

# Well-being of dairy farmers: Effects on the acceptance and effectiveness of sustainable policy

RENS ROLINK | S4120965

Supervisor: Prof Dr. Dimitris Ballas

Bachelor Thesis

Faculty of Spatial Science | University of Groningen

28-01-'22

Words: 6530

## Contents

Summary .....	2
1 Introduction:.....	2
1.1 Background.....	2
1.2 Academic and social relevance.....	2
1.3 Research problem .....	3
1.3 Structure of Thesis.....	3
2 Theoretical framework.....	4
2.1 Concepts:.....	4
Well-Being .....	4
Self-Determination .....	4
Financial Viability.....	4
2.2 Conceptual model .....	5
2.3 Expectations .....	6
3 Methodology .....	6
3.1 Data collection:.....	7
3.2 Data Analysis: .....	7
3.3 Ethics: .....	8
4 Results .....	9
4.1 Views on sustainability and sustainable policy .....	10
4.1.1 Views on sustainability .....	10
4.1.2 Views on sustainable policy.....	11
4.2 Existing policy instruments.....	11
4.3 Financial Viability.....	12
4.4 Future uncertainties.....	13
5 Discussion .....	14
6 Conclusion .....	15
References.....	16
Appendix.....	19
1 Interview Guide (Semi-structured) (Dutch).....	19
2 Consent form (Dutch).....	20

## Summary

Well-being has a close relationship to sustainable development and policy. Additionally, dairy farmers play a big role in sustainable initiatives. In current sustainable environmental policy, the main attention focuses on financial and environmental incentives. The well-being of people involved is often not considered much. However, one could argue that the well-being of farmers affects the acceptance and effectiveness of policy. This thesis will then aim to investigate this topic with the following research question: 'How is the well-being of dairy farmers affecting the acceptance and effectiveness of policy regarding sustainable agriculture in the region of North-East Twente in The Netherlands?' The research is qualitative and will be conducted through semi-structured interviews, with dairy farmers in the region. The research will discuss topics of self-determination, eudaimonic well-being, financial viability, and future uncertainties. In the conceptual model it can be seen that, while well-being influences the acceptance of policy, policy can also influence the well-being of farmers. The research has shown that, while many participants did not experience a direct influence of policy on their well-being, there is feelings of uncertainty present, fundamentally in the definition of sustainability and the direction of the environmental policy. Additionally, having more determination in bottom-up initiatives farmers could feel more heard in policy. Often, financial viability is not considered, which makes policy less effective, and creates uncertainty among farmers. Additionally, more underlying concerns, such as the loss of the cultural landscape, are additional factors that have a more nuanced influence on the acceptance and effectiveness of policy.

## 1 Introduction:

### 1.1 Background

It has been widely studied that farming and agricultural practices influence climate change, considering both Nitrogen emissions (Goyenola *et al.*, 2020) and carbon dioxide emissions (Johnson *et al.*, 2014). In the European Union and The Netherlands particularly, measures are being taken to address these rising emissions and a changing climate as a consequence. In modern-day politics, however, there are two big focuses when considering climate policy: The preservation of human life and the economic affluence enabled by the environment (Bartolini, 2014; Lamb and Steinberger, 2017). What is often left out in climate policy is well-being and its close interrelation with climate policy (FitzRoy, Franz-Vasdeki and Papyrakis, 2012). According to Singh & Chudasama (2021): "Climate action and sustainable development are interdependent and need to be pursued in an integrated manner to enhance human well-being on a healthy planet". Similarly, Lamb & Steinberger (2017), describe human well-being as a 'key-stone' in climate research. Furthermore, in tackling climate change through policies, agriculture is one of the biggest factors of focus. (Goyenola *et al.*, 2020; Singh and Chudasama, 2021). From these statements considering the well-being of individuals and the importance of the field of agriculture, a synthesized argument can be theorized: that the well-being of farmers is important in sustainability and climate and policy.

### 1.2 Academic and social relevance

There is however a gap in current qualitative literature on this topic. De Weerd & Klandermans (1999) state that Dutch farmers feel political and social pressure by European and national policy and that

discontent among farmers is high. However, this source is over 20 years old and does not consider well-being. More current sources consider the experience of cultural norms in sustainability (Westerink *et al.*, 2019) or the experience of regime changes in dairy farming (Runhaar *et al.*, 2020). However, well-being is not mentioned as an aspect of sustainable changes. So, this research tries to fill in the gap that is present in current academic literature.

Currently, this topic has high societal relevance. Since October 2019, protests in The Netherlands have been going on, where farmers were incensed about the fact they are always portrayed as polluters and feel forced to change their ways of farming (Stellingwerf, 2021). Notably, a new party emerged in parliament championing the importance of farms and the Dutch countryside: The BoerBurgerBeweging, (BoerBurgerBeweging, 2021). During the research, the new government stated that they want to use 25 billion euros to alleviate the nitrogen crisis (Kabinetsformatie, 2021), to the worry of many farmers (Winterman, 2021). So, there is attention for people working in the agricultural sector in politics. However, the needs of farmers and their well-being are often left out.

### 1.3 Research problem

This research aims to analyze the relationships of environmental policy with regards to sustainable agriculture and the well-being of farmers. In this way, the relevance of well-being and needs of farmers on the outcomes of these policies can be closer analyzed. The main research question then is:

**How is the well-being of dairy farmers affecting the acceptance and effectiveness of policy regarding sustainable agriculture in the region of North-East Twente in The Netherlands?**

The questions have a qualitative focus, so the opinions and feelings of farmers will be considered, to identify what aspects are deemed important in policy. For this research a closer look will be given to dairy farmers, and any statements made from empirical research talking about farmers, are to be considered of dairy farmers. The following four sub-questions are used to help answer the main research question:

- 1) What are the attitudes of farmers towards sustainability and sustainable policy?
- 2) What aspects of policy are considered important by farmers to account for sustainability and well-being?
- 3) How do financial viability and stability of their firm play a role in well-being of farmers?
- 4) How would farmers like to see the future of policy with regards to their well-being?

### 1.3 Structure of Thesis

This paper encompasses six chapters. Core concepts and the conceptual model will be defined in chapter two. The research method of data collection and analysis will be discussed in chapter three. Chapter four talks about the results obtained from the interviews. Chapter five discusses the obtained results and pays attention to the limitations of the study. Conclusion and future recommendations are given in chapter six.

## 2 Theoretical framework

### 2.1 Concepts:

#### Well-Being

An important concept in this study is the concept of well-being. In academic literature, there is a slight distinction between two types of well-being: hedonic and eudaimonic well-being. Hedonic well-being refers to the mental and subjective state of people, often explained as the balance of pleasure over pain and feeling good (Ryan, et al., 2008a; Lamb and Steinberger, 2017). Although background and context are important for hedonic well-being (Singh and Chudasama, 2021), people with completely different surroundings, e.g. countries with different development levels can have similar levels of hedonic well-being, since only the subjective state is considered (Lamb and Steinberger, 2017).

Eudaimonic well-being on the other hand encompasses a broader definition of well-being. It considers all actions, processes, and contents of one's individual life, rather than the subjective perspective (Lamb and Steinberger, 2017). In light of policy, it focuses on the flourishing of institutions and at the same time individuals (Singh and Chudasama, 2021). For this research then, when referring to well-being it refers to eudaimonic well-being. Since climate and sustainable policy require a change in lifestyle, of which eudaimonic well-being is better suited than hedonic (Lamb and Steinberger, 2017). However, hedonic well-being should not be left out of research, since it is part of eudaimonic well-being (Lamb and Steinberger, 2017; Singh and Chudasama, 2021).

#### Self-Determination

The concept of self-determination, as described by Ryan et al. (2008), focuses on the intrinsic motivations of individuals, which might help to improve a person's well-being and eudaimonic living. Considering intrinsic goals, behaving autonomously, being mindful of others, and satisfying one's own psychological needs are the four aspects of eudaimonic well-being (Ryan, Huta and Deci, 2008; Singh and Chudasama, 2021). These four aspects are the basis for a good balance between happiness and planetary health (Singh and Chudasama, 2021). Moreover, policy can create uncertainty and change for the people involved, when it shifts focus without consultation of farmers, i.e. being mindful of others. An example is the abolishment of the dairy quota in 2015, which created uncertainty and consequentially a change in average herd sizes (Kulkarni *et al.*, 2021). Often sustainable practices of farmers come through personal incentive (Westerink *et al.*, 2019). So, the different aspects of self-determination can be important factors in sustainable policy. Furthermore, if well-being is high, the productivity of a person may be higher (DiMaria et al., 2020). So, promoting well-being can be beneficial for the farmers not only for their own good but also for the good of their business and the effectiveness of the policy.

#### Financial Viability

Financial Viability can be seen as the monetary indicator of the resilience of a firm (e.g. a farm) (Perrin, Milestad and Martin, 2020). This financial resilience is a cornerstone to the existence of a firm, so there may be a close relationship with well-being (De Weerd and Klandermans, 1999; Perrin, Milestad and Martin, 2020). Furthermore, financial incentives provided by the government could have a significant influence on the shift towards more sustainable agriculture (Vrolijk, Reijs and Dijkshoorn-Dekker, 2020). E.g. biogas from manure is growing as a sustainable energy source, where upscaling and subsidies can significantly increase the financial viability of alternatives (Gebrezgabher, Meuwissen and Lansink, 2010).

So, in academic literature, there has been some research that looks at the links between well-being and sustainable/environmental policy. However, from an agricultural view, both in policy and individuals are often left out, although this is described as highly important (Goyenola *et al.*, 2020). So, this paper will try to partially fill in this gap, by identifying what farmers and politicians think and feel about the importance of the well-being of farmers in policy aimed at environmental sustainability.

## 2.2 Conceptual model

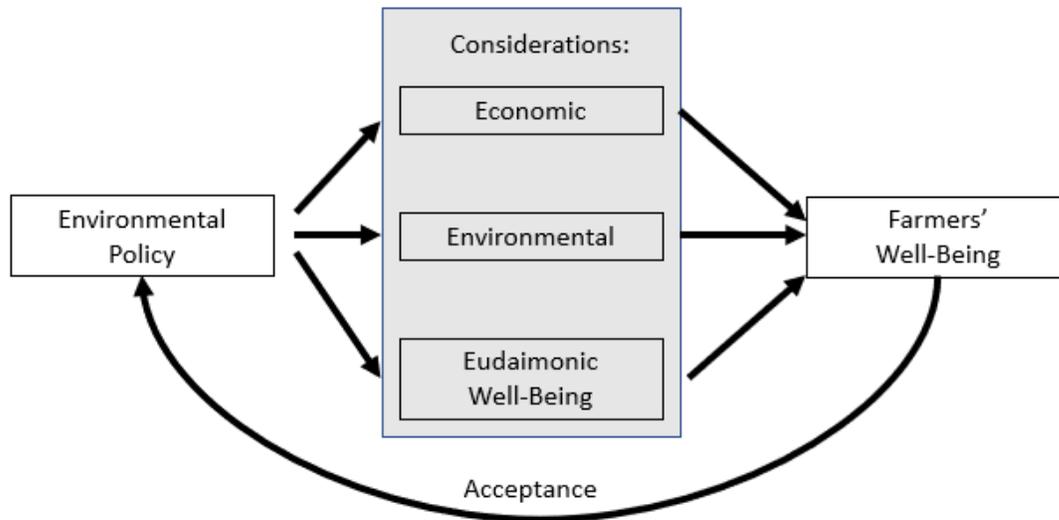


Figure 1) Conceptual Model (Author, 2022)

This conceptual model (fig. 1) is partly based on the outlined theoretical framework above. The model starts with environmental policy, which in a broad Dutch context encompasses policies on living spaces (Veldhoven - Van der Meer, 2020). For this research, we focus on the environmental policies with regards to sustainable agriculture. These policies in political practice are often dominated by economic and environmental considerations (FitzRoy *et al.*, 2012; Lamb and Steinberger, 2017). The environment is the focus of policies and economic consideration is often of high importance to politicians. Still, this is often criticized for being one-sided (FitzRoy, Franz-Vasdeki and Papyrakis, 2012). Eudaimonic well-being should increasingly become considered in policy especially environmental policy (Lamb and Steinberger, 2017; Singh and Chudasama, 2021). These three factors on their own relative terms have an impact on farmers and their well-being.

This well-being can have an influence on policy and politics as well. Discontent might form across farmers and manifest itself in discontent amongst this group (Stellingwerf, 2021). If well-being, however, is high this can also positively influence sustainability and the acceptance and effectiveness of policy concerned with it (Bartolini, 2014). So, model circles back. Policy can through different considerations have an influence on well-being, which means that policy indirectly can have an influence on the acceptance of the policy itself (Bartolini, 2014; Lamb and Steinberger, 2017).

## 2.3 Expectations

Based on the outlined research question: '*How is the well-being of dairy farmers affecting the acceptance and effectiveness of policy regarding sustainable agriculture in the region of North-East Twente in The Netherlands?*', expectations are that well-being plays a role in the acceptance and effectiveness of these policies, which will be analyzed through interviews with dairy farmers. Well-being is an important factor determining the success of climate policy (Bartolini, 2014), and it is expected that the well-being of farmers likewise plays a determining role. The conceptual model shows that policy can also influence the well-being of farmers and thus indirectly the acceptance of this policy. It is consequently expected that farmers themselves would feel the need to be heard and would like to have a say in relevant policies. Concepts such as self-determination in their work (Ryan, Huta and Deci, 2008; Westerink *et al.*, 2019) and financial viability (Perrin, Milestad and Martin, 2020) are expected to be a part of this involvement. Especially representing groups, might play an important role in making farmers' voices feel heard. Such as the LTO (Land- en Tuinbouw Organisatie), which is an organization that locally tries to represent its members, predominantly farmers, in local politics (LTO, 2021).

## 3 Methodology

This research focuses on the relations between farmers' well-being and sustainable environmental policy. Because the research considers the direct experiences and opinions of farmers, qualitative research is more suited (Clifford *et al.*, 2016; Hitchings and Latham, 2020), as opposed to more quantitative options which try to use reasoning and statistical techniques to understand phenomena (Clifford *et al.*, 2016). Furthermore, qualitative research can help to fill a gap in existing knowledge and investigate complex motivations (Dunn, 2016), like in the case of this research, the motivations linked to the acceptance and effectiveness of policy. For this method interviews are conducted.

The region for analysis is the North-East Twente in the east of The Netherlands. This region was chosen for numerous purposes. Firstly, it is a region with its own LTO board: LTO Noord-Oost Twente. They represent the four municipalities of Oldenzaal, Tubbergen, Dinkelland, and Losser, of which most farmers in these municipalities are part of LTO organization (LTO, 2021). Secondly, this scale of four municipalities is small enough to have good analysis and allows to focus on a smaller sub-culture and is not too small that finding respondents will be hard. Thirdly, having grown up on a farm in this region, knowledge on the region and its culture is present.

Considering my own positionality there are some considerations. First and foremost, knowing the region and the culture of the people living here gives me insider knowledge. As Shirley (2010), shows in her paper, being aware of the culture and hostility towards outsiders in a region might be beneficial when analyzing the topic, especially in interviews. Amongst farmers, this hostility may likewise be present (De Weerd and Klandermans, 1999). Furthermore, being an insider also gives me easier access to the network, since I know individuals who are part of LTO Noord-Oost Twente, which makes data collection easier. However, this does give some drawbacks to the validity of my sample. Consequently, data is collected through the organization of LTO, to reduce the inherent bias. Ethically, I try to acknowledge the fact that I am different from my sample, in ways of occupation, living arrangements, age, etc., and not let these differences intervene, but simply acknowledging them if clashes come up (Clifford *et al.*, 2016).

### 3.1 Data collection:

To collect the qualitative data, semi-structured interviews have been conducted. This data collection strategy helps to get elicit, qualitative information of individual respondents, while offering participants the chance to explore topics they consider important (Clifford *et al.*, 2016). This allows for a deeper understanding of the research subjects (Niglas, 2000), especially considering happiness and satisfaction (Suldo *et al.*, 2014). It is important to consider the motivations, methods, and personal involvement when outlining interviews (Hitchings and Latham, 2020). As outlined above, data is collected through the LTO district. From here a convenience sample has been chosen, where participants are sampled based on willingness to participate. Additionally, a combination with a snowballing approach, where participants recommend other participants was used, which is helpful in a situation where the participants are hard to reach (Niglas, 2000), which can be the case for Dutch farmers (De Weerd and Klandermans, 1999). These strategies have the limitation that the sample may not be fully representative. However, since the aim is to understand individuals' perspectives and less to be representative, in interviews this method can be appropriate (Clifford *et al.*, 2016). The semi-structured interview questions can be found in appendix 1.

### 3.2 Data Analysis:

The main aspect of data analysis consists of using code trees within Atlas.ti, to code the transcriptions of the interviews conducted. Atlas.ti is used in numerous researches to organize interviewed data (Suldo *et al.*, 2014; Burgos-Watkinson, 2020), with the given advantage that structure and commonalities between interviewees can be identified (Suldo *et al.*, 2014; Chandra Sekaran *et al.*, 2020). There is a combination of inductive and deductive coding. Deductive codes (Clifford *et al.*, 2016) are used to structure the interview questions (appendix 2), to for example gather views on sustainability and environmental concerns in sub-question one. With inductive approaches (Clifford *et al.*, 2016), codes are finalized after the interviews are finished so unidentified themes and factors are identified (Dunn, 2016). Here for example financial viability, a key concept in the research and sub-question 4, was identified as a factor. Exact code trees considering the main topics outlined in the conceptual model can be found in figure 2 below.



wish to do so, without any particular reason. Lastly, due to the Covid-19 pandemic, governmental guidelines have been followed at all time or the research has been conducted in an online environment.

## 4 Results

Below in table 1, a summary is given for the individuals that participated in the interview. The semi-structured interviews (Appendix 1) averaging 42 minutes took place between November 12<sup>th</sup> and November 24<sup>th</sup> 2021. All participants are dairy farmers, and P-3, was an interview with husband and wife, so a total of ten people were interviewed over nine interviews.

**Table 1: Participants in the semi-structured interviews (Author, 2022)**

Participant:	Link to agricultural sector	Age	Gender
P-1	Dairy Farmer Member of Corporate organization	50	Female
P-2	Dairy Farmer Member of Energy cooperation	58	Male
P-3 (2)	Dairy Farmer Member of Corporate organization	49	Female / Male
P-4	Dairy Farmer	39	Male
P-5	Dairy and Pig Farmer Member of Corporate organization	35	Male
P-6	Dairy Farmer Member of Corporate organization	32	Female
P-7	Dairy Farmer	53	Male
P-8	Dairy Farmer	60	Male
P-9	Dairy Farmer Member of Corporate organization	58	Male

In certain ways these dairy farmers are of homogenous characteristics, such as occupation, geographical location, and cultural background, still, there are some distinctions. Firstly, the participants have different ages ranging from 32 to 60 (Table 1), which can cause different views on the future of farming. Secondly, there is a difference in size of the farms where the biggest has over 150 dairy cows (P-2, 2021) and the smallest has around 30 cows (P-9, 2021), which influences their way of farming and the rules and policy surrounding the firms. Despite these differences, all participants agree that a good farmer should take care of their animals, land, and finances. Or as P-4 put it:

*"You have to take good care of his animals and crops. And don't lose sight of your wallet either."* (P-4, 2021)

Additionally, other farmers stressed the importance of time left for family, sustainable practice, a regard for the future, and care for nature. These often values are motives to keep going and can if they are not regarded for cause stress, in their experience.

To see what effects well-being have on the acceptance of policy, the current perception of farmers' well-being was discussed. Surprisingly, when asked whether farmers feel stress from sustainable policy, all

participants answered: 'No'. At first glance, one could draw the conclusion that policy does not affect stress levels or well-being much, however, as seen in the interviews, the answer can more nuanced than that. According to P-5, farmers often don't show emotion, stick to the facts and say things like they are (P-5, 2021). It is then important nuance in the interviews is considered to see the connection between well-being and sustainable policy. In the following parts, the sub-question will be answered to give more insight into this nuance.

## 4.1 Views on sustainability and sustainable policy

### 4.1.1 Views on sustainability

In this subsection the first sub-question will be discussed: What are the attitudes of farmers towards sustainability and sustainable policy? Most participants say that view a sustainable climate and nature as important. Still, the definition of sustainability and a sustainable climate can be getting harder to understand by farmers. As P-4 said:

"... sustainability is also such a container concept. I think that the farmers are also more aware than the average citizen to take action, But do not always have the resources available for that." (P-4, 2021)

The notion of sustainability as a container concept leads to numerous ways of understanding among farmers that do not always match up. Even the general public could play a role in this. P-5 gives an example saying that organic food production and CO<sub>2</sub> reduction do not add up. Both concepts are seen as sustainable, while organic farming often encompasses small-scale extensive farming, while the most carbon-efficient method can be found in large-scale intensive farming (P-5, 2021). These mismatches or misalignments can cause stress because it causes uncertainty and no clear direction (P-2; P-3; P-4; P-5; P-8, 2021).

Still, effort into sustainable investments are made by some participants. Whether those encompass manure digesters, solar panels, windmills, wooded banks, bird/habitat protect or regards for nature in other ways. Personal incentive was often mentioned as the main motivation (P-1; P-2; P-4; P-6; P-7; P-8, 2021) which is in line with the theoretical framework (Westerink *et al.*, 2019). This incentive can come in either of two ways.

Firstly, this can come from personal interest or value. For example, P-8 mows his grass later in the year, to allow birds, mainly the black-tailed godwit to breed in his grasslands. He does this because he likes the birds themselves, and the birds have been there for as long as he knows, so it would be a shame if they disappear (P-8, 2021). Additionally, P-7 invested in walnut trees. This was mainly due to personal interest and to provide something to do for him and his wife when they have aged (P-7, 2021). So, these intrinsic goals within self-determination as outlined by Ryan *et al.* (2008), can be positively related to well-being.

Secondly, it can come from the personal finance incentive. All interviewed farmers have considered renewable energy options, such as wind or solar energy. A reason why some participants took action or not is the financial incentive in the form of subsidies they got: e.g. the Stimulating Sustainable Energy (SDE) subsidy for CO<sub>2</sub> reducing practices (Ministerie van Economische Zaken en Klimaat, 2021).

#### 4.1.2 Views on sustainable policy

While nature and sustainability can be an important aspects of farmers values, policy can be a place where there is tension:

*“In principle is nature not my enemy, the policies that flow from nature are my enemy, if I want to do something, I’m always judged on nature.” (P-4, 2021)*

This quote shows a sentiment that nature can be seen as a burden in policy and regulations, while farmers often work, and want to work, closely together with nature (Westerink et al., 2019). The nitrogen crisis, which has caused numerous protests in recent times (Stellingwerf, 2021), is an example of where farmers could feel left out. They feel a sense of unfairness when they have to bear the consequences, while big industries do not (P-3, 2021; P-8, 2021). Recently, during times of interviews, plans of the forming Dutch cabinet have circulated where 20-30 billion euros will be used to buy up farmers’ land to solve the nitrogen crisis (Winterman, 2021). These plans illustrated this negative sentiment. While most interviewed farmers were not personally affected, because of their distance to Nature-2000 areas, some did worry for farmers who are and that their voices are not being heard.

*“When scientist reach an agreement that is seen as the holy truth, and the practical applications are not considered” (P-7, 2021)*

These feelings of being excluded from the discussion, could lead to a sense of distrust in the government because farmers do not feel heard, whereas they feel closest to the practical applications (P-3, 2021; P-8, 2021). Moreover, some participants do not think this dynamic change in the near future, like P-8 describes: “But it won’t change you don’t have to worry about that” (P-8, 2021). This can even lead to a total distrust towards the science of nitrogen as well. In a practical sense, there have been instances where science was seen as being wrong (P-1; P-4; P-8, 2021), which could make farmers strongly opposed to any sustainable policy at all because the trust is completely lost.

#### 4.2 Existing policy instruments

In the following section the second sub-question will be discussed: What aspects of policy are considered important by farmers to account for sustainability and well-being?

To know what aspects are considered important, participants were asked if they felt heard in current policies. Some responses were: “No, no, no there is no space for that” (P-2, 2021) or “No, no, not at all, that’s the case, whenever you sit with administrators, whatever they say is true” (P-4, 2021). In wider organizations and politics this is similarly experienced. However, through organizations, such as the LTO could make their voices heard, which is deemed important by P-5:

*“If you have an opinion about something you should find ways to be heard, it broadens your horizon as well” (P-5, 2021)*

Other farmers like P-1 state the importance of knowing what your limits are and where you can make a difference. That it is often a bumpy road, but when you focus on what you can do and leave the other things to other people, it helps your personal well-being (P-1, 2021). Similarly, broadening one’s horizons could help to see one’s own possibilities and limitations (P-5, 2021; P-6, 2021). In line with literature, a

broadening of perspective can help to increase eudaimonic well-being, by moving away from personal subjective views (Lamb and Steinberger, 2017).

Other than broadening ones perspective, there are ways in which policies can be fundamentally tweaked. In literature there is a belief that initiatives must come from bottom-up (Runhaar *et al.*, 2020), from autonomy (Ryan, Huta and Deci, 2008). When initiatives come from bottom-up the worries of farmers themselves can be stressed (P-4, 2021) and, additionally, get the ideas of people who are close to the practice (P-6, 2021). P-3 even stresses that they believe that the well-being of farmers, would be better if the rest of the population would not intervene as much (P-3, 2021), which is in agreement with the concept of self-determination explored by Ryan *et al.* (2008).

Still, governments are fundamental parties in terms of guidance and change (Runhaar *et al.*, 2020). According to some participants, governments should facilitate sustainable initiatives in terms of research (P-6, 2021) or subsidies (P-7, 2021). Additionally, having people with practical experience in positions of influence on policy could create a closer connection to farmers themselves (P-3, 2021). Governments could also be more open to outside opinions, rather than providing impositions (P-4, 2021). Since some farmers are still wary of governments, as outlined in section 4.1.2, self-determination could help restore some trust that is lost.

The more local top-down approach could also help strengthen the cultural cohesion and community-ties, or *noaberschap* as it is called in the region (Versluis, 2017). Strong local corporation and initiatives are deemed as highly important (P-1; P-2; P-6, 2021). Strong cohesion and taking care of the people around you is important and fit better in the cultural landscape than top-down approaches according to P-2 (2021). This is in line with theories by Westerink *et al.* (2019), who suggests cultural norms are important in governance. However, P-9 notes that not everyone thinks the same, so initiatives cannot always work out for everyone, especially when you look outside of the region, with other cultural norms (P-9, 2021). “Someone must feel the consequences” (P-7, 2021). Not everyone can be satisfied, so regard for cultural community feelings could not always the best option.

### 4.3 Financial Viability

The following subsection will talk about financial viability and sub-question three: How do financial viability and stability of their firm play a role in well-being of farmers?

Financial viability is a concern brought up in some interviews by farmers regarding what is lacking in current policies. It could even be related back to farmers’ well-being and stress (De Weerd and Klandermans, 1999; Perrin, Milestad and Martin, 2020):

*“The money brings the stress, it always has. If there is enough money with most people things are good, except for illness and things like that are different. But policy is all about money.”* (P-7, 2021)

While there often is a positive regard towards sustainability (Westerink *et al.*, 2019), the financial aspect could pose limitations (P-5, 2021). The values and incentives could be present, but initiatives are simply not always financially feasible (P-6, 2021). Subsidies are a financial incentive that can promote sustainable investments (P-5, 2021). The SDE subsidy has been used by numerous interviewed farmers, for manure digester (P-2, 2021), solar panels (P-7, 2021), or other initiatives. However, they are not always enough to cover costs. P-3 outlined that the option of two small windmills to power production at

their firm, would with subsidies still cost over €100,000.-, which they would rather use for other investments (P-3, 2021). And other farmers, likewise said that subsidies alone would not be enough to finance sustainable incentives, especially at smaller farms (P-9, 2021). What is more, some farmers are hesitant of subsidies, because it may take away the entrepreneurial part of farming (P-5, 2021) or it could create unfair competition (P-6, 2021).

There are other ways in which financial viability can be achieved. Diversification may be a way to spread the risks, to invest in other aspects other than just dairy farming alone (Kuipers *et al.*, 2021). Since, some participants want to have self-determination and diversify from their own initiatives (P-6; P-7; P-8, 2021), having tailored governmental support through financial incentives could also create financial viability. Moreover, policy could provide is the ability to become energy producers. Some participants (P-2, 2021; P-8, 2021) would like to generate energy and sell this to electricity providers. However, the electrical infrastructure, under the responsibility of governments, to rural places is often not good enough to allow farmers to make these investments (P-2, 2021; P-8, 2021). So, this infrastructure would need to be improved by the government first.

Still, a something that all participants agreed on is that they simply want to be paid a living wage. The prices for milk have been unstable over recent years (ZuivelNL, 2019). So, if the policy would provide a stable 50 cents per liter of milk, it could give farmers their own financial means to make investments in sustainable initiatives (P-3, 2021; Westerink *et al.*, 2019). Still, money does not cover everything, especially when farms are being bought up, which current plans hint towards (Winterman, 2021). While money could heal wounds and make things more bearable (P-7, 2021), it does not necessarily cover personal and cultural values. Being removed from their current ways of living, could impact farmers' well-being when they drastically have to change their ways of farming or even move (P-3, 2021; P-9, 2021).

#### 4.4 Future uncertainties

This subsection discusses the last sub-question considering the future: How would farmers like to see the future of policy with regards to their well-being? When asked, P-5 noted that there are two main things that he is missing in policy:

*"Yes, clarity and revenue model. ... At some point I want to do something, and I feel like we've been standing still for about 10 years, but you're still an entrepreneur, I have no idea what direction to go towards, and that is difficult." (P-5, 2021)*

A clear direction, with financial viability are two aspects that often came up during the interviews. To have this clarity means you have goals to work towards (P-1, 2021) and you do not feel surprised by ad-hoc policy (P-3, 2021). While all participants view that policy should be more simple and logical, some have their doubts whether it will change, or even if it can change (P-8, 2021). Additionally, there is a difference in perceptions of the future depending on age. Younger participants want to work with policy and do not want to lose the entrepreneurship (P-5, 2021) and want to have the space for investments (P-6, 2021):

*"I am young, I want to change and grab chances when I get the opportunity to" (P-5, 2021)*

Older participants seem to not have this sentiment as strongly. While P-1 wants to see a future for farmers in the region, she experiences only small incentives to make investments (P-1, 2021). This could be due to a lack of a successor (P-1, 2021; P-8, 2021). P-9 summarizes his sentiment from a lack of successor the following:

*“That station I have already left behind me, so now I’m like: ‘I’ll see how much longer I can farm’. I still enjoy doing it too much now”* (P-9, 2021)

Additionally, it could be that farmers have enough financial capital invested in their firm, that if they were to quit and sell the farm, enough money would be left to compensate for these losses in terms of finance and well-being set in cultural ties (P-7, 2021; P-8, 2021).

The region is agricultural in nature and has strong community ties (Versluis, 2017). If farmers move away from these foundations culture may be lost (P-1, 2021). So, certainty of a future for farmers in the region and The Netherlands could be important for well-being (P-9, 2021). As P-6 puts it: “Your farm is all you have dear, it’s what you do it for” (P-6, 2021). In that farming is different from other occupations since it is fundamentally connected to farmers everyday lives and ways of living (Versluis, 2017). Within this fundamental connection well-being could be influenced by feeling heard in policies (P-3, 2021). Or, moreover, being heard, because then structural care and change could take place (P-3, 2021). Still, structural change does not necessarily have to be drastic, since problems may fix themselves over time, as the profession could slowly die out as a consequence of a lack of successors (P-1; P-3; P-6, 2021).

## 5 Discussion

An initial limitation of the research is that the interview questions asked were quite broad, considering sustainable policy as a whole, instead of focusing on one specific topic. This especially became clear when participants stated that they view sustainability as a container concept. Although the focus of the research was the overall position and well-being within sustainable policy. It is difficult to relate views when all participants talk about different aspects of the topic.

Secondly, the research is limited, because most participants are active in corporate organizations because of the convenience sampling method. This may lead to a biased view of the topic since farmers who have no connection to such organizations are left out.

Thirdly, because of my positionality, it may have skewed the participants who applied, since most participants knew who I was, or who my family was, which limits the objectivity of the research.

Lastly, the data only looked at dairy farmers. When collecting participants, the research was open to all individuals working in the agricultural industry, but only dairy farmers eventually participated. This makes the conclusions limited for application to the broader agricultural sector.

This research leaves opportunities for future research. Firstly, research on a more specific type of policy can be approached, by taking a closer look at the nitrogen crisis or biodiversity for example. Secondly, based on this research investigations to how the conclusions can be applied in practice can be conducted. This research is limited to gaining an understanding, as with many qualitative studies. Studies to apply this understanding more quantitatively or practically may be undertaken.

## 6 Conclusion

This thesis looked at the following research question: *'How is the well-being of dairy farmers affecting the acceptance and effectiveness of policy regarding sustainable agriculture in the region of North-East Twente in The Netherlands?'* As the conceptual model showed, policy can indirectly influence its own acceptance, through the effects policy has on the well-being of farmers. To first consider this view, most participants interviewed did not feel a direct effect of their well-being being affected by policy. They personally do not relate current policy instruments to more stress or bad mental health. Still, well-being could have a more nuanced effect on the acceptance and effectiveness of policy. Overall, it can be said that uncertainty could play a role in the stability of firms and the well-being of farmers. While numerous farmers want to work sustainably, unclear definitions of sustainability and uncertainty in the direction of policy can be experienced as limiting factors, and have been for quite some time (De Weerd and Klandermans, 1999).

Furthermore, the idea of self-determination as outlined by Ryan et al. (2008), suggests that intrinsic motivation and bottom-up initiatives (Runhaar *et al.*, 2020) have a positive influence on well-being. Interviews suggest that farmers might feel they can affect policy in some ways, and consequently accept it more easily, while other farmers do not feel like they are being heard at all, which highly limits the acceptance. A more bottom-up approach could assist this, so farmers' values and needs are being heard, which can according to Bartolini (2014) increase the acceptance.

Moreover, financial viability is an aspect that is experienced as lacking in many policy instruments. This may cause the effectiveness of sustainable policies to go down since a lack of financial means negatively affects the possibility for sustainable investment (Westerink *et al.*, 2019). In the future, some problems may also be solved by the natural course of action, since many farmers do not have a successor. Uncertainty about the future may consequently also not have a large effect on mental health, because many farmers accept the fact that their firm will not continue and with personal finance will be well off. Still, worries are present that other people in the industry may experience a lot of stress when policy becomes more strict and investments are restricted.

So, current sustainable agricultural policies are experienced with a lack of direction and little regard for financial viability. With an increase in attention for these aspects and self-determination, the eudaimonic well-being of dairy farmers could improve and consequently, according to dairy farmers, the acceptance and effectiveness of these policies can see benefits as well.

## References

- Bartolini, S. (2014). Building sustainability through greater happiness, *The Economic and Labour Relations Review*, 25(4), pp. 587–602.
- BoerBurgerBeweging (2021). *Uitleg | BoerBurgerBeweging, Missie*. Retrieved on 28-09-21 from: <https://boerbürgerbeweging.nl/boerbürgerbeweging/missie/>.
- Burgos-Watkinson, I.N. (2020). *International Student Migration and Happiness: A Qualitative Study*. bachelor. Retrieved on 29-09-21 from: <https://frw.studenttheses.ub.rug.nl/3255/> Groningen, University of Groningen
- Chandra Sekaran, V. *et al.* (2020). “This is the place where I can be alone, no tension:” Photovoice evidence for adolescent perceptions of their microsystem and psychological adjustment. *Asian Journal of Psychiatry*, 51, p. 102021.
- Clifford, N. *et al.* (2016). *Key Methods in Geography*. 3rd edn. London: SAGE.
- De Weerd, M. and Klandermans, B. (1999). Group identification and political protest: farmers’ protest in the Netherlands, *European Journal of Social Psychology*, 29(8), pp. 1073–1095.
- DiMaria, C.H., Peroni, C. and Sarracino, F. (2020). Happiness Matters: Productivity Gains from Subjective Well-Being, *Journal of Happiness Studies*, 21(1), pp. 139–160.
- Dunn, K. (2016) Interviewing. In I. Hay, 4<sup>th</sup> ed., *Qualitative Research Methods in Human Geography* (pp. 101-138). Ontario: Oxford University Press.
- FitzRoy, F., Franz-Vasdeki, J. and Papyrakis, E. (2012). Climate Change Policy and Subjective Well-Being, *Environmental Policy and Governance*, 22(3), pp. 205–216.
- Gebrezgabher, S.A., Meuwissen, M.P.M. and Lansink, A.G.J.M.O. (2010). Costs of Producing Biogas at Dairy Farms in The Netherlands, *International Journal on Food System Dynamics*, 1(1), pp. 26–35.
- Goyenola, G. *et al.* (2020). Influence of Farming Intensity and Climate on Lowland Stream Nitrogen. *Water*, 12(4), p. 1021.
- Hitchings, R. and Latham, A. (2020). Qualitative methods I: On current conventions in interview research, *Progress in Human Geography*, 44(2), pp. 389–398.
- Johnson, J.A. *et al.* (2014). Global agriculture and carbon trade-offs’, *Proceedings of the National Academy of Sciences*, 111(34), pp. 12342–12347.
- Kabinetsformatie (2021). *Omzien naar elkaar, vooruitkijken naar de toekomst, Kabinetsformatie*. Bureau Woordvoering Kabinetsformatie. Retrieved on 12-01-2022 from <https://www.kabinetsformatie2021.nl/documenten/publicaties/2021/12/15/coalitieakkoord-omzien-naar-elkaar-vooruitkijken-naar-de-toekomst> Den Haag: Rijksoverheid
- Kuipers, A. *et al.* (2021). European dairy farmers’ perceptions and responses towards development strategies in years of turbulent market and policy changes, *Agriculture (Switzerland)*, 11(4), p. 293.

Kulkarni, P. *et al.* (2021). Survival analysis of dairy cows in the Netherlands under altering agricultural policy, *Preventive Veterinary Medicine*, 193, p. 105398.

Lamb, W.F. and Steinberger, J.K. (2017). Human well-being and climate change mitigation, *WIREs Climate Change*, 8(6), p. e485.

LTO (2021). *Noord-Oost Twente, Welkom op de website van LTO Noord afdeling Noord-Oost Twente*. Retrieved on 29-09-21 from <https://www.ltonoord.nl/afdeling/noord-oost-twente>

Ministerie van Economische Zaken en Klimaat (2021) *Subsidieaanvragen voor zonnepanelen in trek tijdens eerste openstellingsronde SDE++ - Nieuwsbericht*. Retrieved on 15-12-21 from <https://www.rijksoverheid.nl/actueel/nieuws/2021/01/14/subsidieaanvragen-voor-zonnepanelen-in-trek-tijdens-eerste-openstellingsronde-sde> . Den Haag: Rijksoverheid

Niglas, K. (2000). Quantitative and qualitative inquiry in educational research is there a paradigmatic difference between them. *European Conference on Educational Research*, Lahti, Finland, 25-09-1999. Estionia: Talin Pedagogical University

Perrin, A., Milestad, R. and Martin, G. (2020). Resilience applied to farming: organic farmers' perspectives, *Ecology and Society*, 25(4).

Runhaar, H. *et al.* (2020). Endogenous regime change: Lessons from transition pathways in Dutch dairy farming, *Environmental Innovation and Societal Transitions*, 36, pp. 137–150.

Ryan, R.M., Huta, V. and Deci, E.L. (2008). Living well: a self-determination theory perspective on eudaimonia, *Journal of Happiness Studies*, 9(1), pp. 139–170.

Shirley, C.D. (2010). "You might be a redneck if..." Boundary Work among Rural, Southern Whites, *Social Forces*, 89(1), pp. 35–61.

Singh, P.K. and Chudasama, H. (2021). Pathways for climate resilient development: Human well-being within a safe and just space in the 21st century, *Global Environmental Change*, 68, p. 102277.

Stellingwerf, K. (2021). Boer opnieuw op actietour: een overzicht van lange rij protesten. 07-07-21. *RTV Drenthe*.

Suldo, S.M. *et al.* (2014). American High School Students' Perceptions of Determinants of Life Satisfaction, *Social Indicators Research*, 118(2), pp. 485–514.

Veldhoven - Van der Meer, S. van (2020). Kamerbrief bij Ontwerp Nationaal Milieubeleidskader (NMK) - Kamerstuk. Retrieved on 12-01-22 from <https://www.rijksoverheid.nl/documenten/kamerstukken/2020/09/24/ontwerp-nationaal-milieubeleidskader-nmk> . Den haag: Rijksoverheid

Versluis, P. (2017). Wie zorgt voor onze ouderen in landelijke gebieden?: Interview aanjagers Nederland Zorgt Voor Elkaar, *Sociaal Bestek*, 79(5), pp. 59–61.

Vrolijk, H., Reijs, J. and Dijkshoorn-Dekker, M. (2020). Towards sustainable and circular farming in the Netherlands : Lessons from the socio-economic perspective. *Wageningen Economic Research*. Den Haag.

Westerink, J. *et al.* (2019). Kan een goede boer natuurinclusief zijn? : De rol van culturele normen in een beweging richting natuurinclusieve landbouw. *Wageningen: Wettelijke Onderzoekstaken Natuur & Milieu*. 161. pp 4-86

Winterman, P. (2021). Miljardenplan stikstofcrisis: mes gaat diep in veestapel rondom natuurgebieden 15-12-21. *Algemeen Dagblad*.

ZuivelNL (2019). LTO internationale melkprijsvergelijking 2019 LTO Nederland. Retrieved on 04-01-22 from <https://www.zuivelnl.org/marktinformatie/melkprijzen/historie-melkprijzen>.

## Appendix

### 1 Interview Guide (Semi-structured) (Dutch)

#### **Hoofdvragen:**

Hoe beïnvloedt het welzijn van boeren de acceptatie en effectiviteit van beleid op het gebied van duurzame landbouw in de regio Noordoost Twente in Nederland?

- 1) Hoe ben je zelf betrokken bij de agrarische sector?
  - a. Werk (Leeftijd)
  - b. Context
  - c. Deel van organisatie & verenigingen
- 2) Hoe zou je een goede/verantwoorde boer omschrijven
  - a. Grootte? Gemeenschap? Plezier in vak?
  - b. Is duurzaamheid en belang voor de toekomst belangrijk?
- 3) Hoe is duurzaamheid en belang voor de toekomst en het klimaat belangrijk? En de impact op boeren hiervan?
  - a. Moet beleid hierin sturen?
  - b. Hoe voel jij je hierin?
- 4) Heeft beleid op dit moment een grote invloed op het bedrijf?
  - a. Sturen van duurzaamheid
  - b. Onzekerheid?
  - c. Voel jij je gehoord in dit beleid?
- 5) Is je persoonlijke welzijn beïnvloed door dit beleid?
  - a. Positief/Negatief
  - b. Door beleid/onzekerheid/klimaat/geld
  - c. Omgeving?
  - d. Acceptatie van het huidige beleid
- 6) Denk je zelf dat er verandering moet komen in het belang van welzijn in duurzaam landbouw beleid?
  - a. Belangen gehoord voelen?
  - b. Hoe zie jij de toekomst van landbouw in Nederland voor je (wat denk je en wat wil je zien?)

Andere belangrijke dingen/voorbeelden wat belangrijk is in dit thema/onderzoek?

## 2 Consent form (Dutch)

### Overeenkomst van Deelname (Consent Form)

**Onderzoeker:** Rens Rolink

**Onderzoeksproject:** Bachelor Scriptie Human Geography and Planning

**Onderzoeksonderwerp:** Belang van welzijn van boeren in duurzaam landbouwbeleid

Geachte Meneer/Mevrouw,

Bedankt dat u wilt deelnemen aan dit onderzoek over het belang van het welzijn van boeren in duurzaam landbouwbeleid. Het interview zal hierover uw mening en ideeën rondom dit thema verkennen. Het interview zal ongeveer 20-30 minuten duren, maar kan veranderen door de open structuur van dit interview en de antwoorden die u geeft.

Het interview wordt via een geluidsrecorder opgenomen, waarna het wordt getranscribeerd. Als u dit transcript zou willen inzien kunt u altijd contact met mij opnemen hierover. Ook als u het uiteindelijke onderzoek zou willen lezen, kunt u contact opnemen. De informatie zal worden gebruikt om de onderzoeksvraag te beantwoorden, wanneer het onderzoek is afgerond zal de opname dan ook worden verwijderd. Tot die tijd zullen de gegevens vertrouwelijk en anoniem worden behandeld. De gegevens zullen alleen door mijzelf en mijn supervisor: Dimitri Ballas worden ingezien. In de scriptie zal de informatie geanonimiseerd worden en niet aan u persoonlijk te linken zijn.

Met het ondertekenen van deze overeenkomst geeft u aan dat:

- Het duidelijk is voor u waar het onderzoek over gaat.
- Dat het duidelijk is dat de deelname vrijwillig is en dat u het recht heeft vragen niet te beantwoorden en zich altijd terug kunt trekken uit het onderzoek.
- Uw deelname vertrouwelijk is en dat informatie uit het interview gebruikt kan worden voor de onderzoeks-scriptie of in de vorm van quotes, en dat deze informatie geanonimiseerd zal zijn.
- Dat het duidelijk is dat uw interview met geluidsopname alle informatie die daaruit voortkomt vertrouwelijk wordt bewaard op een pc beveiligd met een wachtwoord en alleen toegankelijk is voor de onderzoeker en supervisor.

Voor verder vragen aanmerkingen kunt u mij of mijn supervisor contacteren:

Onderzoeker: Rens Rolink

Tel: [REDACTED]

Email: [REDACTED]

Supervisor: Professor Dimitris Ballas

Tel: [REDACTED]

Email: [REDACTED]

Ik begrijp en ga akkoord met het bovenstaande en wil meedoen aan dit onderzoek:

**JA / NEE**

**Naam Deelnemer:** \_\_\_\_\_

**Leeftijd:** \_\_\_\_\_

**Link tot de Agrarische Sector:** \_\_\_\_\_

**Datum Overeenkomst:** \_\_\_\_\_

**Handtekening:** \_\_\_\_\_