to ensure nothing was overseen, the internal validity has been protected as well. Reliability, lastly, has been protected by collecting data in a standardised manner; the data primarily consisted of self-published mission & vision statements related to sustainable agriculture or sustainable land use more broadly, this also ensured no third-party interference. Through the use of texts and words that were prepared beforehand, rather than spur-of-the-moment utterances, the circumstances under which data was collected were consistent. This way there was little to no influence of external factors such as emotions or socially-desirable answers on the data. Despite these precautions, there were still some limitations to the research.

5.1 Limitations of research

The research undertaken within the scope of this paper suffered from two clear limitations that could affect the generalisability and validity of the results. The first limit is related to the nature of frame analysis as a research method while the second limit is related to the methods of data collection used for this research.

Framing analysis is by its nature limited. Recent research has shown that theoretical concepts of frame analysis are not well defined and are rather vague (Van Dijk, 2023). What this means is that frame analysis could be considered to be too subjective in nature. Furthermore, the fuzziness of the concepts of frame and framing (Van Dijk, 2023) pose a threat to the generalisability of the research. This limitation can be dealt with by repeating this research with the same data, and comparing the results between multiple researches. As such, repeated research into the way sustainable agriculture is framed within the Dutch agricultural context is recommended.

The second limitation of this research was the limited data. While 44 documents representing the views and beliefs of 39 separate organisations containing a total of 32 thousand words, can hardly be considered a small amount of data, it still represents only a small part of the complete discourse surrounding sustainable agriculture. As a large number of other organisations and people beyond those analysed in this paper are involved in the discourse, this leaves the possibility of various other frames existing outside of the ones identified in the scope of this research. It is hard to make any statements about the completeness and the representativeness of the data and thus the results. However, at the onset of this research it was determined that choosing to analyse those organisations that Johan Remkes considered to be the most important voices in the debate about the future of Dutch agriculture (Remkes, 2022), would ensure an acceptable level of representativeness. Analysing the way other organisations involved in the discourse frame sustainable agriculture, and then comparing those results to this research can show to what extent the results presented above are generalisable. Thus, repeated research into the way sustainable agriculture is framed by different Dutch organisations is recommended.

5.2 Note on researcher bias

The presence of researcher bias can introduce subjectivity and potentially distort the findings and interpretations of any qualitative study. Researcher bias comes in a number of different forms. Design and selection bias refers to biassed data collection and sampling methods while confirmation bias refers to a strong focus on data that agree with the preconceived ideas of a researcher. In the scope of this research, it is important to reflect on both of these types of bias.

Design and selection bias was avoided as much as possible by basing data collection first and foremost on the selection of organisations that Johan Remkes picked as the most important voices in the debate on the future of agriculture in the Netherlands. In the scope of this research, this strategy ensured that researcher bias in data selection was minimised. It is however important to reflect on the fact that Johan Remkes might have been biassed in his own selection of these organisations, and by copying his selection this research might be less representative than it seems. The only way to confirm or deny such a claim, however, is to repeat the research as was already recommended in the previous sub-chapter.

Within this research, confirmation bias was avoided as much as possible by adhering to a strategy of constant self-review. This meant being self-reflective and trying to identify and acknowledge my own biases, values, and assumptions. This self-awareness helped me to recognize and minimise the influence of my own preconceptions on the research process and the answers found within. Lastly, by meticulously connecting all claims and findings within this result to a specific quotation that served as the basis of that claim, We tried to be transparent. This transparency should allow others to assess the potential influence of bias on my findings.

Chapter 6: Conclusion

In this research we answered the question: How is sustainable agriculture framed in the Dutch farming context? As the meaning of sustainable agriculture has become contended, with differing interpretations leading to tensions between farmers and environmentalists, culminating in protests, we set out to find out what frames lay at the basis of this debate. This research consisted of frame analysis of the mission statements of the most important voices in the debate about the future of Dutch agriculture according to the Remkes commissions, as well as other organisations related to these former organisations. Based on this analysis it can be concluded that there are four widespread framings of sustainable agriculture within the Dutch agricultural discourse, with two of them achieving a particular level of dominance. These two dominant frames were named the future for farmers frame and the birds and bees frame. The former defined sustainable agriculture through economical arguments as a form of agriculture that ensures financial and economic sustainability for the farmer first and foremost, while the later defined sustainable agriculture through factual/scientific arguments as a form of agriculture that protects and preserves environmental factors such as clean air and water, healthy soil and biodiversity. These findings are similar to those of previous literature, which stated that sustainable agriculture is often framed as meeting economic, environmental, and social sustainability criteria (Gan et al., 2022; Slätmo et al., 2017). Despite the differences, and the various arguments these camps produced to discredit and attack each other, organisations such as Greenpeace showed that these two framings are not mutually exclusive. Environmental sustainability and economic sustainability are both possible at the same time, and Greenpeace argued that the best way forward is to enact policy that gives equal consideration for both forms of sustainability at the same time.

The current dominance of these two frames might not be stable in the long-term however, current developments might lead to shifts in the near future. The upcoming election for the Dutch House of Representatives, the future developments on the landbouwakkoord and the court cases against the Dutch government's sustainability policies by Greenpeace can possibly change the balance in the discourse. It would therefore be useful to do future research on the impact of these developments on the framing of sustainable agriculture in the future. As the results of this research provide a foundational understanding of the way sustainable agriculture is framed in the Netherlands, these results should serve as a basis for any future research into.

The findings of this research should thus serve as a foundation to possible future research, but more importantly they help us gain a foundational understanding of the different voices in the discourse. This understanding also brings better insights into the motivations of both farmers protests and environmental protests and gives a crucial understanding of the framings that influence the future of Dutch agriculture through their participation in the roundtable talks with the Remkes Commission on the landbouwakkoord and the solution to the nitrogen crisis. The discourse on sustainable agriculture in the Netherlands is complex and multifaceted, and our research has highlighted both differences between various frames as well as points of convergence and possible common ground. The results of this research contribute to a deeper understanding of the broader debate and the diverse perspectives that shape the future of agriculture in the Netherlands.

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Appendix A:

Coding-scheme:

○ 4 Returns	
○ About Agriculture	
○ About Sustainability	
● AEB	
○ AGR	
● AGRAC	
○ Agricultural Inefficiencies	
○ Agricultural Input/Output Imbalance	
○ Agricultural Products Diversity	
○ Agricultural Scale-Increase as a Problem	
○ Agricultural Scale-Increase as a Survival Necessity for Farmers	
○ Agricultural Shrinkage	
○ Agricultural Total	
○ Agriculture	
○ Agriculture as a Scapegoat	
○ Agriculture as Economic Driver	
○ Agriculture Transition	
○ Agriculture under Pressure	
○ Agro-Ecology	
○ Agroforestry	
○ Air Pollution	
○ Ambitions	
○ Animal Extinction	
○ Animal Interests	
○ Animal Rights	
○ Animal Rights Frame	
○ Animals	
○ Animals as a Danger to Sustainability	
○ Anti-Globalism	
○ Anti-Government Sentiment	
○ Anti-Science	
○ Anti-Technology	
○ ATTACK ON GOVERNMENT	
○ Attractive	
○ Autonomy	
○ Awareness	
● Balance Society vs Farmers Income	
○ Balanced Farming	
● Balanced Living	
○ Beautiful	
○ Benefits of Extensification/Reduction of Live Stock Keeping	
○ Bio-Agriculture needs to Change too	
● Biodiversity	
● Biological Farming	
● BION	

● Birds and Bees	
● BMF	
● BONA	
● CAFA	
○ Carbon cycle	
○ Changing Organisation	
○ Changing Society	
● Circular Agriculture	
○ Circular Economy	
● Clean Air	
● Clean Water	
○ Climate Adaptation	
○ Climate Change	
● Climate Neutrality	
● Climate/Future Proof	
○ Close to Nature	
● CNL	
○ Community	
○ Community Building	
○ Community Involvement	
○ Consensus Agricultural Products Demands	
○ Considerations for Space-Use	
○ Consumer Behaviour as a Push for Sustainable Agriculture	
○ Cooperation	
○ Cooperation Across Borders	
○ Cooperation Businesses	
○ Cooperation Private Parties	
○ Cooperative Agriculture	
○ Costs of Extensification/Reduction of Live Stock Keeping	
○ Create Opportunities	
○ Create Sense of Urgency	
○ Creativity	
○ Criticism	
○ Crop Rotation	
○ Decapitalisation of Agriculture	
○ Decentralisation	
○ Decreased Pollution and Erosion	
● DEM	
○ Demand for more Research	
○ Demands	
○ Dialogue	
○ Diversity	
○ Division as the Norm	
● DMBO	
● DS	
○ Dutch Agricultural Products as a Global Necessity	
○ Dutch Agriculture as Different from the rest	

of Europe	
○ Dutch Food System Companies	
○ Ecological Agriculture	
○ Ecological Interests	
○ Ecological Sustainability as a Threat to Food Security for the Poor	
● Economical Sustainability	
○ Educating People	
○ Educating Young People as Key to Sustainability	
○ Efficiency of Resources	
○ Emissions Compensations	
● Emissions Reductions	
○ Emulate Nature	
● Energy Transition	
○ Entrepreneurship	
○ Environment	
○ Environment Total	
○ Environmental Degradation	
● Environmental Development	
● Environmental Healing	
● Environmental Health	
● Environmental Preservation	
● Environmental Quality	
○ European Law Supremacy	
○ European Policy	
○ Expensive	
○ Extensification Agriculture	
○ Extensive Live Stock Keeping as Insufficient to achieve Sustainability	
○ Extra-Legal Tactics	
● Fair Prices for Farmers	
● Fair Trade	
● Fairness	
○ Farm Buy-Outs	
○ Farm-to-Fork	
○ Farm/rural Adjacent Political Party Voters	
○ Farmer-Businesses Relations	
○ Farmer-Citizen Relations	
○ Farmer-Environment Relations	
○ Farmer-Environmental Movement Relations	
○ Farmer-Farmers Lobby Relations	
○ Farmer-Government Relations	
○ Farmers are Willing to be Sustainable	
● Farmers as an Important Part of Sustainable Transition	
○ Farmers contribute to the Environment	
○ Farmers Feed the People	
● Farmers First	
● Farmers Interests	

○ Farmers Long-Term Survival	
● Farmers Protection	
● Farmers Rights	
● FDF	
○ Field-Edge Management	
○ Fight Light Pollution	
● FMF	
○ Food Forests	
○ Food Products Balance	
○ Food Security	
○ Food Systems	
○ Forceful Government Policy	
● Fossil-Fuel Phase Out	
○ Fraud	
● Future for Farmers	
○ Global Connections	
○ Global Trade as Harmful for Environment	
● Global Trade as Harmful for Farmer	
○ Globalisation	
○ Goal Oriented Working	
○ Government as a Barrier to Sustainability	
○ Government as a Necesity to Protect Farmers	
○ Government as a Necessity for Sustainable Agriculture	
○ Government-Citizens Relations	
● GP	
○ Grassroots	
○ Green Economy	
● GRO	
● Health	
○ High-Quality Products	
○ Historic Decrease Sustainability	
○ Hollistic Views	
○ Hopeful	
○ Hostility	
○ Human Long-Term Survival	
○ Human Manure	
○ Human rights	
○ Identity	
○ Ill-Defined	
○ Importance	
○ Imported comment	
○ Inclusion	
○ Inclusion Frame	
○ Increase Taxes to Fund Transition	
○ Incremental Transition	
○ Industrial Agriculture	
○ Innovation	
○ Inspire	
○ Integral Solutions	

○ Intensitve Farming as a Problem	
○ Intensive Agriculture	
○ Intensive Agriculture as a Moneypit	
○ Internalising Externalities	
○ Invest in Farmers	
● IP	
○ Justice	
○ Knowledge Sharing	
○ Lack of Clarity in Data/Knowledge	
○ Lack of Knowledge as a Barrier to Sustainable Agriculture	
○ Lack of Money as a Barrier to Sustainable Agriculture	
○ Legal Tactics	
○ Live Stock	
● LMN	
○ Local Community	
○ Local Cooperation	
○ Local Interests	
○ Long-Term Thinking	
○ Loss of Jobs	
○ Love & Respect	
○ Low Impact Farming	
○ Low Impact Living	
○ Low-Quality Products	
● LTO	
○ Manure Excesses	
○ Manure Recycling	
● Market Power Farmers	
● Market Protection	
● MD	
○ Meat as a Problem	
○ Mention	
Mention	○ Agriculture/Farmer
Mention	○ Coöperatie Natuurrijk Limburg
Mention	○ Demeter
Mention	○ European Union
Mention	○ Fairness
Mention	○ Farmers Defense Force
Mention	○ Government
Mention	○ Live-Stock
Mention	○ LTO
Mention	○ Natuur & Milieu
Mention	○ Natuur & Milieufederatie Limburg
Mention	○ NAV
Mention	○ NMV
Mention	○ Sustainable
Mention	○ Toekomstboeren
Mention	○ UN
Mention	○ Vereniging Innovatief Platteland
○ Milk as a Problem	

○ Milk Cows as Circular	
○ Move	
Move	○ Attacking
Move	○ Defending
Move	○ Defining
Move	○ Supporting
○ Multiple Solutions	
○ Natural Pesticide	
○ Nature Long-Term Survival	
● Nature-Inclusive Agriculture	
● NAV	
○ Necessity	
○ Negativity	
○ Network Building	
○ Network Involvement	
○ Nitrogen Crisis	
● NLL	
● NM	
● NMD	
● NMF	
● NMG	
● NMGro	
● NML	
● NMNH	
● NMO	
● NMU	
● NMV	
● NMZH	
○ Norms and Values	
○ Nurture Support	
○ Nutrient Cycles	
○ Opposition to Scale-Increase	
○ Organisation	
○ Organisational Embiggening	
○ Organisational Professionalisation	
○ Organisational Restructuring	
○ Organisations	
○ Out-Group Cooperation	
○ Paris Accords	
○ Path Dependency	
○ Peace and Quiet	
○ Permaculture	
○ Philosophy	
○ Planetary Boundaries	
○ Policy	
○ Policy Fail	
○ Policy Influencing	
○ Popular Support as a Necessity for Agriculture	
○ Population Growth as a Threat	
● PPM	

○ Precision Agriculture	
○ Pro-Science	
○ Pro-Technology	
○ Problems	
○ Productivity	
○ Progress	
● Protect Animal Species	
○ Protein Transition	
○ Protests	
● Quality of Life	
○ Recreation	
○ Recycling	
○ Redirect Funds	
● Reduce Chemical Inputs Agriculture	
● Reduce Environmental Footprint	
○ Reduce Expports	
○ Reduce Farming Susidisation	
● Reduce Imports	
○ Reduce Iniefficentie	
○ Reduce Livestock Size	
○ Reduce Waste	
○ Renewable Power	
○ Resilience	
○ Resist Unwanted Change	
○ Responsibility	
○ Reuse Agricultural Waste	
○ Reward Farmers who are Sustainable	
○ Right to Food	
○ Rural Area	
○ Rural Greening	
○ Rural-Urban Relations	
○ Safety	
○ Scarcity	
○ Scarcity of LAbor	
○ Self-Governing	
○ Self-Reliance	
● SEPA	
○ Set an Example	
○ Social Acceptability	
● Societal Sustainability	
○ Society Interest	
○ Society needs to help Farmers	
● Soil Health	
○ Soil Pollution	
○ Space for Nature	
○ Spirituality	
○ Super-Local Cooperation	
○ Sustainability	
○ Sustainability as Profitable	
○ Sustainability as something expected	
○ Sustainability is Pluralistic	

● SUSTAINABLE AGRICULTURE	
○ Sustainable Agriculture is Doable	
○ Sustainable Devlopment	
○ Sustainable Measures need to be Scientifically Proven	
○ Sustainable Transition	
○ Sustainable Transition as an Opportunity not a Threat	
○ Sustainble Agriculture as Impossible but Approachable	
○ Tactic	
Tactic	○ Appeal to Emotion
Tactic	○ Appeal to Popular Support
Tactic	○ Authority Arguments
Tactic	○ Economic Arguments
Tactic	○ Ethical/Moral Arguments
Tactic	○ Factual/Scientific Arguments
Tactic	○ Rational Arguments
● TB	
● TCV	
○ Technological Agricultural Practices as a Problem	
○ Technological Agricultural Practices as a Solution	
○ Technology as Insufficient to Make sustainability	
○ Tourism	
○ Traditional Agriculture as Out-of-Sync with Nature	
○ Traditional Farming	
○ Traditional Farming as Violence	
○ Tranquility	
○ Transition Funds	
○ Transparantie	
○ Truth	
○ Uncertainty	
○ Uneven Farm Incomes	
○ Unfair Externalities	
○ Unhappiness Status Quo	
○ Urban Greening	
● VALA	
○ Violence	
○ Voice for Nature	
○ Water Pollution	
○ Water USe	
○ Wellbeing	
● WFN	
○ Wild Animals as Danger to Farmers	
● WL	
● ZMF	

Appendix B:

(These are the quotations referenced in the body of the research, the full list of quotations is available within the Atlas.ti datafile)

3:1	verheid en multinationals staan verduurzaming van onze landbouw in de weg, zeggen Suzanne Ruesink, boerin, en Donald Pols, Milieudefensie. De schaalvergroting is funest voor zowel boer als klimaat.
3:11	Maar in haar beleidskeuzes plakt ze vooral pleisters. Daar blijft het bij. Niet de boeren en het stoppen van klimaatverandering staan voorop.
3:12	Als de politiek echt betrokken is bij boeren en klimaat, wordt de export van bulkvoedsel ingedamd, om verdere schaalvergroting in te perken, en maakt men zich hard voor een eerlijke prijs voor de boer, zodat deze kan vergroenen en de voedselmarkt meer in balans komt.
4:1	Wij staan voor een provincie met een aantrekkelijk landschap, een rijke biodiversiteit en een gezonde leefomgeving voor mens, plant en dier.
4:3	Onze provincie is energieneutraal en circulair
5:7	Een voorbeeld: Spuiten met een breedwerkend herbicide zonder de gevolgen daarvan te kennen, is geen methode die verenigbaar is met duurzame landbouw, omdat je dan meteen een heleboel verschillende soorten planten en insecten doodt. Bovendien zijn de meeste ervan misschien niet eens gevaarlijk voor uw gewas.
7:6	Het betekent dat de maatschappelijk duurzame akkerbouw die we beogen, voorkomt dat komende generaties worden belast met de gevolgen van de huidige productiewijze. Voor akkerbouwers betekent dit het zuinig omgaan met grond, het efficiënt benutten van hulpstoffen en het voorkomen van schadelijke emissies.
7:10	Een krachtige positie van telers in de markt.
7:11	Een gelijk speelveld voor akkerbouwers in de hele EU.
7:14	Voedselzekerheid, voedselveiligheid en faire opbrengstprijzen (kostprijs plus ondernemersmarge) zijn de doelen van het EU-beleid na 2013.
7:21	Invoerheffingen voor alle basisproducten vergelijkbaar met de huidige invoerheffingen voor granen.
8:3	Natuurinclusieve en grondgebonden landbouw heeft de toekomst. Het gaat over agrarische ondernemers die ernaar streven in de gehele bedrijfsvoering zoveel mogelijk rekening te houden met de natuur, biodiversiteit en landschap.
8:4	Bij natuurinclusieve landbouw draait het om samenwerken met de natuur (onder andere natuurlijke plaag- en ziektebestrijding en -preventie in plaats van chemie) en het bevorderen van de biodiversiteit op het eigen land. Met grondgebonden bedoelen we (bij veehouderij) dat er voldoende grond onder het bedrijf zit voor de mest en het voer voor een lokale kringloop. En dat lokaal en in de directe omgeving van de bedrijven.

9:3	Een maatschappelijke kosten-batenanalyse (MKBA) door onderzoeks- en adviesbureau Ecorys 1 en Ethical Growth Strategies in opdracht van Greenpeace toont dat een hervorming van de intensieve veehouderij haalbaar en betaalbaar is.
9:5	In totaal worden de volgende hardnekkige problemen van de intensieve veehouderij aangepakt; ● Einde aan de stikstofcrisis ● Minder uitstoot broeikasgassen ● Meer ruimte voor de natuur ● Minder ammoniak vervuiling ● Minder fijnstof ● Einde aan het mestoverschot ● Minder gezondheidsschade (o.a. minder kans op epidemieën zoals Q-koorts, en minder longziekten door fijnstof in lucht(wegen). ● Minder boskap in het buitenland voor soja bestemd voor veevoer
9:10	Het kabinet is nu dan ook aan zet om de noodzakelijke stappen te zetten. Het vereist een inspanning om dekking voor de benodigde financiële middelen te vinden. Er zijn echter talloze mogelijkheden om een zogenoemd Transitiefonds te vullen. Denk aan het het vergroenen van het belastingenstelsel (via de consument of het 'vervuiler betaalt' principe), relatief goedkoop geld lenen van de Europese Centrale Bank, afschaffen van contra-productieve subsidies als bijstook van biomassa in kolencentrales, het aanwenden van de landbouw- subsidies vanuit het Gemeenschappelijk Landbouwbeleid of banken hun leningen laten afschrijven in de vee-industrie
9:11	Daarnaast is het noodzakelijk dat er nieuwe spelregels worden opgesteld zodat de boer een eerlijke prijs krijgt voor zijn product, zoals door stapeling van waardering en een vergoeding voor de stappen die worden gezet op het gebied van duurzaamheid. Op deze manier blijft een gezond en schoon landbouwsysteem in stand.
9:21	De grote stikstofneerslag (ammoniak en stikstofdixiden) in Nederland is schadelijk voor de natuur. Door de hoeveelheid stikstof die in Nederland uit de lucht neerslaat verdwijnen verschillende plant- en diersoorten waardoor het evenwicht in ecosystemen verstoord raakt.
9:23	De Nederlandse overheid wilde de hoeveelheid stikstof in de natuur terugdringen met het Programma Aanpak Stikstof (PAS), dat in 2015 werd geïntroduceerd . De manier waarop binnen 2 het PAS de vergunningen werden verleend voor landbouw of andere activiteiten rondom natuurgebieden, is echter onrechtmatig gebleke
9:27	Uit het door de landbouwsector gepresenteerde plan 'Uit de gecreëerde stikstof-impasse' blijkt 10 dat de sector zelf de stikstofuitstoot wel wil beperken, maar tegelijk op dezelfde voet verder wil gaan. De sector wil emissies verkleinen met verschillende technieken, zoals eiwit-armer voer, het bijmengen van water bij mest voordat het wordt toegepast op het land en via luchtwassers die ammoniak uit de stallucht filteren. Ook pleit de sector voor het heroverwegen van de beschermingsstatus van natuurgebieden in Nederland. Krimp van de veestapel - door menig

	expert aangewezen als de effectiefste maatregel om de uitstoot uit de dierhouderij te verkleinen - lijkt onbespreekbaar.
9:28	Wat Greenpeace betreft is de stikstofcrisis een kans om de landbouw, met nadruk op de veehouderij, te hervormen naar een voedselsysteem dat veel beter past binnen de ecologische draagkracht. Het is daarvoor cruciaal om het aantal dieren in de vee-industrie te verminderen en een ecologisch voedselsysteem te ontwikkelen dat natuurinclusiever is . 11
9:29	In verschillende analyses en gesprekken met boeren en vertegenwoordigers van de sector 12 komen twee zaken duidelijk naar voren: ten eerste zitten boeren vast door investeringen die zij deden in hun boerenbedrijf. Eenmaal een bepaald pad van bedrijfsvoering ingeslagen, betekent dat zij minder makkelijk tot structurele veranderingen over kunnen gaan. Dit is de zogenaamde ‘padafhankelijkheid’. Ten tweede is het lastig een verdienmodel te bedenken dat alle boeren in Nederland in staat stelt om op ecologische manier, met minder dieren te werken en een goed belegde boterham te verdienen.
9:30	De schijnbare tegenstelling tussen natuur en boer, en de ‘padafhankelijkheid’ van het individuele boerenbedrijf, verlamt de discussie over stikstof en de mogelijkheid om deze crisis te zien als kans voor een ontwikkeling naar een ecologisch voedselsysteem.
9:35	De gemiddelde overschrijding van de kritische depositiewaarde voor heel Nederland is circa 500 mol N/ha/jr. Dat is ongeveer een derde van de totale gemiddelde depositie. Om onder de kritische depositiewaarde te komen is een gemiddelde reductie van 33 procent nodig van alle emissies die bijdragen aan de Nederlandse depositie op de Natura 2000-gebieden. Een deel van deze emissies vindt plaats in het buitenland; als we de gehele reductie enkel in Nederland willen behalen gaat het om ruim een halvering van de huidige Nederlandse emissies . Omdat de 25 Nederlandse ‘export’ van stikstofvervuiling in de atmosfeer vier maal groter is dan de ‘import’ , 26 is dit een te rechtvaardigen opgave.
9:36	De vee-industrie is een grote bron van broeikasgassen: de totale broeikasgasuitstoot uit de Nederlandse vee-industrie is rond de 23 Mton Co2 eq. Dit is 11-12 procent van de gehele broeikasgasuitstoot van de Nederlandse economie

9:40	n heel Europa is de biodiversiteit de afgelopen decennia achteruit gehold. Maar in Nederland is het in vergelijking met andere Europese landen nog slechter gesteld. Dit komt voornamelijk door de intensieve landbouw. Niet alleen de grote stikstofuitstoot, maar ook een sterke verandering 32 van het landschap en de vervuiling van de natuur door meststoffen (stikstof en fosfaat) en bestrijdingsmiddelen zijn belangrijke factoren in het verdwijnen van dier- en plantensoorten
9:46	schadelijk voor de luchtwegen en hart- en bloedvaten. Op dagen met een hogere concentratie van ammoniak wordt een lagere longfunctie van mensen vastgesteld. De Gezondheidsraad dringt om die reden aan op het terugdringen van de ammoniakuitstoot van de vee-industri
9:53	De kwaliteit van het oppervlaktewater verbetert, maar is nog onvoldoende om de voor 2027 gestelde doelen van de Kaderrichtlijn Water te halen. Dat zijn in een notendop de conclusies van het PBL over de waterkwaliteit in ons waterrijke land. Het planbureau stelt vast dat het nodig is om het gebruik van (kunst)mest en bestrijdingsmiddelen te verminderen. Dit zijn notoire vervuilers van het water, naast riooloverstorten en medicijnen. 59 De organisatie Natuur & Milieu vat de noodzakelijke maatregelen tegen nutriëntenvervuiling slim samen: ‘Het probleem bij de bron aanpakken is een stuk effectiever: minder mest produceren en toepassen.’
9:57	Veel boeren willen wel graag anders, maar zitten in een wurggreep van schulden, investeringen en lage marges op hun producten, analyseert het PBL in ‘Naar een wenkend perspectief voor de Nederlandse landbouw’. Het Planbureau voor de Leefomgeving noemt dat ‘padafhankelijkheid’
9:58	Eenmaal op het pad van schaalvergroting en intensivering is het lastig omkeren voor boeren. Vier ‘padafhankelijkheden’ duwen de boeren steeds weer terug op dezelfde, heilloze weg.
9:87	Het maatschappelijk rendement van de twee scenario’s die - naast een vermindering van het aantal dieren - ook inzetten op een transitie naar een natuurinclusiever landbouwsysteem (scenario 2 en 3) is zelfs flink hoger dan in het scenario waarin de resterende veehouderij doorgaat op dezelfde voet als nu (scenario 1). Business as usual is dus op de langere termijn een slechte maatschappelijke investering.
9:113	veel boeren snakken naar een echt toekomstperspectief, waarbij niet de ene nieuwe milieumaatregel op de andere natuurbeschermingsregel wordt gestapeld en waarin een goede boterham te verdienen is met een duurzame onderneming.
9:115	Boeren krijgen weer sociaal-economisch perspectief en maatschappelijke waardering. Zij zijn cruciaal voor een leefbaar en bloeiend platteland, daarom is het nodig om ze te steunen in de noodzakelijke verandering van hun belangrijke werk: voedsel maken met respect voor klimaat, natuur en leefomgeving.

9:117	Vertel het eerlijke verhaal en handel daarnaar “Niet alles kan”, concludeerde de Commissie Remkes al. De industriële landbouw is een vastgelopen systeem dat een veel te zware wissel trekt op het klimaat, de natuur, onze gezondheid en de boeren zelf. De stikstofcrisis is daarvan een uitkomst, maar niet de eerste en zeker niet het laatste maatschappelijke probleem
9:119	De dominante focus van de Nederlandse agro-industrie op efficiency en schaalvergroting is een doodlopende weg gebleken voor zowel onze natuur als voor een groot deel van de individuele boeren. Toch is krimp in kringen van de regering en beleidsmakers nog steeds een taboe. De regering moet het publieke belang voorop zetten, afstand nemen van de landbouwlobby en regie nemen in de transitie van ons voedselsysteem. Zachte heelmeesters maken stinkende wonden.
9:123	Boerenbanken mogen boeren niet aan hun lot overlaten, maar hebben een verantwoordelijkheid om hen te helpen in de omslag naar ecologische landbouw met minder dieren. Banken kunnen een cruciale rol spelen in de transitie door te stoppen met het financieren van de industriële veehouderij, en ontwikkeling in ecologische landbouw aantrekkelijker te maken. Zij maken met hun investeringsbeleid tevens deel uit van het stapelen van betere beloningen voor duurzame boere
10:3	Samenwerking tussen de schakels is van groot belang voor kwantitatieve en kwalitatieve groei. Daarbij zijn de vier internationaal erkende kernwaarden van biologisch richtinggevend: Gezond (voor bodem, plant, dier, mens en planeet), Ecologisch, Fair en Verantwoordelijk. Bionext faciliteert samen met de leden de optimale invulling hiervan en de noodzakelijke samenwerking in de keten.
11:1	De Brabantse Milieufederatie staat voor een schoon milieu, een vitale en rijke natuur, een gevarieerd landschap en een duurzame economie. Nu en straks.
11:7	Natuur en landschap beschermt en de biodiversiteit herstelt;
11:8	Kringlopen sluit en waarin landbouw natuurinclusief is;
11:12	Bescherming en verbetering van natuur, landschap, leefomgeving en biodiversiteit in Brabant. Dat doen we samen met onze achterban, koploperbedrijven en bewoners. Door positieve ontwikkelingen te steunen en negatieve ontwikkelingen tegen te houden;
13:6	de belangenbehartiging van de agrarische sector en het rationaliseren van het Kabinetsbeleid;
13:12	en de belangen van de mensen in onze agrarische sector verdedigt
13:14	Het Kabinet werkt in een moordend tempo verder aan het inkrimpen van onze sector, het elimineren van de landbouw zoals we die kennen
13:15	Via wet- en regelgeving die de landbouwsector opoffert aan huizenbouw, zware industrie en de luchtvaartsector: de ‘vuile’ sectoren.
13:16	Zonder daarvoor enige zekerheid of toekomstperspectief te bieden aan de boeren.
13:17	Het laatste rapport van het Adviescollege Stikstofproblematiek (Commissie Remkes) is opnieuw een manier om boeren van hun land af te vegen en te demotiveren

13:24	5. Kostendekkende prijzen
13:25	6. Afdoende compensatieregeling voor nertsenhouders
13:27	8. Geen oneerlijke handelsakkoorden
13:28	9. Einde aan oneerlijke handelspraktijken
15:2	Het klimaat warmt te snel en te veel op. Wat we eten en hoe dat geproduceerd wordt, draagt hieraan bij. Zo zijn grote Nederlandse vlees- en zuivelbedrijven verantwoordelijk voor een enorme uitstoot van broeikasgassen. Meer dan de directe uitstoot van alle auto's en vrachtwagens in Nederland in een jaar.
15:5	Boeren in Nederland hebben te maken met hoge kosten. Veel van hen komen met de huidige lage en onstabiele prijzen niet uit. Ook niet met subsidie. Het lukt alleen als ze flink groeien, investeren en intensiveren. Veel boeren haken daardoor af.
15:6	Wat de boeren en onze aarde nodig hebben, is afscheid van de wereldmarkt waar de laagste prijs geldt. Waar vervuilende bedrijven, supermarktketens en grootgrondbezitters de dienst uitmaken. De boeren en onze aarde zijn gebaat
15:9	een zo groot mogelijke Europese zelfvoorziening; • eerlijke prijzen voor duurzame producten, zoals biologisch; • meer verbinding tussen boeren en burgers door lokale markten.
15:11	die eerlijke prijzen voor producenten en consumenten garandeert;
17:1	De huidige, reguliere landbouw in Nederland gaat niet goed samen met de uitdagingen waar we als land voor staan
17:5	De Nederlandse landbouw is verantwoordelijk voor 45 procent van de landelijke stikstofuitstoot. Dat is meer dan welke andere bedrijfstak ook. Ook is het met 14 procent verantwoordelijk voor een flink percentage van onze totale uitstoot van het broeikasgas CO2. De manier waarop we nu ons eten produceren, moet daarom snel veranderen.
17:8	et wordt steeds duidelijker dat we niet kunnen doorgaan met de intensieve vorm van landbouw die we nu hebben. We moeten weg van het idee van 'zoveel mogelijk eten maken'. Waar we naartoe moeten is: 'eten maken met aandacht voor dier, boer, natuur en milieu'.
17:9	Bij Natuur & Milieu zetten wij ons in voor een landbouw die voedsel op zo'n manier produceert dat het geen schade veroorzaakt aan de natuur én niet langer bijdraagt aan klimaatverandering. Een manier, bovendien, waarbij de boer nog steeds een goede boterham kan verdienen. Dat kan met natuurinclusieve kringlooplandbouw.
17:11	We verzamelen hun ervaringen, onderzoeken welke obstakels zij tegenkomen en welke oplossingen ervoor zijn. Deze praktijkvoorbeelden dragen we vervolgens aan in onze gesprekken met politici en ambtenaren. Hiermee tonen we aan dat we op een andere manier voedsel kunnen en moeten maken.
17:14	Met hen presenteerden we een aanpak aan het kabinet waarmee de overheid stikstof kan verminderen, de natuur versterken en boeren en ondernemers een toekomst bieden. Deze aanpak kon rekenen op een welwillend oor bij het kabinet. Dat is een eerste stap in de goede richting. Maar er moet nog veel gebeuren om te zorgen voor schoon water en

	natuurherstel, en het tegengaan van klimaatverandering.
18:2	In ons agrarisch collectief stimuleren en helpen leden en medewerkers elkaar om door toepassing, ontwikkeling en kennisdeling van het agrarisch natuur- en landschapsbeheer (ANLb) in de provincie Limburg leefgebieden te creëren waarmee de gewenste soortendiversiteit terugkeert.
18:9	De identiteit van Natuurrijk Limburg heeft zich de afgelopen jaren gevormd in het streven naar meer biodiversiteit op boerenland
18:11	Natuurinclusieve landbouw is iets dat op ons werkveld bruist; iets waar haar leden mee bezig zijn of graag mee aan de slag willen. Met alleen activiteiten in het kader van agrarisch natuur- en landschapsbeheer zijn we er niet, maar dit is wel een belangrijke aanjager richting een natuurinclusieve landbouw.
21:1	Wij.land staat voor een gezond, biodivers en veerkrachtig landschap dat ecologische, economische en sociale waarde creëert voor de maatschappij. Zodat wij ons landschap beter overdragen aan de volgende generaties.
21:5	We werken samen met boeren aan de omslag naar een landbouw met een goed financieel perspectief en een positieve invloed op mens & natuur; en we nemen drempels weg die deze omslag in de weg staan.
21:7	We beginnen bij de bodem als basis voor een duurzame toekomst.
23:3	Herwaardering van de Boer.
23:4	De achterliggende periode zijn boeren door éénzijdige berichtgeving in een onjuist daglicht komen te staan. 1 oktober was een duidelijk begin van de herwaardering van de boer. Boeren in Nederland hebben een missie, een verhaal te vertellen.
23:5	Het verhaal van de productie van eerlijk, veilig voedsel, met de laagste milieu belasting ter wereld. Voedsel uit Nederland, dat mensen in Europa, én verder weg op hoge waarde waarderen, omdat er nergens ter wereld een gebied is waar de samenhang tussen alle partijen zo efficiënt is.
23:7	Een duurzaam Nederland is niet alléén een taak van de boer.[P SEP]Agractie wil onnódig gesleep met voedsel tegengaan, en de consumptie van Nederlands voedsel bevorderen. Export en import van voedsel is natuurlijk prima, als het nodig is! Maar wat ons betreft, géén onnodig gesleep met voedsel over de wereld.
23:9	In de meeste landen ter wereld is men, ook door ligging en terrein omstandigheden, niet in staat om voldoende voedsel voor de eigen bevolking te produceren. In Nederland zijn alle omstandigheden erg geschikt om voedsel te produceren. Daarom kunnen we ook veel aan onze buurlanden in Europa leveren. Van al het voedsel wat we exporteren is ruim 75% voor onze mede-Europeanen. We importeren ook veel producten die in Nederland niet kunnen groeien, zoals bijvoorbeeld

	mandarijnen en koffiebonen.
24:1	Congress Notes
24:7	. Land access, fair incomes/prices for farmers. Reclaiming land for the people.
24:9	Biological food without poison is a right.
24:15	Power relations of human vs animal has put animals rights away and dismissed their language and culture aspect
24:17	In conflict between humans and non-human animals, deliberation between them is often framed in a way where animal voices are dismissed and humans turn to violence based on power relations (human rights to land, animals are not rational and dumb so therefore lesser than). In didos project animals are left to their own so no deliberation?
24:33	Volgens Ruud de bodemspecialist, is een gangbare sustainable manier om met bodem om te gaan: stoppen met gif en stoppen met tractors. Deze verstoren het microleven in de bodem: bacteriën en schimmels die in constant contact staan met het plantenrijk en de mineralen (vormen een brug: kunnen meer en beter mineralen verwerken, wisselen uit met planten en zorgen tegelijkertijd ook samen dat de bodem gezond blijft)
25:1	Veel boeren zitten gevangen tussen de toenemende maatschappelijke druk voor een schoon milieu, dierenwelzijn en voedselveiligheid en de wereldmarkt waar alleen de laagste prijs telt. De stikstofdiscussie zet de verhoudingen op scherp. Als de politiek een duurzame landbouw wil, moeten D66, VVD en CDA hun steun staken aan handelsverdragen met landen als Canada en Brazilië die boeren dwingen voor onhoudbare prijzen te produceren. Die verdragen vergroten de onzekerheid over voedselveiligheid, zijn slecht voor het dierenwelzijn en zorgen voor extra vervuiling, ontbossing en opwarming van de aarde.
25:2	Binnenkort stemt de Tweede Kamer over Ceta. Dit handelsverdrag tussen de EU en Canada opent de grenzen voor Canadese landbouw- en veehouderijproducten die tegen lagere standaarden voor milieu- en dierenwelzijn zijn geproduceerd en zo oneerlijke concurrentie vormen. Ook dit gaat ten koste van de inkomens van Europese boeren, de veiligheid van ons eten, de rechten van werknemers, de kwaliteit van het milieu en het dierenwelzijn
25:5	Een duurzame en rechtvaardige voedselvoorziening is niet alleen noodzakelijk, het kan ook. Een model waarin boeren wereldwijd een eerlijke prijs krijgen voor een zo milieu- en diervriendelijk mogelijk product, waar werknemers een fatsoenlijke beloning krijgen, en burgers van gezond voedsel en een gezonde leefomgeving kunnen genieten. Vrijhandelsverdragen moeten daarvoor drastisch hervormd worden.

26:2	In een tijd waarin de voorraden aan fossiele energie en grondstoffen opraken wordt in de landbouw steeds meer technologie toegepast, waardoor de landbouw een steeds groter beroep doet op deze schaarser wordende bronnen en daarmee bijdraagt aan een vergroting van het klimaatprobleem.
26:4	Vanaf 1950 tot nu toe is de duurzaamheid van de Nederlandse landbouw behoorlijk afgenomen. De hoeveelheid toegepaste hulpmiddelen aan energie en grondstoffen
26:7	Er is een aantal randvoorwaarden om tot een duurzame landbouw te komen. Het is onder andere noodzakelijk de kringlopen te sluiten. Kringlooplandbouw is echter veel meer dan alleen een gemengd bedrijf of het gaan samenwerken van akkerbouwers en veehouders.
26:9	Dat vergt een grote systeemverandering en betekent bijvoorbeeld dat alle reststromen van organisch materiaal terug moeten naar het land.
26:14	n het door mij geschetste scenario voor 2040 blijk dat dit mogelijk is: een lage input landbouw, zonder gebruik van bestrijdingsmiddelen en kunstmest die de eigen bevolking van voedsel kan voorzien. In dit scenario zijn de opbrengsten per ha hoger dan die van het huidige landbouwsysteem. Met een dieet voornamelijk gebaseerd op de adviezen van de Gezondheidsraad is een voedselvoorziening voor de eigen bevolking dan mogelijk. En met het hergebruiken van alle reststromen van organisch materiaal kan een voldoende bemestingsniveau worden bereikt.
27:1	Lang voordat de milieu- en klimaatproblematiek voor een breed publiek zichtbaar en bekend werd, is de biodynamische (BD) landbouw, al in 1924 vanuit de zorg voor de aarde ontstaan.
27:6	Met jouw aankopen bied je ruimte aan deze levende landbouwcultuur barstensvol leven om zo het leven door te geven.
28:6	zijn wonen, werken en reizen energieneutraal doordat Flevoland zuinig is met energie en grondstoffen en in zijn behoefte voorziet met hernieuwbare bronnen
28:9	krijgen planten en dieren de ruimte in mooie natuurgebieden waarvan bewoners kunnen genieten
32:1	Samen met overheden, bedrijven en inwoners maken we Overijssel mooi en duurzaam.
34:9	De omvang van de huidige veestapel is onhoudbaar omdat deze te veel mest, fijnstof, ammoniak en geurhinder met zich meebrengt. Het sluiten van de voedsel-mest kringloop op lokaal niveau zien we als een deel van de oplossing.
35:6	Duurzaam betekent voor NMV bovenal duurzaam voor de melkveehouder en zijn bedrijf. Als het inkomen van de boer goed is, zijn er mogelijkheden om stappen te zetten op beleidsgebieden of te voldoen aan vragen vanuit de maatschappij.

35:14	Dat inkomen komt uit de markt, vanuit de verkoop van melk en de omzet en aanwas van verkochte koeien en kalveren. Hiervoor is een stabiele markt met een kostendekkende melkprijs noodzakelijk. In de toekomst dienen melkveehouders volgens NMV niet afhankelijk te zijn van toeslagen vanuit de overheid. Dit vereist een transitie op verschillende niveaus
35:34	Rundveemest verwerken is duur. Rundveemest is veel geschikter voor rechtstreekse aanwending op de grond. De belangrijkste mineralen (stikstof, fosfaat en kalium) zijn in een goede verhouding aanwezig en het organische stofgehalte is veel hoger. In toenemende mate zien akkerbouwers de voordelen van het gebruik van rundveemest voor gewas en bodem en is de vraag naar rundveemest gestegen
35:51	De koe staat aan de basis van het inkomen van de melkveehouder. Een gezonde en robuuste koe is daarmee inherent aan een gezond en robuust melkveebedrijf. Het belang van een correcte aanpak van dierziektes is daarom groot.
35:57	Het gebruik van medicatie bij dierziektes zal altijd noodzakelijk blijven. NMV vindt het belangrijk dat de melkveehouder hier intensief in samenwerkt met de dierenarts. Dit doen zij bijvoorbeeld door samen het bedrijfsbehandelplan vast te stellen. NMV is daarbij stellig van mening dat dierziektes, waarbij is vastgesteld dat dit de melkkwaliteit niet beïnvloedt, niet mag leiden tot een leverantiestop.
35:59	NMV vindt dierenwelzijn ontzettend belangrijk. Verschillende waarden zoals natuurlijk gedrag zijn in toenemende mate onderwerp van het maatschappelijke debat. NMV is een voorstander van weidegang, indien dit mogelijk is. Weidegang is een essentieel onderdeel van het imago van de melkveehouderij. De overheid zou dit kunnen bevorderen door vrijwillige ruilverkaveling te faciliteren. De melkveehouder is zelf vrij om keuzes te maken op welk gebied hij investeert. NMV is een voorstander van onderzoek naar diervriendelijke huisvestingssystemen.
35:73	Bedrijfsoverdracht moet rendabel zijn voor zowel opvolger als overdrager. In Nederland is een boerenbedrijf zeer kapitaal intensief geworden. Fondsen die geboden worden aan jonge boeren zijn vaak onder voorbehoud van extra investeringen, daar schiet een jonge boer die een goedlopend ‘on going concern’ wil overnemen niets mee op. NMV vindt dat een dergelijk subsidiefonds gedurende de eerste tien jaar na bedrijfsoverdracht van een melkveehouderij mogelijk moet zijn en bedrijfsovername verzilverd moet kunnen worden.

35:83	Nu de onderhandelingen in de WTO al jaren stil liggen probeert de EU steeds meer bilaterale handelsverdragen af te sluiten. De bekendste zijn TTIP met de VS, CETA met Canada en Mercosur met een aantal landen in Zuid-Amerika. Verder zijn er ook nog onderhandelingen met Nieuw-Zeeland, Australië en een groot aantal Aziatische landen. NMV heeft grote moeite met deze handelsverdragen. De EU heeft zeer hoge standaarden wat betreft het milieu, dierenwelzijn, waterkwaliteit, arbeidsomstandigheden, enz. Nederland doet daar vaak nog een schepje boven op. De landen waarmee onderhandeld wordt hebben vaak veel lagere standaarden. Hogere standaarden brengen ook hogere kosten met zich mee. NMV heeft hier geen moeite mee als deze hogere kosten terug komen in een hogere melkprijs. Als boeren uit deze landen middels een handelsverdrag echter vrij op de Europese markt mogen komen ontstaat oneerlijk concurrentie.
35:84	Zij hebben lagere kosten en kunnen producten uit de EU van de markt drukken. NMV vindt dat de EU alleen producten toe mag laten die aan dezelfde standaarden voldoen als producten die in de EU geproduceerd worden. Vrijhandel en hoge standaarden gaan niet samen. Bovendien maakt vrije import regulering zeer moeilijk. Indien de EU middels productiebeperking een zuivelcrisis probeert te voorkomen, kan het niet zo zijn dat overschotten vanuit de wereldmarkt de ontstane balans in vraag en aanbod weer verstoren. NMV vindt dat de EU haar boeren moet kunnen beschermen tegen goedkope importen.
36:1	Caring Farmers is de nieuwe boerenbelangenbehartiger voor alle boeren die op weg zijn naar een natuurinclusieve kringlooplandbouw. Voor boeren die al kringlooplandbouw bedrijven, of die de eerste stappen in die richting make
36:3	at is dat dan precies? We doen een poging tot een definitie en die luidt als volgt.‘Onze voedselvoorziening moet sociaal en ecologisch zo efficiënt mogelijk zijn waarbij we zoveel mogelijk monden kunnen voeden met zo min mogelijk input van gronden en grondstoffen, geen input van buitenaf én waarbij er geen negatieve tot bij voorkeur een positieve impact op biodiversiteit, natuur, klimaat en het dier mag zijn.’
36:4	Om daar te komen vergt grote stappen en een hele andere werk- en denkwijze. Boeren kunnen hier niet alleen komen. Hoe we er precies gaan komen, weten we zelf ook nog niet precies. En we zijn geenszins van plan om zelf het wiel uit te gaan vinden. We werken samen met alle partijen die bij kunnen dragen aan onze doelstelling om te komen tot een nieuw en houdbaar voedselsysteem.
37:15	De omgevingskwaliteit van Fryslân is zodanig sterk en duurzaam, dat klimaatadaptatie, energietransitie en circulaire economie geïntegreerd is in het Friese landschap. Wij zien deze ontwikkeling als een kans, in plaats van een bedreiging.
38:1	Duurzame landbouw kent veel verschillende vormen. Duurzaam betekent letterlijk “iets dat lang kan bestaan”

38:6	Het grootste verschil is dat kringlooplandbouw zich focust op het circulair krijgen van de boerderij. Dus het minimaliseren van grondstofgebruik, verliezen en emissies binnen de bedrijfsvoering. Dit betekent bijvoorbeeld voor de veehouderij: zorg dat je lokaal en met reststromen voert, zorg dat de nutriënten in de mest goed worden benut en dat deze ten goede komt aan de akkerbouw (elders). Daarnaast is het beheer van de bodem, met een focus op organische stof en bodemleven belangrijk in veehouderij en akkerbouw. Hiermee zorg je namelijk dat nutriënten ook in de bodem rond kunnen circuleren.
38:7	Bij natuurinclusieve landbouw richt men zich meer op de natuur; zorg dat je op een manier produceert die de natuur niet belast of zelfs bevordert. De focus ligt meer op het bevorderen van biodiversiteit in plaats van het managen van stromen in het systeem. Goed voor je bodem zorgen is een grote overeenkomst tussen de twee, omdat een gezonde en levende bodem aan zowel kringlopen als biodiversiteit ten goede komt. Binnen de definitie van natuurinclusieve landbouw bestaan drie pijlers: Verrijken, Benutten en Sparen. Deze drie pijlers laten verschillende manieren zien om landbouw met natuur te bedrijven.
38:12	Precisielandbouw Precisielandbouw is preciezer landbouwbedrijven. Dankzij data en technologie kan management van dier en gewassen veel preciezer plaatsvinden. Op deze manier kunnen verliezen en vervuiling naar omgeving worden verminderd. Binnen precisielandbouw wordt veel gebruikt gemaakt van sensortechnologie, ICT, robotisering en GPS. Voorbeelden zijn activiteitensensoren bij vee of precisiebemesting op akkers dankzij drones.
38:13	Agro-ecologie Agro-ecologisch boeren betekent ecologie gebruiken in je bedrijfsvoering. Er wordt optimaal gebruik gemaakt van natuurlijke hulpbronnen zonder deze uit te putten of te beschadigen. Door principes uit de natuur te kopiëren en toe te passen op de boerderij ontstaat een duurzamer systeem. Nutriëntenkringlopen en ecologische netwerken worden zoveel mogelijk in stand gehouden en hiermee het efficiënt produceren van voedsel. Daarnaast wordt ingezet op het sociale doel van landbouw.
38:17	Agroforestry Agroforestry is een landbouwpraktijk waarbij meerjarige houtige gewassen (bomen en struiken) bewust worden gecombineerd met (éénjarige) landbouwgewassen en/of dieren. Door bomen te integreren met gewassen kunnen een hoop voordelen worden behaald voor biodiversiteit, maar ook voor de boer. Voor meer informatie, zie de agroforestry pagina’s op deze website.
38:18	Biologische landbouw is ontstaan in de 20e eeuw als tegenhanger van de gangbare vorm van landbouw.

38:21	Biodynamisch gaat nog een stapje verder dan biologische productie. Het is gebaseerd op antroposofische principes en er wordt holistisch gekeken naar de boerderij. De natuur is de basis van alles en verbindt het systeem. Binnen deze vorm van landbouw staan bodemvruchtbaarheid en versterking van natuurlijk groei centraal. Biodynamische boeren bedrijven vaak landbouw onder het 'Demeter' keurmerk, want een vorm van biologische landbouw heeft te maken met nog strengere handhaving op de natuur.
38:22	Andere vormen van duurzame landbouw
40:3	De beoogde ontwikkeling en groei van de hippische sector moet plaatsvinden binnen de economische en maatschappelijke grenzen. Tegenover de schaalvergroting van paardenbedrijven in de bebouwde omgeving staat bijvoorbeeld aangescherpte wet- en regelgeving
40:5	Dit geldt ook voor de identificatie & registratie van paardachtigen, mede met het oog op een mogelijke uitbraak van dierziekten. Deze thema's staan dan ook hoog op de agenda van de sector en zijn de belangrijkste speerpunten in het Toekomstperspectief 2017 – 2021 van de Sectorraad Paarden.
40:11	De Sectorraad Paarden werkt daarvoor samen met de dragende organisaties aan het verder ontwikkelen en professionaliseren van de sector en aan kwaliteitszorg. In het meerjarenplan 'Toekomstperspectief 2017 – 2021' van de SRP zijn drie hoofdthema's benoemd: dierwelzijn, diergezondheid en identificatie & registratie. Voor ieder thema formuleert een werkgroep die bestaat uit deskundigen van binnen en buiten de sector beleid en richtlijnen die moeten leiden tot verbeteringen.
43:6	4. Boeren als dragers van natuur en landschap Steeds meer boeren leveren een keur aan zogenaamde ecosysteemdiensten. Het gaat dan om zaken zoals herstel en bescherming van biodiversiteit, landschapsbeheer en andere beheerdiensten op onder andere het vlak van water en bodem. Denk echter ook nadrukkelijk aan behoud en versterking van het cultuurlandschap, dat immers is gevormd door de land- en tuinbouw. LTO benadrukt dat deze werkzaamheden van de boer uit de sfeer van 'subsidie' moeten worden gehaald en worden gezien als wat het is: diensten die voor de samenleving worden uitgevoerd en waar een reële prijs tegenover staat. Vaak zal de overheid aan zet zijn. Maar ook lagere overheden, natuurorganisaties, goede-doelen-stichtingen en andere maatschappelijke partijen kunnen positief bijdragen aan werkzaamheden die boeren verrichten voor het landschap. Een marktconforme vergoeding is daarbij cruciaal. Deze dienen nadrukkelijk van buiten het GLB te komen. Het is echter geen volwaardige betaling of vergoeding voor diensten die boeren aan de overheid of derde partijen leveren.
44:3	Tegelijkertijd zijn veel burgers ervan overtuigd dat eten op een betere en meer verantwoorde wijze kan worden geproduceerd met lagere klimaatimpact, verhoogde biodiversiteit en meer aandacht voor de intrinsieke waarde van plant en dier.

44:4	1. Werken aan een eerlijke prijs voor ons eten Nederland behoort tot de wereldtop als het gaat om het produceren van eten. We doen dat kwalitatief, efficiënt en met aandacht voor de directe omgeving. Om dat vol te houden is het nodig dat boeren de investeringen die nodig zijn kunnen doen en tegelijkertijd een leefbaar inkomen behouden. Uit onderzoek van ZLTO samen met ABAB, Rabobank, Agrifirm en BAJK is gebleken dat de vergoeding voor arbeidsuren van een Brabantse agrarisch ondernemer gemiddeld €16.000 is, minder dan de helft van het gemiddelde inkomen in diezelfde provincie. Natuurlijk zijn er grote verschillen tussen boeren en tuinders onderling, maar de gemiddelde bedrijfsratio's zijn te laag.