

“We have to change, no matter what”

Conflicting frames in debates about the
future sustainability of the Dutch food
system

Henriëke te Winkel - MSc Thesis - June 2016



Colophon

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Abstract

There is a growing concern about the future of the food and agriculture sector, which is why the world is asking for a transition towards a sustainable food system. However, there are currently many debates about what a sustainable food systems should look like. Sustainability is a concept that can have many different meanings attached to it, depending on whom you ask. In this research, framing theory is used to analyse these different meanings that are given to sustainability. I am showing what the conflicting frames look like in two debates about sustainable food systems in the Dutch agricultural sector. In the case about poultry production as well as the case about local versus global food production, several frames can be found. For the transition towards a sustainable food system, there are different ways of dealing with these different frames surrounding sustainability. Because of the complexity of the problems surrounding sustainability, and the uncertainty about the consequences of particular policy decisions, this thesis is recommending a reflexive governance approach with clumsy policy solutions.

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List of abbreviations

ACM	Autoriteit Consument & Markt
BSc	Bachelor of Science
CAP	Common Agricultural Policy
FAO	Food and Agriculture Organisation of the United Nations
GMO	Genetically Modified Organism
HLPE	High Level Panel of Experts on Food Security and Nutrition
LAW	Law & Governance group
MID	Master International Development
MSc	Master of Science
NGO	Non-Governmental Organisation
NVP	Nederlandse Vakbond Pluimveehouders
PAP	Public Administration & Policy Group
SFS	Sustainable Food System
WUR	Wageningen University & Research Centre
WWR	Wetenschappelijke Raad voor het Regeringsbeleid

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1. Introduction

1.1 Problem statement

In recent years, there has been a call for a transformation towards a more sustainable food system on a global scale (HLPE, 2014; IPES-Food; 2015), as well as on national and local levels. In the Netherlands, this call for change can be seen at the national level in the report *Naar een Voedselbeleid (Towards a food policy)* by the Wetenschappelijke Raad voor het Regeringsbeleid (WWR) (*Scientific Council for Governmental Policy*) that was published in 2014. In this report, the WWR is arguing for a shift from an agricultural policy to a food policy. A food policy is thought to be more inclusive by comprising different values surrounding food, as well as including the connection between production and consumption and changes in power relations (WWR, 2014). In October 2015, the state secretary of economic affairs and the minister of public health, wellbeing and sports reacted to this report with a letter (Tweede Kamer, 2015). In this letter the importance of issues such as sustainability and health are emphasised, and it is stated that they want to strengthen the Dutch food policy, inviting other stakeholders to help with designing and implementing this. The latest development on the state level has come from the government document *Aan Tafel (At the table)*, in which the state secretary of economic affairs has asked ten people from the food & agricultural field to share their vision on food (Ministerie van Economische Zaken, 2016). The intention of sharing these visions is to stimulate the debate about a more sustainable food system and to inspire others to change. The call for a change towards a more sustainable food system is also happening at regional and city level. For example, cities such as Amsterdam and Ede have developed their own food visions and strategies in which they lay out their ideas about the future of food systems (Gemeente Amsterdam, 2016; Gemeente Ede, 2016).

A well known concept regarding this transformation is 'sustainability.' Sustainability has been used by many different actors in many different sectors, and there seems to be agreement on the importance of the concept (van Gorp & van der Groot, 2012). Although there seems to be a general agreement that sustainability is necessary, the problem arises in the wide variety of interpretations in the meaning that is given to this concept of sustainability (Mooney & Hunt, 2009). It is such a flexible concept that opposing actors can incorporate it strategically into their communications (van Gorp & van der Groot, 2012). This can lead to confusion and conflicts in which sustainability is used in different ways and where the concept can mean different things to different people, and that makes meaningful conversation difficult.

Food and agriculture is one such sector in which sustainability is used as something to be desired, but used in very different ways, which leads to confusion and conflict. An example of such a debate within the food and agriculture sector in the Netherlands is about making chicken meat (plofkip) and eggs more sustainable within the supermarkets. This is the initiative of the Dutch NGO's Wakker Dier and the Dierenbescherming, who are actively

campaigning for an improvement in animal well-being of products that are sold in the supermarket (Wakker Dier, 2015-1; Dierenbescherming, 2015). At the same time, supermarkets are not very willing to change these practices. Another example of such a debate surrounding sustainability is about local food. Within this debate, the term 'locavore' is used as a concept to indicate people who make an effort to eat food that is grown, raised or produced locally, typically within a hundred mile radius (Merriam Webster, 2015; Local foods wheel, 2015). Local food is often seen as more transparent, more healthy, and better for the environment (SustainableTable, 2015). There is an increasing number of people who grow their own food in individual and community gardens, particularly in cities (Volkskrant, 2012; Ensia, 2015). But there are other voices that argue that local food is no more sustainable than food from the supermarket (SustainableTable, 2015). In fact, local food is characterised by critics as promoting less food security and greater environmental destruction (Scharber & Dancs, 2015).

In this research, I will show what the different perspectives on sustainability are by looking at the conflicts in these two debates within the Dutch food sector. I will do this by using framing theory. Framing theory can be used to analyse ways in which actors give meaning to sustainability within food governance, and to explain policy controversies (Schön & Rein, 1994). Frames are structures of belief, perception, and appreciation that underly statements and opinions (Schön & Rein, 1994). However, when it comes to dealing with these different frames and the transformation towards sustainability, there is no unified view. One approach is frame reflection. By reflecting on conflicting frames, actors can try to find a resolution and thereby reframe the issue at hand (Schön & Rein, 1994). But there are also other approaches on how to deal with such conflicts, such as through reflexivity and clumsy solutions (Candel, 2016; Verweij; 2006), in which there is no one forthright solution. I will reflect on these different approaches and on what this could mean for the transformation towards a sustainable food system.

1.2 Research objectives & questions

The goal of this research is to better understand the ways in which sustainability is given meaning to by different actors within food and agriculture debates in the Netherlands, and to which extent the meaning given to sustainability can be a reason for misunderstanding, confusion and conflict. Although the awareness of the need for sustainable food systems has been growing and has recently been getting more attention (Lang & Barling, 2012; Marsden, 2000), the meaning of sustainability remains unclear. Up until now, the approach to sustainability within food and agriculture has been very fragmented in which these different actors all give their own interpretation to what should be done. In some cases, these interpretations might be in conflict with each other, which could be problematic for the common goal of a sustainable food system.

This research is an attempt to unravel these fragmented pieces of sustainability within debates about the future of food systems. In the end, this research can improve the understanding of academics, policymakers and consumers on framing processes within sustainability debates, as well as recommend policy strategies for dealing with conflicts surrounding sustainability.

Thus, the main research question has been defined as follows:

To which extent is there a consensus about what the transformation towards a sustainable food system should look like?

This main research question can be divided into the following sub questions:

- What are the different frames in the sustainability debates on poultry and local versus global food?
- How do the different frames relate to each other and to existing frameworks?
- What are the implications of these results for the transformation towards a sustainable food system?

2. Theoretical framework

This chapter will start by explaining how the ideas of sustainable food systems have developed over the past years. The second part is about the theory of framing and the different ways in which this can be dealt with. Finally, more will be said about how framing theory can be applied to the subject of sustainable food systems.

2.1 Sustainable food systems

For a long time, agricultural policies have been focused on raising productivity and production as a solution for malnutrition and hunger (Lang & Barling, 2012; Waltner-Toews & Lang, 2000). The underlying belief has been that producing more will satisfy the society's increasing need for food (Ingram, 2011). At first this was done through state-led industrialisation of agriculture, and since the 1980s the strategy has shifted to free trade and a market-led industrialisation of agriculture (Gupta, 2004). But there are limitations to this agricultural free trade perspective. It over-simplifies factors that can affect outputs and it has the tendency to externalise costs, for example for environmental health (Lang et al., 2009; Waltner-Toews & Lang, 2000). Another limitation of the free trade perspective is that even though the current amount of food that is produced is enough to feed the global population, a lot of people are still living in hunger (Ingram, 2011). This suggests that there is a problem with distribution rather than with the level of production.

For the past twenty years, there has been a growing realisation that food-related policies should be about more than just raising agricultural production. Maxwell (1996) identified this as the need for the shift from a food first perspective to a livelihood perspective. Things such as environment, health and social issues are all connected and interrelated with food and agriculture, and should therefore be taken into account (Hinrichs, 2012; Lang et al., 2009). Instead of concerns about national food supply and prices, the perspective should be focussed on the complexities of livelihood strategies in uncertain environments (Maxwell, 1996). There have been policies for health, for environment, and social issues, but these have always been fragmented and treated as separate policy domains, in which no connection has been made with food in general. Policy-making processes are more used for single-issue problems and not for the connections between issues (IPES-Food, 2015; Lang & Barling, 2012).

However, several scholars have recently asked for a more holistic and integrated approach towards food and agriculture (Ingram, 2011; IPES-Food, 2015; Lang & Barling, 2012; Waltner-Toews & Lang, 2000). In this new approach, social, environmental, and public health dimensions should all be taken into account because of their mutual and overlapping influences (Lang & Barling, 2012; Oosterveer, 2005). Lang et al. (2009) use the concept of 'food systems' when they talk about an integrated approach towards food governance. The

definition for a food system has been given by the high-level panel of experts on food security as *“gathering all the elements and activities that relate to the production, processing, distribution, preparation and consumption of food, and the outputs of these activities, including socio-economic and environmental outcomes”* (HLPE, 2014). It includes people, inputs, processes, infrastructures, institutions, and more, and also interferes with other systems such as energy and transport (HLPE, 2014). In short, a food system is about how processes interact with one another, in the environmental, social, political and economic context (Ericksen et al. by IPES-Food, 2015).

However, a food system in itself does not include any value. A much-used concept for including value is *‘sustainability.’* The most common definition can be found in the Brundtland report called *Our Common Future* in the light of development. They defined sustainable development as *“development that meets the needs of the present without compromising the ability of future generations to meet their own needs”* (WCED, 1987). Thus, when we translate this to a food system, this would mean that the food system would have to meet the needs of the present without compromising the ability of future generations to meet their own needs. The only food system to be secure is that which is sustainable, and that therefore the route to food security has to be through addressing sustainability (IPES-Food, 2015; Lang & Barling, 2012).

The concept of food systems can thus be linked to sustainability. A definition of a sustainable food system (SFS) has been given by the high level panel of experts on food security as being *“a food system that delivers food security and nutrition for all in such a way that the economic, social and environmental bases to generate food security and nutrition for future generations are not compromised”* (HLPE, 2014). This means that ensuring food security and nutrition alone is not enough to make a food system sustainable (HLPE, 2014). A sustainable food system includes more than that, on economic, social, and environmental levels, as well as on different time scales and geographical scales (HLPE, 2014). It should also be addressed at the interface of science, policy and practice (IPES-Food, 2015).

However, the involvement of such a large amount of actors and concerns makes the transformation towards a sustainable food system complicated. The difficulty with such a complex approach towards food and agriculture, with all the different aspects and dimensions that fall under the scope of sustainable food systems, is that there are many different interpretations possible. The exact meaning of sustainability depends on who is using it and in what context (Bell & Morse, 2008). Actors can give their own meaning to what they think is important within sustainable food systems, depending on their own values and beliefs. There is no mechanism that effectively deals with these conflicts (Oosterveer, 2005). But the theory of framing can help to better understand these conflicts, and might also be a starting point to resolve them.

2.2 Framing, reframing, reflexivity and clumsy solutions

2.2.1 Framing

As shown above, the purpose of sustainability is to resolve problems in relation to the future of the planet. But the precise nature of the issues at hand, who or what causes the problem, the remedies required, the urgency of such interventions, and who should take responsibility for their implementation all depends on a process of interaction and exchange of meaning (van Gorp & van der Groot, 2012). Actors involved in a policy issue are, logically, inclined to look at a problem from their own point of view, based on their interests, knowledge and perceptions of the problem (van Bueren et al., 2014). Analysing these processes can be done through the use of framing theory.

Frames can be used to understand an issue, to understand what the problems are with the issue, and what the responses to these problems are (DeWulf et al., 2009). Actors engage in framing to portray a policy issue in such a way that it supports their own interests (Candel et al., 2014). Framing refers to the manner in which a particular topic or issue is represented (van Gorp & van de Groot, 2012). Frames can contribute to defining a situation through this giving of meaning to it. They structure how people perceive reality and make sense of particular issues and situations in the world around them (Van den Brink, 2009). Making sense of social reality is always done through using a frame. A frame makes sense of complex, information-rich situations that require selectivity and organisation, which is what framing does (Schön & Rein, 1994). Schön & Rein (1994) use framing as a framework for reflection on policy controversies. They define frames as “*the structures of belief, perception, and appreciations that are underlying policy positions.*” In this research, this approach will be used to understand these underlying structures for the issue of sustainability.

In order to better understand the mechanisms of framing, a communicative approach towards framing can be helpful. Communication is about how people add meaning to certain topics and issues (Candel et al., 2014). Entman (1993) takes such a communicative approach. He uses framing as a way to describe the powers of a communicating text. He argues that a frame determines whether most people notice a problem and how they understand and remember it. He defines framing as “*to select some aspects of a perceived reality and make them more salient in a communicating context, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described.*” Saliency in this matter is used to describe that a piece of information is made more noticeable, meaningful or memorable to audiences. Increased saliency enhances the probability that receivers will perceive the information, discern meaning and thus process it, and store it in memory (Entman, 1993). Thus, framing can be seen as a tool that decides which elements of reality should be selected to present an issue in such a way that it is comprehensible to a diversity of audiences (van Gorp & van der Groot, 2012). This is a constructionist perspective of

framing, which also means that they are not neutral, but serve a certain purpose (Jerneck & Olsson, 2011; van Gorp & van der Groot, 2012).

Because a frame defines how we understand an issue, it has implications for the evaluation and acting upon the problem, and in turn for the options and interventions that are chosen (Entman, 1993; Jerneck & Olsson, 2011). In some cases, frames can obtain wide support and enable the institutionalisation of a particular course of action (Candel et al., 2014). However, policy issues can also be subject to various - potentially conflicting - frames at the same time. Particularly when multiple actors are involved, framing can lead to counter-framing by actors who attach different meanings to the issue at hand, based on their different interest (Candel et al., 2014). Frames and framing can be used to study these conflicts, how they are negotiated and how actors interact with each other (DeWulf et al., 2009). Depending on the underlying values and perceptions, there can be different problems for one issue. These underlying values and perceptions cause disputes between actors and are called conflict frames (Schön & Rein, 1994).

In a frame conflict, different frames represent mutually incompatible ways of setting the policy situation (Schön & Rein). This means that what is being seen as a solution for one actor can be seen as a problem to another actor and vice versa. The conflicting frames of different parties determine what counts as a fact and what arguments are taken to be relevant and compelling (Schön & Rein, 1994). Because of this, it is impossible to reach an agreement on the course of action. Another aspect of these conflicting frames is that those who construct the social reality of a situation through one frame can always ignore or reinterpret the 'facts' that holders of a second frame present as decisive counter evidence to the first (Schön & Rein, 1994). Thus, in a frame conflict, there are opposing values and perceptions surrounding an issue, which makes it difficult to come to a policy solution to which all actors agree.

Following on the knowledge about the different frames that are surrounding a particular issue, the question is what can be done with this knowledge. Change starts with reflecting on these different frames. The difficulty with frames is that they belong to the taken-for-granted world of policy making (Schön & Rein, 1994). People are usually unaware of the role of frames in organising their actions, thoughts and perceptions. But in order to reflect on the conflicting frames that underlie policy controversies, it is important to become aware of those frames (Schön & Rein, 1994). Once this happens, there might be a potential for change.

According to Schön & Rein (1994), human beings are able to reflect on and learn about the game of policy making, even when they play it. This is also true for the conflicts that are underlying policy controversies. People can explore how their own actions can increase policy disputes and contribute to stalemate, and thus provoke controversy. On the other hand, people can also explore how their actions might help to resolve frame conflicts that

are underlying policy issues (Schön & Rein, 1994). Being aware of framing processes offers the potential for practitioners to approach conflict situations with different lenses for understanding issues, identities and relationships, and interaction processes, and even to share this with disputants (DeWulf et al., 2009).

2.2.2 Reframing

Reframing is a process of shifting one's thinking into a different system and structure of concepts, language and cognitions. When actors with conflicting frames interactively co-construct overlap in their sense making, there is a bridging potential to reach agreements about a dispute (Dewulf et al., 2009; Schön & Rein, 1994). Reframing stems from stakeholders' understanding of their own as well as others' expressed frames (Kaufman et al., 2003). It changes perception of what to ask, how to investigate, and how to act upon a subject. It thus has performative implications (Jerneck & Olsson, 2011). Dewulf et al., (2009) call this frame change. Someone can shift from one available frame to another, but real change only happens when an existing frame is changed by adding new elements or when a new frame is made (Dewulf et al., 2009). Reframing can reveal incomplete solutions and/or undesirable consequences of incomplete solutions. It can also discover missed opportunities and identify additional benefits of alternative solutions (Jerneck & Olsson, 2011). Finally, it can also identify agents of change and suggest action (Jerneck & Olsson, 2011).

How exactly these processes of frame reflection and reframing are happening remains unclear, but Schön & Rein (1994) argue that it is required for practitioners to have the capability for reflexive inquiry in and on the practice situation, the effectiveness of strategies of action, and the stalemates in which they are caught up. Thus competent policy practitioners can be seen as reflective inquirers, a kind of researcher within the policy making game, and they have a sensitivity towards their own framing (DeWulf et al., 2009). These processes of change need continuous monitoring and feedback to participants on their actions, interactions and responsibilities. This involves collective reflections of the process and its progress (Jerneck & Olsson, 2011).

In the end, frame reflection may contribute to a kind of reframing that resolves the controversies that arise in policy practice. It is a process that may open up new pathways towards sustainable options (Jerneck & Olsson, 2011), or at least to better manage a dispute (Kaufman et al., 2003). However, the potential for frame reflection is only evident in idealised models, for which no practical application is at hand (Schön & Rein, 1994). Thus, it is questionable to which extent the theory of reframing can be applied to practice.

2.2.3 Reflexivity and clumsy solutions

There has been some criticism on the potential of reframing. In complex issues such as sustainability, instead of reframing, it could be a better option to follow parallel pathways

towards a plurality of sustainable food systems (Candel, 2016). One way to deal with a plurality sustainable of food systems through parallel pathways is by reflexive governance. Reflexivity is the capability to understand and handle the varieties of frames surrounding a policy problem (Candel, 2016). According to Galli et al., (2016), reflexive governance is the continued learning in a process of ongoing development. Thus, rather than moving towards complete knowledge and maximisation of control, there is no fixed endpoint. Another aspect is the absence of a ranking of winners and losers, because reflexive governance means that a priori positions on what counts as sustainability can be overcome (Galli et al., 2016). It integrates a diversity of perspectives and strategies, making it possible to follow parallel pathways. This reflexive approach embraces the understanding that societal change, in this case towards sustainable food systems, results from a multiplicity of efforts. Thus instead of assuming one adequate problem framing and one best way to solve problems objectively, reflexivity searches for openness, diversity and multi-dimensionality (Voss & Bornemann, 2011).

Verweij et al., (2006) argue that this approach to governance might lead to 'clumsy solutions.' Clumsy solutions are policies that recognise frame conflicts and competing knowledge claims (Candel, 2016). They creatively combine opposing frames (Verweij et al., 2006). Thus, by combining elements of different frames, this approach does justice to the multi-dimensional nature of sustainable food systems, and is more democratic than approaches that consist of only one dominant problem understanding (Candel, 2016; Verweij et al., 2006).

2.3 Framing of sustainability

Sustainability is a concept with many related dimensions and many different actors that have a stake in it. This makes the transformation towards a sustainable food system a complex issue where many different interpretations of the concept are possible. Sustainability can therefore be seen as a consensus frame (Gamson, 1995). The rest of this chapter will explain what this means and how other authors have used these theories in their own research.

2.3.1 Consensus frame

Sustainability is such a complex term because it is a 'quality of a system,' which does not specify who is included in the system and how that quality can be determined (Bell & Morse, 2008). This makes all kinds of value judgments possible (van Gorp & van der Groot, 2012). The term sustainability is thought to capture an essential meaning that can be used in a wide variety of discursive contexts (Mooney & Hunt, 2009). Also, an 'unsustainable' food system is not a goal anyone would be in favour of, which makes it difficult to mobilise alternative options that are against sustainability. Therefore, sustainability can be seen as a

consensus frame. A consensus frame is a term or concept that is widely shared and accepted in terms of their values and objectives (Gamson, 1995). It can be used in a wide variety of contexts, where the meaning is nuanced by the context in which it is situated (Mooney & Hunt, 2009). Sustainability is such a concept, because it used by a broad range of actors, even though many of them hold contradictory policy positions (Candel et al., 2014). What actors mean by the term, their causal analyses, and which forms of action they champion differ strongly (Candel et al., 2014; Mooney & Hunt, 2009). Thus, behind the apparent agreement implied by consensus frames lies considerable dissensus (Mooney & hunt, 2009). Because there is a broad range of different actors and interests involved in the issue of sustainable food systems, it is to be expected that there is a frame controversy underlying this consensus frame of sustainability.

2.3.2 Frame controversy

Other authors have done research about the controversy underlying the consensus frame of sustainability (Bell & Morse, 2008; Galli et al., 2016; van Gorp & van der Groot, 2012). Although there is no explicit mentioning of framing in the research by Bell & Morse (2008), their distinction between strong sustainability and weak sustainability could be seen in that light. For strong sustainability, the focus is primarily on the environment, with no consideration of financial aspects. On the contrary, for weak sustainability, financial value is a key element where cost-benefit analyses are often made. The focus is more on economics where trade-offs with the environment are possible (Bell & Morse, 2008). Bell & Morse (2008) also make a distinction between an ecological approach and a critique of technology approach, which could be seen as two different frames. The ecological approach uses the idea of carrying capacity, which comes from the notion that an ecosystem can only sustain a certain density. If there are too many individuals it will result in an overuse of resources, and eventually the population will collapse. For the critique of technology approach, there is a fear that technologies may pose dangers to the environment, such as the use of pesticides and genetic engineering. The reaction to this fear of technology has been a move towards promoting sustainable agriculture, with using terms such as organic agriculture and ecological food production.

A more explicit frame analysis for sustainable food and agriculture in particular has been taken out by Van Gorp & van der Groot (2012). They have done an inductive frame research for communications in the media about sustainable food and agriculture. This research has led to the distinction of six frame packages. Two of them are similar to the approaches by Bell & Morse (2008). The undermining of foundations frame (van Gorp & van der Groot, 2012) fits with the ecological approach (Bell & Morse, 2008) and the Frankenstein frame (van Gorp & van der Groot, 2012) fits with the critique of technology (Bell & Morse, 2008). Table 1 gives a summary of the results of the research by Van Gorp & van der Groot (2012) and a more elaborate summary can be found below.

Table 1 - Framework by Van Gorp & van der groot

Name		Core notions	
1.	Value of responsibility	vulnerability, accountability.	Taking care
2.	Metaphor of undermining of foundations	balance, complex system, foundations/fundamentals	Mutual dependency, fragile balance, unstable
3.	Story of Frankenstein	arrogance of science	risk, poison, point of no return
4.	Myth of natural goodness	health, purity, authenticity, good taste	naturalness, pureness, taste of nature
5.	Myth of progress	modernization, progress	technology!
6.	Archetype of the good mother	never ending supply, freedom of choice, broad range of products	product range, familiar products, customer friendliness

- The responsibility frame is constructed around the value that people are responsible for and must take care of the planet. Humankind has been given temporary stewardship over the Earth, but is failing to perform this task with due care. Vulnerability and accountability are core notions within this frame.
- The undermining of foundations frame comes from the idea that agriculture and the food industry disturb the fragile balance within the ecosystem. It suggests that the underlying structure of the global ecosystem is gradually and stealthily being compromised, and that it will collapse eventually.
- The Frankenstein frame sees humans acting as God, where the science that is used for intensive farming and the food industry is leading the world to doom. Thus, the possible consequences are uncontrollable. It refers to risks, pollution, poisoning and contamination in combination with irreversibility: there is no way back.
- The natural goodness frame sees nature as inherently good and that it therefore comes before all else. Naturalness and pureness are good for you. It tastes better and they are authentic. The choice seems to be self-evident (*biologisch, biologique*).
- The progress frame sees scientific progress as the solution for food production, as opposed to the Frankenstein frame. The belief is that science helps society to evolve and that it is needed for modernisation, because acting against progress is the same as taking a step back. Therefore, people should have trust in science.
- The good mother frame comes from the idea that agriculture and the food industry guarantee the supply of nourishment, and that people should show gratitude for this. This is about a never-ending supply, a range of different product, and freedom of choice. It can be used in combination with the natural goodness frame, but it can also be used as an argument not to bother about sustainability, because the availability is so high that it is just something to be thankful for.

Another research on sustainable food chains has been done by Galli et al., (2016). They have done a case study on sustainability within different bread chains, and they have used the framework that can be found below in Figure 1. Although their research does not explicitly use framing theory, the different ‘dimensions’ and attributes they distinguished can be related to different frames.

Sustainability	Attribute	Definition
Economic	AV creation	Product's ability to obtain a price premium that remunerates production
	Profitability/competitiveness	Ability of the chain to get stable prices, access to credit, access to factors of production (raw materials and skilled labor), market access
	Economic development	Contribution to growth and employment
	Rural development	Contribution to growth and employment in rural areas
Social	Labour relations	Quality of working conditions of the operators in the industry
	AV distribution	Fairness of the distribution of added value along the supply chain
	Food security	Stability in the availability and access (physical and economic)
	Trust	Relationship of trust between producers and consumers
Environmental	Territoriality	Ability of the chain to reflect the links between the product and the territory
	Resource use	Resources consumed (land, energy, other materials) in the production process
	Pollution	Negative impacts on the ecosystem
	Biodiversity	Contribution of food chains to the preservation of diversity of species and ecosystems
Human health	Waste	Losses and waste of raw materials, semi-finished and finished products
	Nutrition	Nutritional qualities associated with the food in terms of composition and capabilities of the product to contribute to the physical health and well-being
	Safety	Standards of hygiene and safety adopted by companies to reduce the risks associated with complex transformation and storage of food
Ethical	Responsibility	Company procedures based on non-trade values. Coherence between behavior and communication.
	Transparency	Information conveyed to consumers, and communication between the actors in the chain (including traceability).
	Governance	Stakeholder involvement to business decisions.
	Innovation	Innovations for primarily environmental, social and health aims

Figure 1 - Attributes within sustainability dimension and definitions by Galli et al., (2016).

However, these frames have not yet been used to analyse specific debates and conflicts surrounding sustainable food systems in the Netherlands. The distinction as made by Van Gorp & van der Groot (2012) and by Galli et al., (2016) can function as a starting point for disentangling underlying beliefs and values of actors who are involved with sustainability. By becoming aware of the frames there are, awareness can be increased among actors who are involved in these issues. Following from this, it is possible to reflect on the implications of these different frames for governance and policy making. This reflection on how to deal with these frames surrounding sustainable food systems also has not been done before. In the next chapter I will explain what methods have been used for this research.

3. Methods

This third chapter will start with explaining the selection of the case studies. It will be followed followed by a short introduction on the key aspects and events of these case studies. Next, the choices for data collection and data analysing methods will be explained. The final part of this chapter is about the limitations of this research that should be borne in mind.

3.1 Case selection

In this research I have chosen for two case studies. A case study makes it possible to understand the way in which actors give meaning to sustainability within food and agriculture in the Netherlands. Doing qualitative, in-depth research on a particular situation (van Thiel, 2007) is a method to gain a better understanding of how actors think and talk about sustainability in concrete issues related to food and agriculture. A case study is practice-oriented and can contribute to a solution of concrete societal issues (van Thiel, 2007). Because a case study can explore the contextual dimensions that influence a social phenomenon, and because it can reveal patterns of interaction that increases our understanding of social processes (Silverman, 2014), this is a suitable method for revealing which frames are being deployed within questions of sustainable food and agriculture.

According to Silverman (2014), the best way to select cases is by purposive and theoretical sampling. This means that the cases should illustrate the process by embodying the key aspects. The cases should also be based on the relevance to the research question and the theoretical position. For this research, the core process is framing within debates about sustainable food systems. In order to illustrate this process, I have chosen for a multiple case study, in which two cases will be analysed (2-n). The choice for two cases has been made in order to be able to do in-depth research of a limited amount of cases, while at the same time being able to distinguish different ways of framing. Therefore, the selection of the cases has been based on their contrasting nature in the way they approach food systems. One approach to making a food system more sustainable is by improving existing practices within current dominant systems. This is what the debate within poultry production is about: to lift the current standards for animal well-being within intensive agriculture (Wakker Dier, 2015-2). Another way to approach a more sustainable food system is by thinking outside of the current existing dominant practices, and create an alternative system. This is what actors involved in local food production systems are trying to do, by producing food close to where it is consumed (Local foods wheel, 2015).

Besides their different approach towards food systems, the issues at hand are also different. The expectation is that animal-wellbeing will be central in the poultry case, whilst with local food the focus will probably be more on transparency and social relations. However, it is also

expected that the source for the conflicts regarding sustainability will mainly evolve around environmental and economical arguments, for both the chicken produce and the local food case. The selection of these cases are meant as an example of how framing theory can be used in order to gain a better understanding of the debates and conflicts within questions about sustainable food and agriculture. Thus, this research is not meant to find all the frames there are in debates about sustainability, but instead to increase the awareness about the processes that are going on in likewise debates. In the coming sections I will further introduce these two cases.

3.2 Poultry

The first case that I have selected is about making chicken meat and eggs more sustainable within the supermarkets. The *plofkip* (bloated chicken) has become a well-known name for chickens that are grown for meat in the industrial agriculture. This term has been introduced by the Dutch NGO Wakker Dier. This NGO is defending animals in the cattle industry, fighting to give those animals a good life. They do this by increasing societal awareness and starting public debates. Starting from 2012, Wakker Dier has been actively campaigning to stop the selling of the meat from the *plofkip*. They also campaign for chickens that are used for the production of eggs. The way they state it, the animal wellbeing of these chickens is below what is acceptable (Wakker Dier, 2015-2). According to them, ‘sustainable’ means living and producing in a way that is good for people, the environment, and animals (Wakker Dier, 2012), and the *plofkip* as well as chickens used for eggs in the intensive agriculture do not meet those standards. Wakker Dier wants chickens have more space inside as well as access to outside spaces (Wakker Dier, 2015-2). The treatment during capture and slaughter should also be improved. Also, they argue that the *plofkip* should not be allowed to grow as fast as what has become the norm in current practices. An overview of translations of the Dutch concepts related to the poultry debate used in this report can be found below in Table 2.

Table 2 - Translation of Dutch concepts

Dutch	English
Beter Leven	Better Life
Bofkip	Lucky Chicken
Dierenbescherming	Animal protection society
Flopkip	Failed Chicken
Nieuwe standaardkip	New Standard Chicken
Plofkip	Bloated Chicken
Kip van Morgen	Chicken of Tomorrow

Dutch	English
Wakker Dier	Awake Animal

In 2013, the big supermarkets signed a covenant in which they agreed to replace the *plofkip* with the *kip van morgen* (chicken of tomorrow). The small improvements should lead to an ending of the plofkip(campaign). The supermarkets have chosen their own standards, but the changes are so small that Wakker Dier named these new chicken *flopkip* (failed chicken). Wakker Dier will continue the campaign until the chicken meet the dierenbescherming certification standards. The Autoriteit Consument en Markt (ACM) concluded that the covenant acts in violation of the competition law, because the consumer doesn't want to pay more for the minimal animal welfare improvements (Volkskrant, 2015). Still, most supermarkets want to change to a different way of processing chicken before 2020, all on their own terms (Piep vandaag, 2015).

In October 2014, Jumbo introduced the *nieuwe standaardkip* (new standard chicken). The standards are higher than those of other supermarkets, although they still do not meet the certification standards of the dierenbescherming. Still, Wakker Dier is happy with this development and hopes it will be a trigger for other supermarkets to improve their practices too. In June 2015, supermarkets MCD and Boon's markt joined the processes of Jumbo chicken, calling it 'betere kip.' A recent research bij Wakker Dier showed that the amount of plofkip in supermarkets has declined from 80% in 2014 to 60% in 2015, mostly because of the change towards the higher standards such as 'kip van morgen,' 'nieuwe standaardkip' and 'betere kip' (Levensmiddelenkrant, 2015).

For eggs as well as for meat, Wakker Dier is working together with the *Beter Leven* (Better Life) certification scheme of another NGO called Dierenbescherming. Under this scheme, chicken meat and eggs, as well as products from other animals can receive a label with one, two or three stars, depending on the level of animal wellbeing of the product (Beter Leven, 2015). The number of chickens under this scheme was 18 million in 2015 and is still growing (Beter leven, 2015). Since the beginning of 2016, the three biggest supermarkets in the Netherlands have changed to a different kind of processing chicken which is not the plofkip (Wakker Dier, 2015-1). This shows that the issues raised by Wakker Dier are getting increased attention and that it is successful in changing the way in which chicken are held within industrial agriculture.

However, not everyone agrees to the necessity of the plofkip campaign. The conflict on sustainability started when several media sources communicated that, according to scientists at Wageningen University & Research Centre (WUR) production within intensive agriculture is more sustainable than ecologically produced chicken (Trouw, 2012; Telegraaf, 2013-1), and that the claims by Wakker Dier are therefore untrue. The former board

chairman of the Wageningen University, Aalt Dijkhuizen, stated that the Dutch livestock farms are the most clean in the world and that organic food is more expensive, not proven to be more healthy, and bad for the environment (Telegraaf, 2013-1). Actually, the *plofkip* and conventional chicken who produce eggs are better for the environment than ecological chickens, according to these media sources (Trouw, 2012; Telegraaf, 2013-1).

Another counter-reaction came from the poultry farmers and their labour union NVP (Nederlandse Vakbond Pluimveehouders). They introduced the term *bofkip* (lucky chicken) to point out that Dutch chickens actually have a very good life, and that the living conditions for poultry outside of the Netherlands are much worse (Telegraaf, 2013-2). This is because of the extra requirements in the Netherlands, above the European wellbeing-requirements (Telegraaf, 2013-2). The chair of the NVP stated that they have had enough of the the media commercials about the *plofkip*, which puts poultry farmers in a bad light (Telegraaf, 2013-2). In Table 3, an overview of the most important events regarding the poultry debate has been given in a timeline.

Table 3 - Timeline poultry debate

Date	Event	Actors
2012	Introduction <i>plofkip</i> campaign	NGO Wakker Dier
2013	Convenant <i>kip van morgen</i>	Supermarkets
2013	Plea for intensive agriculture	Aalt Dijkhuizen
2015	Violation of competition law	ACM
2016	Increase of minimal standards poultry	3 big supermarkets

3.3 Local versus global

The local versus global case is on a different level than the poultry case. It is more abstract with less clearly defined boundaries. However, these are issues that are being discussed by consumers, scientists and activists alike. On the one hand, there is the currently dominant global food system, where supply is coming from all over the world. On the other hand, there is a growing number of people who are involved with local food production. Instead of a global food system, they plea for urban agriculture and alternative food movements such as 'locavore' and food sovereignty (Oostindie et al., 2016).

3.3.1 Global food system

The world that we live in is becoming more and more global. International trade has increased a lot over the past decades, including the international trade of food products. The quantities of globally traded food are growing, and at the same time, the organisation of this trade is also changing, resulting in global food supply chains (Oosterveer, 2005). This shift

towards global food supply chains also meant a shift from state-controlled systems to private governance in the agri-food system (Swinnen, 2007). One positive result of this globalisation has been that food supply chains have become more efficient, through beneficial effects on output, productivity, and product quality (Swinnen, 2007). Global trade also led to the year-round availability of food products that would not have been offered otherwise. The Wageningen University and Research centre (WUR, 2016) states on its website that this increased efficiency is needed, because the global food production will have to be doubled in order to feed a growing world population. These ideas are often seen in the light of 'feeding 9 billion people by 2050,' combined with the solution that this growing world populations asks for more intensified and large-scale global production (FAO, 2009; Global Alliance on Food Security Research, 2016; Godfray et al., 2010; WUR, 2016).

However, this globalisation of the food system has raised new risks and concerns are now emerging. The regulatory practices of the conventional nation-state are no longer sufficiently able to deal with food risks and concerns (Oosterveer, 2005). This is because of the transnational supermarket chains and multinational companies, who are largely controlling what food is grown where, how and by whom (Konefal et al., 2005; Lyson & Raymer, 2000). How these decisions are being made often remains unclear. This means that the decision-making processes of transnational supermarket chains can be named 'black-boxed' (Konefal et al., 2005). This results in a lack of trust in these transnational supermarket chains. Their development of private standards for safety, quality and the environment is largely the outcome of profit maximisation strategies and concerns over liability, and not necessarily driven by concerns for what is best for the public (Konefal et al., 2005). This focus on profit maximisation and not on the public good makes it possible that this global form of governance for food and agriculture will further increase inequalities in health, social welfare, and ecological conditions (Konefal et al., 2005).

One of the reactions to these negative consequences of globalising food provisioning is to stop this trend and to redirect the modernisation process towards different forms of local food provisioning (Oosterveer, 2005). Many academics have embraced localisation as a solution to the problems of global industrial agriculture (DePuis & Goodman, 2005). For example, researchers state that the most important social forces that could provide a countervailing tide to a global integration of the agro-food system are social movements (Buttel by Konefal et al., 2005). This can be focussed on urban agriculture or alternative food movements such as 'locavore' and food sovereignty (Oostindie et al., 2016). Actually, there are many different notions used, such as alternative food networks, short food chains and local food systems (Oostindie et al., 2016).

3.3.2 Local food system

Thus, producing and consuming local food can be an alternative for the global market system in which supermarkets and multinationals play a central role. People who are

actively making an effort to eat food that is grown, raised or produced locally can be put under the locavore movement. The concept 'locavore' was coined in 2005 in the San Francisco Bay Area by a group of women who challenged residents to eat foods that were grown or harvested within a hundred miles radius of San Francisco (Local foods wheel, 2015). This was picked up very quickly by others and the movement grew a lot. In recent years, initiatives for growing local food have been coming up everywhere, especially in big cities. Urban agriculture is one way of producing local food. Another way is through (online) subscriptions on local food produce.

When talking about a basis for governance in local food systems, literature often turns to a set of shared goals and values, mostly related to sustainability and social justice objectives (Mount, 2012). However, also within local food systems, diverse goals and values are exhibited. People approach, experience and perceive local food based on their own unique priorities, anxieties, goals and values (Mount, 2012). However, notions of reconnection, direct exchange and shared goals and values are often used in relation to local food.

Often, local food is connected to a positive impact on health, environment and economy (NRC, 2008). One much used argument in favour of local food is that local produce is more nutritious and therefore more healthy (Ensia, 2015). Because it is fresher, it also lasts longer on shelves and in refrigerators, reducing waste (Ensia, 2015). Local food is more transparent, because the chains are shorter. This makes it easier to check on fair working conditions (NRC, 2008). Local food is also a way to educate people about the value of food, green spaces and people's connection to nature (Ensia, 2015). In this way local food production can be a social gathering place and classroom, and a way to reconnect people and nature (Ensia, 2015). 'Authenticity' is another concept that is often connected to local food, opposing the anonymity of the food industry where price is the main driver of production (NRC, 2008).

Another much-used concept related to local food is that of 'food miles.' Local produce reduces transit-related costs, as well as the carbon emissions associated with transport, packaging and cooling (NRC, 2008; Ensia, 2015). Lower carbon emissions can be related to higher sustainability. However, the way in which food is grown might be more relevant for the amount of carbon emission - growing indoors under light might undo the reduction of the shorter travel distance (Ensia, 2015).

Scientists are also critical on the notion that local production is environmentally more sustainable. Hinrichs (2013) argues that local food does not automatically lead to any particular environmental, social and economic outcomes. Because of the economic principles of comparative advantage and economies of scale, a local food system could be a contributor to global warming and environmental damage rather than a net reducer (Sexton, 2009). There is also no proof that a local diet will increase the health status of people who consume local food. Probably, fresh healthy products will become more expensive and

therefore less affordable. Also, climates that cannot grow fruits and vegetables will have as a consequence a reduction in access to these products by a lot of people (Sexton, 2009).

These examples show that notions of sustainability differ among actors. The question whether local food systems are sustainable or not remains unanswered, because of the different perspectives people take when they talk about such a concept.

3.4 Data collection

The data collection has been done through a combination of a media analysis and interviews. The combination of these two methods has given the most representative picture of how actors think and talk about sustainable food. The initial media analysis has been used to grasp the essence of the relevant discussions regarding the cases and to select the respondents. The data collected during the interviews have been the main source for analysis and distinguishing the frames.

3.4.1 Media analysis

The media analysis has been done with two main goals. The first was to explain how the selected cases have developed over the past years and to find out what the most important events have been. Secondly, the media analysis has been used for selecting the relevant actors for interviews. Through this media analysis, it has become clear what the main points of view are and by whom they are carried out. This has functioned as the most important point of reference during the selection of the interview respondents.

For the poultry case, I have initially searched for the keywords *plofkip* in combination with *duurzaamheid* (sustainability) and *duurzaam* (sustainable) on Google. From this search the first hits were linking to Wakker Dier and to newspaper articles by several Dutch newspapers. *Plofkip* is already a frame that is used to give a negative connotation to intensive poultry farming. However, the search result also showed opponents of the way in which the term *plofkip* is used. Even though the debate mainly surrounds the keyword *plofkip*, I have also searched for *duurzaam* and *duurzaamheid* in combination with *pluimvee* (poultry) and *pluimveehouderij* (poultry farming), which is a more neutral term to address the production of chicken meat & eggs. Secondly, I searched for the same keywords in the online archives of two of those Dutch newspapers, NRC and Trouw. These two newspapers came up repeatedly during the initial google search. The archives of these newspapers gave greater and more detailed results than those of other newspapers (Telegraaf, Volkskrant) Both NRC and Trouw make use of opinions pieces and background stories (InfoNu, 2016). These opinion and background articles are better suited to gaining an understanding of the debate surrounding the plofkip and to identify the relevant actors.

For the local food case, I have initially searched for the keywords ‘local food production,’ ‘local food system,’ and ‘locavore’ in combination with ‘sustainability’ and ‘sustainable’ on Google. From this search came a lot of local initiatives regarding food production. Also, newspaper articles came forward that question whether local is better. I also searched for ‘global food system’ and ‘global food production’ in combination with ‘sustainability’ and ‘sustainable.’ This last search gave very little results. Therefore, I have thought of actors who might not be actively involved in the media debate, but who do play a big role in the global food system. Supermarkets are very important in the global food system, as well as representatives of the WUR (Wageningen University and Research Centre).

Finally, for both cases I have used the same keywords on the Dutch news platform Foodlog, which is the biggest online platform regarding food. Besides the articles themselves, the discussion section below the articles has been a source for understanding different points of view and finding actors who engage in the debates around sustainable food systems in general and the selected cases in particular. For an overview of the websites used for the media analysis, see Table 4.

Table 4 - Websites used for media analysis
http://www.google.nl
http://www.trouw.nl
http://www.nrc.nl
http://www.foodlog.nl

3.4.2 Interviews

Selection of respondents

The media analysis has led to an initial list of actors who are involved in the debates. I have subdivided these actors into different categories (scientists, farmers, farmers representatives, businesses, NGO’s, etc.). For the local-global case I also added supermarkets, who have not been very actively involved in the debate but who are important for the global food system. After that, I prioritised those actors who have been most important for each case, meaning that they carry out a clear message in the media debate and have repeatedly come back in different media sources. In this way I have selected the most relevant actors for each category. For each category I have tried to speak to at least two respondents in order to increase the validity of the data. Because I couldn’t get in touch with a university representative, who have been important actors in the debate, I have used other media sources that were about the selected cases in order to include their perspectives. I have also used one conference on sustainable food and one debate on meat production because of their relevance for the selected cases as well as the inclusion of a lot of viewpoints at once.

Nine interviews have been done for the poultry case. Among these were four farmers (regular as well as organic), of which one played a role as a spokesperson for the interests of poultry farmers. Others were two representatives of big NGO's, two scientists, and a representative of a labour union. The tenth and last additional data source for the poultry case is a debate about sustainable meat production, in which many of the relevant actors took part. Ten interviews have been carried out for the local food case. Among these were two farmers, two scientists, two activists, three business entrepreneurs and one representative of a big supermarket. Additional sources for the poultry case have been two workshops that took place at a conference about sustainable food, as well as two media interviews with a university representative.

Desktop research

Before each interview, I conducted a desktop research on the respondent in order to gain some basic knowledge about them. This helped the interview in such a way that I knew what kind of job they were doing and in most cases, the basics of their points of view. In this way I could ask more specific questions that applied to their individual situations.

Semi-structured interviews

The different sustainability frames within the selected cases have been identified through semi-structured interviews with open-ended questions. For these interviews, a topic list has been developed. The topics have been based on the framing theory as explained in chapter two. The topics have the intention to find the different meanings that are being given to sustainability. This has been done by asking about the perspectives of the respondents and what they think of as problems and solutions regarding this matter. The final questions about conflicts and joint solutions were added in order to find possible opportunities for reframing.

The topic list with these main issues has been used as a starting point during the interviews, while at the same time there has been space to let the conversations flow in a natural way. Because of this method, additional topics could be added during the interview and there was the possibility to delve deeper into issues that turned out to be most relevant and important (van Thiel, 2007). The interviews also included questions that were specifically adapted to the respondents, based on the results of the media analysis and the desktop research. I also included ideas and points of view of other respondents for them to respond to. This meant that every interview was different and no two interviews were exactly the same.

As explained in the theoretical framework (chapter 2.2), framing is about how problems are understood, evaluated and acted upon (Entman, 1993). This is why I started the interviews with asking about the respondent's ideas and thoughts about sustainability. What does it mean to them and how do they act, as a result of how they understand sustainability? After this, I asked what they see as the main problems and what they think the solutions for these problems are. Because what is seen as the problem can differ, depending on the underlying

values and perceptions (Dewulf et al., 2009). Next, I asked about conflicts and confusion about these values and perceptions. Referring to ideas of other actors is a way to make respondents aware of the role of frames (Schön & Rein, 1994). In this way, they could reflect on the conflicting frames, and think about ways in which these conflicts could possibly be re-framed (Schön & Rein, 1994). That is why the final question was meant for the respondents to think about solutions for conflicting frames and possibilities to solve disagreements. An overview of the interview questions can be found in Table 5.

At the beginning of each interview I have asked permission to record the interview with a mobile phone. This was agreed to by all respondents. I also made an agreement at the beginning of each interview about how I should refer to the respondent in the report. In order to assure the privacy of the interviewees, no specific names will be given, unless they agreed so.¹

The interviews lasted from 20 minutes to 90 minutes, with an average of around 60 minutes. All interviews were conducted in Dutch, because this is the mother tongue of each respondent. In Dutch, the respondents could more easily express themselves. Therefore, all quotes have been translated to English.

Table 5 - Interview Questions
In which ways are you involved with sustainability?
What does sustainability means to you? What is your (organisation's) vision on sustainability?
Which actions do you take to make the food system more sustainable?
What are, according to you, the main problems when it comes to sustainability?
What are, according to you, the main solutions when it comes to sustainability?
Do you have to deal with confusion and / or conflicts regarding sustainability?
Do you see possibilities to come to a joint solution where all parties can agree to? Is there a way to rethink this conflict?

3.5 Data analysis

In this section, I will first explain the choice for an inductive framing analysis of the collected data. Secondly, I will explain more about the choice for coding as a tool for analysis and about the coding process. After that, I will explain how the analysis followed from this coding and which steps were taken to come the results.

¹ A list with the full names and functions - as well as the full transcript of the interviews - has been added in an external appendix in order to assure the anonymity of the respondents.

What frame analysts have to take into account is that their own mental constructs interfere with the identification of a frame. Taking a systematic approach in scanning and comparing the research material can reduce bias (van Gorp & van der Groot, 2012). With deductive analysis, codes have been decided on beforehand (Van Thiel, 2007, p.163), and it gives certainties for conclusions (Svennevig, 2001). In a constructive approach, data is constituted by behaviour which is context-dependent and meaningful in itself (Svennevig, 2001). With an inductive approach, the codes are gradually being developed during the analysis (Van Thiel, 2007, p.163). The coding process in this research has been done inductively, looking for features in the data and developing codes from this data itself.

The reason why the framework by van Gorp & van der Groot (2012) did not suffice for a deductive analysis, is that they have taken a much more general approach towards food and agriculture. This has also led to the distinction of more generic frames of what would be expected to be distinguished in the selected cases. It is also possible that their data, that were mainly derived from media outings, would lead to different frames than the data from the interviews in this research. Therefore, the specificity of the selected cases and the data collection methods made inductive coding a more appropriate tool for analysis. Inductive coding made it possible to construct the analytical framework for the frame analysis from the specificity of the collected data itself. However, in the final phase of the analysis, the codes were compared to the existing framework by van Gorp & van der Groot (2012) in order to see whether and in which ways the data fitted with their results (see chapter 4.4).

To analyse the data, I have made use of coding. Coding takes segments of data apart, names them in concise terms, and proposes an analytical handle to develop ideas for interpreting each segment of data (Charmaz, 2006). Thus, coding is a way to define what is happening in the data and a beginning to understand what that means (Charmaz, 2006).

I have done two rounds of coding. The first round of the coding process consisted of looking for the reasoning devices. An inventory was made of quotes and paraphrases. Codes were added when an element or argument suggested a problem definition, a proposed solution, a non-solution or a non-problem (cf. Candel et al., 2014). Thus, the focus was on the causal stories that respondents told regarding sustainable food systems in the Netherlands (cf. Candel et al., 2014). The result of this first step was a long and unstructured list of framing devices connected to sustainable food systems. These codes were then made uniform, on the one hand by checking the data assigned to each code for differences within a code, and on the other hand by comparing the codes to each other for similarities. To keep track of what I meant by each assigned code, a codebook was kept up with a description of the meaning of each code (see Appendix A)². The second phase requires decisions about which initial codes make the most analytic sense to categorise the data inclusively and completely

² A comparison of which actors make use of which code in which category has been added as an external Appendix in order to assure the anonymity of the respondents.

(Charmaz, 2006). During this round of focussed coding, I have selected most useful initial codes and tested those against the extensive data. Thus, at first the data has been compared with data and afterwards the data has been compared to the codes (Charmaz, 2006).

The coding program Atlas.ti has been used to analyse the collected data. This program has been used because of its ability to store large amounts of data in a systematic way (Van Thiel, 2007, p.160). The method used has been similar to those by Van Gorp & van der Groot (2012) and Candel et al., (2014).

3.6 Reflection

3.6.1 Subjectivity & bias

Framing analysis has as strong interpretive character and therefore requires a certain amount of 'theoretical sensitivity' by the researcher (Boeije by Van Thiel, 2007, p.164). Frames must be constructed by someone, and everyone brings their own frames, maybe being unaware of doing so (Schön & Rein, 1994). It is the interpretation of the researcher which allows information to be translated into valuable data. Giddens (1987) explains this through the term 'double hermeneutic.' In social sciences, it is not just about what people do, but also about how people understand their world, and how that understanding shapes their practice (Giddens, 1987). And because people can use new information to revise their understandings, they can use this new knowledge to change their practices (Giddens, 1987). The risk in this double hermeneutic lies in the possibility for the researcher to overemphasise or overlook certain aspects (van Thiel, 2007, p.164). A way to deal with this double hermeneutic is by continually asking which patterns and themes there are in the data and compare those to each other, to decide which codes there are and how relevant they are for the end goal of the research: to describe, understand and explain (Van Thiel, 2007, p. 164). Language is another issue to keep in mind - each researcher makes use of specific language that reflects views and values. Also the codes arise from language, meanings and perspectives through which we learn about the empirical world (Charmaz, 2006). During the data collection and data analysis, I have dealt with this by continually being aware of these risks. I have tried to be aware of hidden assumptions in my own language as well as in the language of the respondents (Charmaz, 2006). I have also taken into account that my own perspective is one view among many, and not the 'the truth' (Charmaz, 2006). However, this does not mean that the risks of subjectivity disappear. Therefore, it is important to acknowledge its existence.

3.6.2 Methodological reflections

Due to the practical limitations of doing MSc research I could only perform an in-depth analysis of two cases. It cannot be excluded that additional cases would have resulted in additional or more refined frames. Another practical limitation is the restricted amount of interviews that have been taken out for this research. Therefore, the frames depend on the data from a limited number of actors. There is a possibility that additional interviews would have resulted in additional or more refined frames as well.

A characteristic of framing analysis is that it is demanding and time consuming to differentiate between frames, their layers, messages, and messengers. It can be hard to determine when a full picture of a problem has emerged (Jerneck & Olssen, 2011).

Another characteristic of framing theory and analysis is that it is rather static. Analysts tend to present frames as relatively stable systems of meaning, similar to modular texts or maps with an articulated logic and structure of argumentation (Steinberg, 1998). Instead, framing theory gives an abstract meaning to things that might be mere indications in reality (Steinberg, 1999). This means that the distinguished frames in this research do not give complete explanations, and not all data can be analysed by framing analysis.

A final difficulty of framing analysis is that the same course of action may be consistent with quite different policy frames. Conversely, the same frame can lead to different courses of action (Schön & Rein, 1994). It may also be difficult to distinguish between conflicts within a frame and conflicts that cut across frames (Schön & Rein, 1994). Thus, observations and analysis should be carefully nuanced in order to overcome these difficulties (Schön & Rein, 1994).

Though the selected methods are valuable tools for this research, it is important to be aware of these issues and to keep them in mind during the data collection and analysis.

4. Results

In this chapter, the different frames behind the sustainability consensus frame for the two selected cases will be described. The frame descriptions are based on the frame conflict matrix (see Appendix B). Two different frames have been distinguished for the poultry case, and three frames for local food case. Most of the frames are the same for both cases, but the reasoning and arguments are different, because of the nature of the cases and the topics debated within these cases. The chapter will start by frames within the poultry case and will be followed by the frames within the local food case.

4.1 Poultry

Within the poultry case, two main frames have come to the front. They are the productionist frame and the natural goodness frame. The final subtopic will explain more about which actors are deploying which frame.

4.1.1 Productionist frame

Definition of sustainability	Problem definition	Solution	Non-solution
upscaling and innovation of production as a way to increase efficiency and secure the income of the farmer	income of the farmer, regulations, trade restrictions, values such as animal wellbeing, false picture	freedom of choice, efficiency, innovation, investments, mass production, upscaling, world market	niche market, alternative local food systems

Within the productionist frame, efficiency is seen as the most important aspect of sustainability. In this frame, efficient production is reached by producing as much as possible through scaling up and by investing in technologies that increase the efficiency of production. Actors who deploy the productionist frame mainly think of sustainability as securing an income for the farmer, which in their eyes will be reached through the mechanism of the free market. This means that, in order to compete on this free market, costs should be kept as low as possible. In fact, this is the only way for the farmer to survive and stay in business, which is what the definition of sustainability is about within the productionist frame. One argument they give for this is that if poultry farmers are not given the chance to survive in the Netherlands, it does not make sense to talk about other aspects of sustainability at all. For example, one of the poultry farmers expressed the view that the current market system requires investments and upscaling in order to be able to survive:

'.. But I've learned, and I think it still works that way. If you want to advance your company, you have to make sure that you stay up to date, that you keep on developing. You cannot just do that internally, but you also have to expand, you have to keep volume.'

- Interview no.4, regular poultry farmer.

The main problems that stand in the way of sustainability, according to respondents within the productionist frame, all have to do with limitations to the efficiency. In this light, all regulations that suppress the possibility to produce as much as possible in the most efficient way, thus with the least costs, are seen as unnecessary obstacles. These regulations make that the costs of the farmer increase, which reduces their income and therefore their chance of surviving.

The main issue at stake here is animal wellbeing and the societal voice that animals held for production should have an increased standard of life, which often means a longer life and more living space. In the eyes of actors within the productionist frame, these voices from society are unfair and not based on facts. And because of the higher costs that come along with giving animals a longer life and more living space, this is seen as unsustainable, because it threatens the income of the farmer for unnecessary reasons. Instead, they argue that the animals they keep already have a good life and that there is no reason for changing the current practices. In fact, it is even argued that it is less sustainable when animals live longer and have more space. On the one hand, when it comes to environment, it is a waste of scarce resources. And on the other hand, practices like free range (outside) have negative effects on animal health because of a higher risk on diseases such as the bird flu. They believe that the reason for the regulations and trade restrictions derives from a small group of people who influence the public opinion, leaving society with a false picture and a general lack of knowledge. However, in practice, changing towards a niche product is often a possibility for a poultry farmer to increase their income because of the added value. It shows that from the perspective of these farmers, their own income is the most important aspect:

'Today our motivation is purely financial. Free range (inside) makes so little money, you can not run on it. The market as well as the industry is asking more and more for Freiland eggs (free range outside). Every farmer who has the possibility to open up the stable and who has enough land, yes they will try to keep Freiland eggs. Whether that is sustainable or not, but in the end it is the income that makes you go in a certain direction ... But the threats are huge. You have a much bigger risk of the bird flu, and also of all kinds of other negative things. When you talk about worms or other old diseases that are returning. You have a higher chance on those when they walk outside.'

- Interview no.8, regular poultry farmer.

The main solution for sustainability that actors within the productionist frame argue for is not to impose all kinds of regulations and restrictions, but to leave the choice to the farmers, so that every individual can decide for themselves what solutions suits them best. Freedom of choice is a key concept within the productionist frame, because farmers know best what is good for their animals and their business. They also see that the system of the world market leads to the most efficient way of food production, and is therefore the most sustainable food production system. Historically seen, they argue, the Netherlands has been a front runner when it comes to efficient and safe production of chicken products, and that therefore, there is no need for this to change. A researcher on animal wellbeing affirmed this:

‘The regular chicken really won’t go away. Worldwide it will continue to be The chicken because it is a very efficient producer of animal protein. You have a lot of animals on a square meter, and a feed conversion that they can still bring down through breeding. That are all things that contribute to it.’

- Interview no.6, researcher.

For actors within the productionist frame, shifting to a niche market is often not an option. They argue that niche markets are less efficient and therefore less sustainable. It will cost more to produce the same amount of food products, and therefore this is a non-solution. The same is true for alternative local systems that are no part of the world market. The demand for such products is too low, and it will feed much less people. Therefore it is not seen as a sustainable option.

4.1.2 Natural goodness frame

Table 7 - Natural goodness frame			
Definition of sustainability	Problem definition	Solution	Non-solution
animal wellbeing as an aspect of natural goodness which should not be limited at the cost of other priorities	animal wellbeing, price of food, focus on low costs.	natural behaviour, animal health, longer lives, more living space, less antibiotics, human health	efficiency, upscaling, mass production

The second frame within the poultry case is the animal natural goodness frame. Sustainability within this frame in the poultry case is about the quality of the lives of the animals that are held for production. If the animals have a healthy life and are able to perform their natural behaviour, this is seen as sustainable. For actors who are deploying the natural goodness frame, these values have priority and should not be limited because of other priorities such as low costs or environment. They argue that the current dominant system is unsustainable because it is taking it too far when it comes to upscaling and efficiency. This comes at the cost of seeing animals as a product, and not as a living being

that can feel pain and stress. When the only goal is to produce the highest quantity possible for the lowest costs that are possible, this has as a consequence for the quality of the lives of the animals.

Thus, in the natural goodness frame, effects for the income of the farmer or possible negative effects for the environment are not taken into account. It is acknowledged by actors within this frame that an increased animal wellbeing comes at a higher cost. But for them, this is no reason to therefore leave things the way they are. Instead, it is argued that the price of food is currently too low and consumers should actually spend more money on food for it to be a fair and sustainable price.

The solution for actors within this frame is to give animals a healthy life in which they can perform their natural behaviour. To realise this, animals would need to grow more slowly. As a result, it takes more time for the animals to fully grow, which is why they tend to live longer. Another important way to give animals a chance to perform their natural behaviour is by giving them more space, among other things. Actors within the animal wellbeing frame fight to improve the living situation of the animal:

'But what our goal is that every animal has a right to an animal worthy life. And that means that they have the right to perform their natural behaviour. Outside, healthy so without the use of antibiotics, no crazy inbred varieties, but strong, robust animals who have a normal life and an animal friendly slaughter ... Animals are feeling beings, they can experience pain, stress, and suffering. It is proved for more and more animals, it is simply a fact. And if they cannot perform their natural behaviour to some extent, they will experience chronic stress. They will show abnormal behaviour, they get sick with a stomach ulcer or do I now what. And you just cannot do that to feeling beings.'

- Interview no.2, NGO.

Farmers who switched to an alternative system where the animals live longer and have more space agree that it feels good for them to see the difference with their animals. Both in health status as well as in the naturalness of seeing animals having more space and being outside:

'The fun you have with it, that's a big difference whether they walk in a henhouse with two chicks on a square meter or ten, yes. They have a lot more space to walk. That is so nice to see ... The health status of the animals is higher. It are strong animals, stronger chickens. You also don't have the use of antibiotics. It is a slower growing race so the animal is stronger by itself.'

- Interview no. 7, organic poultry farmer.

A final aspect of sustainability within the natural goodness frame in the poultry case is the effect of the status of the animals on the people who consume the meat. On the one hand, it

is argued that consumption of meat with higher animal wellbeing standards is healthier because of the more natural state of the meat. A stronger animal has less diseases and needs less antibiotics, which is also good for human health. On the other hand, it is also argued that the meat from animals with a higher wellbeing standard tastes better, although this is personal preference.

Finally, within the natural goodness frame, the main non-solutions for sustainability are efficient production, upscaling, and mass production. These strategies are non-solutions for actors in this frame because they do not contribute to animal wellbeing as a part of natural goodness, but stimulate the further increase of fast growth and limited moving space. One respondent asked itself whether there is a limit to increasing efficiency:

'In all the time that I've been working on broilers, I have seen that each year, broilers grow 1 gram a day faster. Because that selection has continually been about faster growth ... I say to them sometimes, where does it stop? Do you have an egg and the broiler jumps right out of it and you can slaughter it right away? They don't know the limit yet, they thought they would have reached it much earlier, but it still isn't there. And they just go on and on an on.'

- Interview no.9, NGO.

The main conflicts between the natural goodness frame and the productionist frame are about the trade-offs between efficient and low-cost production and the care for animal wellbeing, which reduces this efficiency and increases the production costs. Therefore these two frames are incompatible with each other.

4.1.3 Actors deploying sustainability frames

The regular farmers are the ones who most strongly fit within the productionist frame. When these farmers have chosen to switch to an alternative farming system, they do still take their earned income as the most important aspect of sustainability. The spokesperson for poultry farmers and the board member of the labour union also deployed the productionist frame. They mainly look at the global picture and like to see the Netherlands having a leading role in the worldwide poultry production.

The NGO's are the most strongly representing the natural goodness frame. They are the ones who advocate for a societal change and a switch in farming practices. The researchers who involve themselves with animal production systems also fit within the natural goodness frame. However, they are more nuanced and not necessarily against regular farming, but they do still try to increase the living circumstances for the animals living in these regular systems. The organic farmer also deploys the natural goodness frame. Although the main motivation to switch to organic is not necessarily the increased animal wellbeing, it is one of the factors they appreciate.

4.2 Local versus global

For the local versus global case, three main frames have come to the front. They are the social connection frame, the natural goodness frame, and the productionist frame. The social connection frame is in this case the most dominant, followed by the natural goodness frame. These two frames have been deployed by most of the respondents. The productionist frame is less dominant, but also there. The final subtopic will explain more about which actors are deploying which frame.

4.2.1 Social connection frame

Definition of sustainability	Problem definition	Solution	Non-solution
social values related to food such as one's identity and feeling connected to other people and nature through food	long chains, non-transparency, lack of knowledge of the consumer, low price of food	connection, short chains, transparency, storytelling, income of the farmer	mass production, efficiency, world market

In the social connection frame, sustainability is about feeling connected to other people. and creating an identity related to food. A food system is seen as sustainable when this feeling of connectedness to other people is there. Thus, instead of taking an economic or environmental approach, the consumer is central in this frame. In the local-global case, this frame has repeatedly come back with several actors.

Among the actors in this frame, sustainable food is not only seen in terms of calories and money, but connected to things that have to do with human values and cultural identity. Within this frame, it is argued that the current global food system is unsustainable, because it does not take into account these social values. They argue that the global food system consists of long, non-transparent chains in which there is no connection between people and the food that they eat. As a result, people get far removed from the food they eat, and they do not have any knowledge about the food they buy, mainly in supermarkets. People just see the low price and base their choices on just the financial aspect:

'Actually you should sell it directly to the consumer. Then you are the one who decides on the price and the consumer agrees or doesn't agree. The problem is the fog cloud between the farmer and the supermarket and no one really knows what exactly happens there. And who is paying the price.'

- Interview no.19, regular farmer.

Thus, actors within the social-cultural values frame try to bring back this connection between people and the food they eat. This is often done through short, transparent chains where the producer and the consumer directly know each other. It is not just the food product itself that is sold and bought, but also the story behind the food. Often, this is expressed in terms of knowing where your food comes from:

'Knowing where it is coming from. The feeling like, this is real food. I can see it, I feel it, I taste it, I smell it. This is food that I recognise, of which I know: exactly there it was growing, so to say. And not somewhere far away, unknown.'

- Interview no.14, activist.

Transparency about the origin of a food product and short chains are ways to create this connection between producer and consumer. In some cases, this is happening through the consumer who directly visits a farmer to buy their produce. In other cases, the food products are ordered online from a farmer or a farmers cooperation and delivered to the doorstep. Yet another way to create this connection is by webpage on which the consumer can see a picture of the farmer and read something about their farming practices. Sustainability in the socio-cultural value frame is thus about the importance of ideas and motivations behind a food product. Because the farmer is creating a special product that differs from the regular bulk products by telling the stories of the products, this adds to the value of the product. Subsequently, this means that the price asked for the product can be higher:

'It could be that urban people would want to pay much more for their food if they had more knowledge about it. Now they see farming business as factories or something. Detached, no connection, not transparent.'

- Interview no.17, researcher.

Another way in which this added value for the farmer can be reached is through the short chains. When there are less steps from producer to consumer, a higher percentage of the price will reach the farmer. Thus, in the social connection frame, mass production, a focus on efficiency and the world market are seen as non-solutions for sustainability, because it is not possible to tell the stories and create connections in long, non-transparent chains.

4.2.2 Natural goodness frame

Definition of sustainability	Problem definition	Solution	Non-solution
food that is produced in a natural way, without the use of pesticides, antibiotics or other artificial additives and according to the seasons	animal wellbeing, human health, technology, non-transparency	natural, taste, quality, eating according to the seasons, local, healthy	efficiency, upscaling, mass production

Sustainability within the natural goodness frame is about food being grown naturally. This means that there hasn't been made any use of pesticides, antibiotics, or other artificial additives. Where the focus within the poultry case is on animals, for the local-global case, the focus is broader than just that: vegetables and cereals are also included in this case. Within this frame, it is seen as sustainable when nature is allowed to take its course without the interference of chemicals like pesticides, antibiotics or other artificial additives.

For actors within the natural goodness frame, the main worries related to sustainability are about a natural way of growing food and about human health as a result of this. There are worries among actors who deploy the natural goodness frame about everything that is technologically modified or artificially added, because of their idea that everything which is natural equals good. There is also a general lack of trust for the agro-business, which they believe is not about producing food which is good for humans, but about making the most of money. Together with the lack of transparency about the production systems and the product chains, this leads to a distrust of the sustainability of food products from this agro-business:

You have to ask, what happened that it can be in the stores for one euro for a kilogram. I think that every person should think about that. Why do I eat this chicken, what has happened to it? Is it coming from far away, has it been frozen for a long time, has it been inflated with water, under which circumstances did this chicken live?'

- Interview no. 16, entrepreneur.

Some of the actors have no arguments that express the dislike of artificial additives, but they simply state that this natural approach towards food gives them a good feeling and that they like the idea of naturalness. In their opinion, naturally produced food tastes better and is of higher nutritional value and therefore of better quality. Thus, in their view, food products are sustainable because of the quality of the product itself:

'I feel better, knowing that this has grown the way it's supposed to and that it could just take its own course. And that it afterwards ends up on my plate like that.'

- Interview no.16, entrepreneur.

Local food production is one way of being in control of this natural production process, but it does not necessarily have to be locally produced. However, in the case when actors see eating according to the seasons as an aspect of sustainability, this is only possible through the production of food at a short distance. Eating local products automatically leads to eating according to the seasons, because nothing else is available. In this way, people feel more connected to nature and the way nature works, which is an important aspect of sustainability in the natural goodness frame. This natural way of growing and consuming food is seen as being of a better quality, with a higher nutritional value, which tastes better, is more fresh and is also better for human health:

'We have lost the connection with the seasons and our local farmers, and that is a pity. Flying in products out of season not necessary if there are so many beautiful products in the Netherlands ... We think it is very important that people learn to eat according to the season ... when you eat according to the season, you notice that it tastes so much better. Vegetables tastes much better in their season, fruit as well of course. And you appreciate it more when products are back again. That you think, ah, finally, there is spinach again. And strawberries of course ... There isn't always fruit. I think that kind of things are important for people to start feeling again.'

- Interview no.13, entrepreneur.

Actors within this frame choose to pay more money for their food, with the assurance that it fits with their definitions of sustainable. To them, things like efficiency, upscaling and mass-production are non-solutions for sustainability, because these strategies will lead to high amounts of cheap food without the natural qualities they are in favour of.

The social connection frame and the natural goodness frame do not necessarily have to be incompatible with each other, but it is a likely possibility. In local food production settings, where the social connection aspect is central, natural goodness might be of no concern. When individuals in these local food settings lack farming knowledge, it will lead to negative consequences for the aspects actors within the natural goodness frame regard as being important, for example through the excessive use of pesticides or other additives. Therefore, these two frames are seen as different from each other.

4.2.3 Productionist frame

Definition of sustainability	Problem definition	Solution	Non-solution
free trade and large scale production as a way to efficiently feed the world and give consumers freedom of choice	growing world population, price of food, regulations, trade restrictions	efficiency, mass production, global free trade system, freedom of choice	alternative local food systems, small scale production

Just like for the productionist frame with the poultry case, sustainability within the productionist frame for the local-global case is about efficient, large scale production. The main difference is that where in the poultry case, the income of the farmer is central in this frame, for the local-global case, the focus is much more on the consumer instead of the farmer.

A global system of free trade is seen as sustainable because it can efficiently produce large amounts of food for low prices. And with a growing world population and the poverty in some parts of the world, this global free trade system is seen as the way to go in the productionist frame. It will further increase the amount of food produced, and it will keep the prices low:

'Most people ... live in cities with millions, tens of millions of people, and their food comes from far away. And for them, especially when they are poor, it is very important that food is produced at a decent price, at a scale that allows the food to be shipped to the cities.'

- Interview no. 11, university representative.

Thus, actors within the productionist frame take a global perspective and food security as an important aspect of sustainability. Another main argument for actors within the productionist frame which lets them be in favour of a global food system is that of freedom of choice. Another aspects of sustainability for them is, besides having enough food for low prices, is that consumers have a broad variety of food products available to them. Local food production will restrict this amount of available food products, because in a particular climate it is only possible to produce a certain kind of crops:

'I'll tell you the story with local, if we should just eat food from the Netherlands. No bananas, no oranges, no chocolate, because chocolate is from Western Africa. No camembert, no avocado, no nutmeg, no kiwifruit. Well, it's December. A lot of cabbage. Cabbage, cabbage, cabbage, every day cabbage. I do not want to think about it, but well. And a lot of potatoes, and a lot of veal. A lot of veal. That is local ... Really, we can't grow pineapples. Kiwifruit

neither. And personally I would think it is a loss for our society if we wouldn't have chocolate anymore. I talk to a woman, you understand what I mean.'

- Interview no.21, supermarket representative.

Alternative local food systems and small scale production is seen as a non-solution for sustainability, because it is less efficient and may lead to higher prices for food, which may be problematic for people who live in poverty. Instead, in order to feed the world population, large scale, global production is necessary:

'And on the other hand we must invest in a better understanding of the importance of having also large scale farming. You cannot provide wheat or bread to the US without having large scale wheat production. There is no way in which we can grow wheat on a small plot here and there and than hope for the best.'

- Interview no.11, university representative.

However, this is only the case when this local food systems become a replacement for the efficient large scale production. In practice, it does not have to be the one or the other. It is often assumed that the options are either a global food system or a local food system, while it could also be a possibility to produce food locally on a small scale, without discarding the global free trade system. Many of the actors who are engaged with local food, do not put off the global free trade system. They just feel that what they do is good for them, but they do not feel as if they are part of a movement or 'against' the current dominant practices. More about this dichotomy between local and global will be said in the discussion.

The main conflicts between the productionist frame and the two frames described above are about the trade-offs between efficient and low-cost production and the care for social connectedness and natural goodness. When the focus is on efficiency and low-cost production, there is no space for caring about the creation of social connections or about the naturalness of food production. Therefore these frames are incompatible with each other.

4.2.4 Actors deploying sustainability frames

The most dominant within the local food case for the actors who are in favour of a local food system is the social connection frame. Activists and farmers as well as researchers deployed this frame. Creating a connection and adding value to a product seems to be the most important reasons for actors to get involved with local food practices. Especially for the entrepreneurs, natural goodness is the main frame that defines their ideas about sustainability. For them, natural goodness is a fundamental reason to choose for an alternative food system. In contrast, the productionist frame has mainly been deployed by actors who are involved in the global food system. The university representative as well as the supermarket representative strongly plead for freedom of choice, year-round availability

of a broad range of products, and for low prices, which fits with their ideas about sustainability.

5. Discussion

The discussion will start with a comparison of the cases and a comparison to existing frameworks. This will be followed by a reflection on the practical implications of the results for governing sustainable food systems and the possible role of reframing in the selected cases. The final section of this chapter will be a methodological discussion.

5.1 Comparison of the cases and comparison to existing frameworks

In this section, I will make a comparison between the poultry case and the local-global case. First I will explain in which ways the cases differ from each other, followed by an explanation of the similarities between the cases. This will be followed by an explanation of how the frames I have found in this research relate to the frameworks that have been developed by earlier research. I will look at to what extent the existing frameworks by van Gorp & van der Groot (2012), Galli et al., (2016) and Candel et al., (2014) match to my own findings. This will give an answer to the second sub question: *how do the different frames relate to each other and to existing frameworks?*

5.1.1 Differences between the cases

As explained in the methodology, the two cases have been selected on the basis of their different nature. This also leads to different debates - the topics discussed within the poultry case are very different from the topics discussed within the local-global case. Where the productionist frame and the natural goodness frame are the most dominant in the poultry case, the social connection frame is the most dominant in the local-global case. However, besides the differences in the frames themselves, the most striking difference is the way in which the debates are conducted.

The poultry case has become a relatively tough debate in which opponents clearly fight each others opinions. That makes it easier to distinguish the different sustainability frames from each other and the actors who deploy them. On the one hand, there are the farmers who value their income as the most important aspect of sustainability, and who believe that their practices are doing no harm. On the other hand, there are the NGOs who fight a system in which they believe where industrial farming comes at the cost of the wellbeing of the animals, which is a central point in their ideas about sustainability. In this debate, there is some fear among the farmers that they won't be able to survive because of the ever increasing costs and the wrong image that society has of their industry, mainly because of the campaigns of these NGO's.

Differences between the respondents in the local-global case were less profound. Although there are definitely different voices in this discussion, for most respondents it doesn't mean that these different ideas about sustainability cannot coexist. Where the poultry case is mainly about being 'against' what the opposing group is saying, the local-global case is much more about acting on your own beliefs and motivations, without being against people who act differently. The respondents who are involved in local food production often act from their personal motivations, most of the time because they believe in the importance of certain social connection or because they believe in natural goodness. This is the biggest difference with the poultry case, where these social connections are not a main issue. The respondents involved in local food production are often alternative farmers, entrepreneurs and activists. In contrast to the poultry case, these people have a good feeling about what they are doing and they are really optimistic about the future.

There are some voices from respondents within the global system that a local food system is not a solution for sustainability because it won't be able to feed the world population, because it will decrease the efficiency tremendously and the availability of the broad variety of products will strongly decline. However, this is only the case when a local system will replace the global system. It is not so difficult to imagine how these two systems can exist at the same time. Some of the poultry farmers also argue for the different systems to coexist, leaving the choice at the farmer. In this way, farmers can choose to produce for the world market when they want to, instead of being obliged to change to a product that can only be sold on a limited market, because there is no worldwide demand for products with an increased animal wellbeing.

Thus, the main differences between the poultry case and the local-global case lie in the way in which the actors talk about each other's practices and the emotions of the farmers involved in one or the other debate (fearful and pessimistic, or passionate and optimistic). Because of these differences, it is clearer for the respondents within the poultry case to which frame they belong than for respondents within the local-global case, where the division is more fluid and less congruent. For sustainability, this means that it has proven to be harder for respondents within the poultry case to reflect on their own and other frames and to find potential for reframing than for the local-global case. More about this will be said in chapter 5.2.

5.1.2 Similarities between the cases

Even though there are some big differences in the nature of the cases as described above, the frames that have been distinguished for both cases show a lot of similarities. The productionist frame and the natural goodness frame have been found in both the poultry case and the local-global case. In fact, the only real difference in the frames between the two cases is the addition of the social connection frame in the local-global case, which is not a topic in the poultry case.

Productionist frame

For the poultry case as well as the local-global case, actors within the productionist frame have a global focus. For both cases, actors within the productionist frame look at the worldwide food production and ways in which to efficiently produce large amounts of food in order to feed a growing world population. For the poultry case, regulations and rules that give farmers extra costs are seen as the main problem, while for the local-global case, the main problem is believed to be the lack of efficiency of a local food system. But in the end, the similarity is that they both believe in a free trade world market as the main solution for sustainability. Local food production or free range chickens might be a good option for some farmers, but those alternatives won't be able to feed the world because of their higher costs and reduced efficiency, and are therefore seen as unsustainable.

Natural goodness frame

Sustainability within the natural goodness frame at the poultry case is solely about the health and the natural behaviour of the animals. This can easily be explained by the scope of the case not reaching further than poultry. At the local-global case, the focus of sustainability lies with the production of cereals, vegetables and fruits, but can also be applied to the production of animal products. Therefore, the scope of the natural goodness frame in the local-global case is broader than in the poultry case. What the two cases have in common is that sustainability is about letting things grow in a natural way, without interference of technology such as pesticides, antibiotics or other artificial additives, and in the case of poultry, to give animals the possibility to perform their natural behaviour.

In the end, the way in which sustainability is defined is closely related what 'food' means to which actor. For farmers it is their income, for consumers it can be part of their identity, some are coming from a global perspective and others keep their relation to food close to their individual self. But in the end, all food food-related issues of sustainability can be traced back to the same underlying reasoning. That is why the distinguished frames in the poultry case and the local-global case show a lot of similarities, despite their different nature.

5.1.3 Comparison to van Gorp & van der Groot (2012)

The first comparison will be with the research by Van Gorp & van der Groot (2012). What their research is about has already been explained in Chapter 2. In Table 11 I have compared the frames by van Gorp & van der Groot to the frames as distinguished in this research.

Table 11 - Comparison Van Gorp & van der Groot (2012)

van Gorp & van der Groot	Research results	Can be related to
responsibility		natural goodness
undermining of foundations		
frankenstein		natural goodness
natural goodness	natural goodness	
progress	productionist	
good mother		productionist

When the frames of both researches are compared, it stands out that two of the frames are almost the same. The *natural goodness* frame is the same for both researches, and the *progress* frame is very similar to the productionist frame. It is not the case that the other frames by Van Gorp & van der Groot (2012) that are not directly found in the results of this research cannot be found at all. Instead, it are not the main issues in the selected cases, but they sometimes fit within, or are a side aspect of, another frame.

For example, the *good mother* frame has sometimes been used as a side argument within the productionist frame. In this case, it means that some actors within the productionist frame have argued that the food industry guarantees the supply of nourishment, and that therefore gratitude should be shown for this provision of food that is being brought to the consumer by this food industry (van Gorp & van der Groot, 2012). However, in the cases that were selected for this research, this has not been distinguished as a frame on its own. Instead it could fit within the productionist frame, where the focus is on free trade and large scale production as a way to feed the world, and give consumers freedom of choice.

The *responsibility* frame and the *frankenstein* frame can both be related to the natural goodness frame, but from different angles. The *frankenstein* frame reasons from anxiety and the ideas that intensive farming and the food industry are leading the world to doom (van Gorp & van der Groot, 2012). This could be one of the reasons for actors who deploy the natural goodness frame or the environmental frame when they talk about sustainability, but it has not been specifically used in the selected cases when actors talked about sustainability.

The same is true for the *responsibility* frame. Actors may believe that humankind has been given temporary stewardship over the earth and is failing to perform this task with due care (van Gorp & van der Groot, 2012), but it has not been a main line of arguing within the selected cases when actors were asked about sustainability. Therefore, these frames have not been distinguished separately in this research.

The main difference between the results of this research and the research by Van Gorp & van der Groot (2012) is that in their research, the social connection frame is missing. In their research. This may be explained by the different methodologies that have been used.

5.1.4 Comparison to Galli et al., (2016)

The research by Galli et al., (2016) does not explicitly use framing theory for their analysis. However, it is a case study about *handling diversity of visions and priorities* for sustainability in food chains. Implicitly, it could be argued that the framework they use for their analysis consists of frames that are very suitable to compare to the results of this research. Just like this research, the research by Galli et al., (2016) has been a case study. The difference is that they have used a deductive approach, using an adapted version of an existing framework (Kirwan et al., 2014) for the analysis. Although no use has been made of framing theory in their research, the framework they took shows similarities to the results of the research in this report. Therefore, it is useful to compare these to each other.

Table 12 - Comparison to Galli et al., (2016)

Galli et al.,	Research results	Can be related to
economic	productionist	
social	social connection	
environmental		
human health		natural goodness
ethical	social connection	

Table 12 shows how the framework by Galli et al., (2016) has even more similarities with the results of this research than the framework by Van Gorp & van der Groot (2012). When their approach to sustainability within food chains is compared to the frames that have been found in the selected cases, it shows the main differences lie in the *human health* attributes. In the results of this research, human health is only one aspect of natural goodness, among other things. And of course, when we talk about poultry, it is not just about humans but about animals as well.

However, for the other frames counts that the resemblance is very high. The *economic* attributes such as profitability and economic development are the same as those in the productions frame. *Social* attributes such as labour relations, the distribution of added value and the relationship of trust between producers and consumers are the same in the social-cultural values frame. Some to the *ethical* attributes such as transparency and stakeholder involvement also fit within the social-cultural values frame.

5.1.5 Comparison to Candell et al., (2014)

Candel et al., (2014) have done a framing analysis on the issue of food security in the Common Agricultural Policy (CAP). Although their research has a lot in common regarding the methodology, the topic of governing food security is not the same as the topic of sustainable food systems in the Netherlands. Consequential, the distinguished frames show some differences, but there are also some similarities, which is why this research is included for comparison. The comparison can be found in Table 13.

Table 13 - Comparison to Candell et al., (2014)

Candel et al.,	Research results	Can be related to
productionist	productionist	
envrionmental		
development		productionist
free trade		productionist
regional		social connection
food sovereignty		natural goodness, social connection

The most interesting is the frame that is the same for both researches: the *productionist* frame. In both researches, the productionist frame is about the efficient production of large supplies to feed the world population. For the other frames counts that they can be related in some ways to each other, but the main focus is not the same.

5.1.6 Implications of the comparisons

For both the poultry case and the global-local case, different frames have been found. These results are also in accordance with the other frameworks by Van Gorp & van der Groot (2012), Galli (2016) and Candell et al., (2014).

In chapter 2, it is explained that frames are the structures of belief, perception and appreciations that underly policy positions (Schön & Rein, 1994). A frame is about how an issue is understood. Each frame on sustainability has different implications on the evolution and acting on the problem (Entman, 1993; Jerneck & Olsson, 2011). In turn, each frame leads to different options and interventions. The framing analysis of this research has shown that for each sustainability frame, there is a difference in the perceived source of the problem and the solutions offered. Thus, there is no agreement on the cause of the problem, and there is no agreement on a solution either.

However, the similarities between the cases and between the different researches show that there is a certain level of agreement on the frames there are in relation to sustainability. The small differences in emphasis and nuance can be explained through the chosen methods and the broad scope of sustainability. So many different topics and perspectives may be included within sustainability, that it becomes very difficult to get to one framework that can be applied to all framing questions within sustainability and food. Also, the choice for specific cases will lead to particular outcomes. Therefore, there is no absolute answer to the question which frames are being deployed within debates about food and agriculture within the Netherlands. Instead, this research can be used as an example of how framing theory can be used in order to gain a better understanding of the debates and conflicts within questions about sustainable food and agriculture.

However, there is an agreement on the existence of different frames. This leads to the answer to the main research question: there is no consensus about what the transformation towards a sustainable food system should look like. Finally, the next section will reflect on the implications of these results for practice.

5.2 Practical implications

This next part will reflect on the practical implications of the results for the transformation for a sustainable food system.

So far, it has become clear that there is no simple answer to what the meaning of sustainability is. Sustainability is such a complex issue to which many issues are related to each other and consequences of particular choices can often not be overseen. This leads to the expression of a plurality of conflicting frames that are incompatible with each other. When each actor is trying to influence the problem definition, advocating their own view of the problem and how to solve it (van Bueren et al., 2014), it becomes difficult to define and solve this problem.

Often, this existence of conflicting frames is seen as problematic. Reframing (Schön & Rein, 1994) is such an approach in which these conflicts are tried to be solved by finding one right solution that all actors can agree to. But the complexity of the issues and the non-existence of a clear solution surrounding frame conflicts, makes that reframing is most likely not a suitable option for aligning policy practices.

Instead, these conflicting frames do not have to be seen as problematic. As long as there are uncertainties about which path to follow, and that might always be the case of sustainability, these different pathways and solutions could also be aimed for next to each other and at the same time. This fits with the approach of reflexive governance and clumsy solutions, which might thus be more useful to tackle the transformation towards a sustainable food system (Candel, 2016; Verweij et al., 2006). This view is also underlined by

the Dutch ministry of Economic Affairs, who argues that the biggest challenge on the road to more honest, more natural and better food is not in choosing for one pathway on the other, but in watching out for jam-up and tunnel visions (Ministerie van Economische Zaken, 2016).

Thus, when we apply these ideas to the production of poultry in the Netherlands, this would mean that the campaigns that advocate for better animal wellbeing can co-exist with the farmers who operate in the free market system. And when these ideas are applied to the debate about local and global food production, this would also mean that both levels can co-exist. As long as there is no consensus on what counts as sustainable and what does not, policies could facilitate food production systems on all kinds of levels.

By looking at the transition towards a sustainable food system from a parallel pathway and clumsy solutions approach, the transformation towards a sustainable food system won't become an endpoint to work towards to, but can be seen as a continuous process in which new developments and knowledge can be integrated over time. Because a final solution does not exist, it is best to be aware of the different frames there are. Being aware of the different frames makes clear what the main clashes are in the debates about sustainable food systems. This makes it possible to further reflect on these clashes and to integrate the the different perspectives in the policy courses of action.

5.3 Methodological discussion

The research has had some limitations regarding the methodological structure. This section will clarify these limitations that occurred within the data collection and analysis.

A general limitation of this research is that it has not been as systematically performed as it could have been. This is true for the media analysis, which would have been more structured and thorough had it been done through LexisNexis, a big database which would have been given to all media sources at once. During the interviews, it would have been methodically stronger to stay closer to the topic list I had developed beforehand. Although the interviews did provide the needed data, because of the questions I have asked differed, it is harder to compare the interviews with each other. More specifically, for the poultry case, a limitation in the media-analysis has been the choice for the keywords. Because the term 'plofkip' already has a certain connotation to it, it would have been better to choose a more neutral term like 'poultry' or even 'bofkip,' a term that has been invented to counterpart 'plofkip.' This means that the choice for respondents has not been as structured as it could have been.

The same counts for the local versus global case, but for different reasons. Although the distinction between local and global food systems can be found in debates surrounding sustainability, and this choice has led to interesting insights, the boundaries of what does and does not belong to the local and the global is difficult to distinguish. Depending on who

you ask, it differs what exactly does and does not belong within the limits of this case. In the scientific literature, a lot has been said about alternative food networks of which local food can be seen as a part of, in contrast to the global free trade system that is currently dominant. But for my research it turned out to be difficult to reach important actors within the global free trade system for an interview, possibly because they do not relate to 'local food,' this being not a relevant issue for them.

These limitations might have had an effect on the exactness of the results and thereby have had some impact on the validity of the frames found in the cases. However, a slightly different outcome in the results would not have changed the practical implications that are being discussed in the previous section because they are rather broad. Therefore, the consequences of these methodological improvements for the exactness of the results and the validity of the research would remain limited.

6. Conclusions

There has been a call for a transition towards a sustainable food system over the past years. However, the concept of sustainability is ambiguous and can mean many different things. This thesis has aimed to unravel these different meanings through framing theory. The main research question was: to which extent is there a consensus about what the transformation towards a sustainable food system should look like?

This research has found two frames for the poultry case and three frames for the local-global case. The productionist frame and the natural goodness frame have been found in both cases, while the social connection frame has only be found in the local-global case. Although the way in which the debates take place differ strongly between the two cases, the underlying frames show many similarities.

The same is true when the frames found in this research are compared to the results of other research. Although there are small differences in emphasis and there are different nuances and accents, there are also a lot of similar findings. The main reason for the differences is likely to be the broad scope of sustainability and the many different topics and perspectives that can be included. Thus, to find one framework that fits to all framing questions relating to sustainability and food is not what this research has been aiming at.

Instead, a more interesting question to ask is what the implications of these results could be for the transformation towards a sustainable food system. Often, the existence of conflicting frames is seen as problematic. Reframing is an approach that tries to find one right solution that everyone can agree to. But the complexity of the issues and the uncertainty of the consequences of certain solutions might make it more fitting to use take a reflexive governance approach and use clumsy policy solutions. This means that the conflicting frames are no longer problematic but become something to work with. In this approach there is no endpoint to work towards to, but instead governance becomes a continuous process in which new developments and knowledge can be integrated over time.

Thus, as the conflicting frames in this research has shown, there is no consensus about what the transformation towards a sustainable food system should look like. However, there might be no need for consensus when a reflexive governance approach is taken and use is made of clumsy policy solutions. This could lead to more constructive policy processes.

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Appendix A - Code book (in Dutch)

Appendix A: Codeboek

Code	Betekenis	Case	Aantal
Beeldvorming	Het ontstaan van een beeld dat niet met de feiten of de werkelijkheid overeenkomt	K + L	2 1
Definitie duurzaam	Wat betekent duurzaamheid, wat houdt het in	L	3
Dierenwelzijn	Diergezondheid, Kunnen uitvoeren van natuurlijk gedrag	K	6
Diergezondheid	Lichamelijke en mentale gezondheid van een dier	K	6
Distributie	Het brengen van goederen van producent naar consument	L	2
Efficientie	Het bereiken van zoveel mogelijk resultaat met zo weinig mogelijk middelen - de kortste route naar het doel	K + L	6 8
Gezondheid	Lichamelijke effecten van voedsel	L	5
Inkomen boer	De hoeveelheid geld die de boer krijgt voor zijn werk	K + L	7 8
Innovatie / Investeringsen	Het verbeteren van bedrijfssystemen, bijvoorbeeld technologisch	K + L	7 5
Kennis consument	Wat mensen feitelijk weten over hoe het er op een bedrijf aan toegaat	K + L	3 3
Kennis exporteren	Dat andere landen zich verder kunnen ontwikkelen mbv Nederlandse kennis	L	1
Keuzevrijheid	Dat een boer zelf kan kiezen wat voor systeem hij kiest en niet wordt gestuurd / beperkt door regelgeving	K + L	5 3
Kleinschalig	Waar weinig dingen of personen bij betrokken zijn, op kleine schaal.	L	4
Korte lijnen	Weinig stappen tussen producent en consument	L	6
Kwaliteit	Vermogen om een behoefte te bevredigen	L	2
Lokaal	Van dichtbij	L	9
Massaproductie	Het efficiënt en goedkoop produceren van voedsel op grote schaal	K + L	3 8
Meerwaarde	Extra opbrengsten voor je product	L	3

Code	Betekenis	Ca se	Aan tal
Middenweg / Integraal	Geen focus op 1 aspect, maar een inclusieve benadering met verschillende aspecten	K + L	5 3
Milieu / CO2	Fysieke omgeving - klimaat, bodem, water	K + L	4 7
Minder vlees eten	Consumptie van dierlijke eiwitten omlaag	K + L	5 6
Natuurlijk	Zonder toevoegingen of chemische processen	L	7
Natuurlijk gedrag	Innerlijke behoeften van een dier tot bepaalde gedragingen	K	6
Nichemarkt	Een specifiek marktsegment met relatief weinig concurrenten voor specialistische goederen of diensten	K + L	6 1
Prijs eten	Het bedrag dat we betalen voor voedsel	K + L	4 6
Regelgeving	Voorschriften die voortkomen uit wetgeving	K + L	8 6
Schaalvergroting	Groei van productie per bedrijf, leidt tot kostenvoordelen en hogere efficiëntie	K	8
Smaak	Wat je proeft met je mond	K + L	1 6
Transparantie	Herkomst makkelijk en duidelijk te herleiden	K + L	1 6
Verbinding / verhaal	Een connectie met de producent, belang van de ideeën en motivaties achter het product	L	12
Voedselveiligheid	De veiligheid van de voedselproducten die de boeren produceren	K	2
Voortrekkersrol	Het goede voorbeeld geven voor de rest van de wereld	K	1
Waarden (moreel / ethisch)	Iets wat een persoon of samenleving nastrevenswaardig vindt, idealen en motieven die als wenselijk worden gezien	K + L	6 5
Wereldbevolking	Het aantal mensen op aarde	L	1
Wereldmarkt	Economisch systeem van globale handel	K + L	5 4

Appendix B - Frame conflict matrix (in Dutch)

Frame conflict matrix kip

	Dieren welzijn	Diergezondheid	Efficiëntie	Inkomen boer	Innovatie / investeringen	Kuizevrijheid	Massaproductie	Middenweg / integraal	Milieu / CO2	Minder vlees eten	Natuurlijk gedrag	Niche markt	Schaalvergroting	Smaak	Transparantie	Waarden (moreel / ethisch)
Beeldvorming																
Dierenwelzijn	x															
Diergezondheid		x														
Efficiëntie			x													
Inkomen boer				x												
Kennis consument																
Massaproductie							x									
Minder vlees eten										x						
Natuurlijk gedrag											x					
Nichemarkt												x				
Prijs eten																
Regelgeving																
Schaalvergroting													x			
Waarden (moreel / ethisch)																x
Wereldmarkt																

Frame conflict matrix lokaal

	Efficiëntie	Gezondheid	Inkomen	Innovatie / investeringen	Kennis exporteren	Kruisverkoop	Kleinchaligheid	Kortsluiting	Kwaliteit	Lokale markt	Massaproductie	Massaproductie	Middelweg / integraal	Milieu	Minder vlees eten	Natuurrijk	Natuurrijk	Prisje	Regelgeving	Schaalvergroting	Smakeloosheid	Transport	Verbinding / verhaal	Waarden (moreel / ethisch)	Wereldmarkt
Beleidsvorming																									
Definitie duurzaam																									
Distributie																									
Efficiëntie	x																								
Gezondheid		x																							
Inkomen boer			x																						
Innovatie / investeringen				x																					
Kennis consument					x																				
Lokaal									x																
Massaproductie										x															
Milieu / CO2											x														
Minder vlees eten												x													
Natuurrijk																x									
Nichemarkt																									
Prisje eten																		x							
Regelgeving																			x						
Smaak																									
Verbinding / verhaal																						x			
Waarden (moreel / ethisch)																								x	
Wereldbevolking																									
Wereldmarkt																									x