



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

Faculty of Natural Resources and  
Agricultural Sciences

# **Perceptions of the milk industry**

– the role of social learning and the new media

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- the role of social learning and the new media

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## Abstract

The role of our consumption in reducing environmental problems is increasingly lifted, not the least our choice in food. Recently, the searchlight has been turned to the milk industry with an increased medial debate as a result. This thesis explores the consumer perception of the environmental sustainability of the Swedish milk industry and the perception of the debate thereof. Possible explanations to how the perception of the milk industry emerges are also explored. The investigation is conducted through 13 individual interviews. Two groups are examined: 1) consumers and 2) researchers on life cycle analysis and environmental experts from the milk industry. The analysis consists of two steps. Firstly, interpretative repertoires are detected. Secondly, a theoretical framework built around social learning and “the new media” is used. The result of the study suggests that within the consumer group, the environmental perception of the milk industry differs and is multifaceted. The most salient repertoires amongst the consumers are 1) Swedish industry as essentially different, 2) ambivalence regarding its environmental impact. The perception of the “experts” is divided. In the emergence of the consumer perception, social learning and media are important. The consumers’ and the experts’ perception of the debate differs. While the consumers do not see this debate as salient or central, the opposite is expressed amongst the researchers and experts. Both groups perceive the debate as emotional and polarized.

*Keywords:* Milk industry, environment, perception, consumer, social learning, media



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# 1 Introduction

The role of the individual citizen and her consumption to reduce environmental problems are increasingly lifted – in the public debate, amongst politicians, authorities and environmental organisations (Sørensen 2002). In this, the interest in food is rapidly growing, and amongst consumers ranked as the most important product group being produced in an environmentally sustainable way (Blom 2014). The Swedish consumption of ecological, “green” products has never been this big, and the group that decrease its meat consumption, partly due to its climate impact, is growing (Dahlin & Lundström 2011, Livsmedelsverket 2015). When the environmental impact of livestock production is put under the lens, the milk industry also becomes subject for debate. In the past years, the problematization of milk products has been increasing, with a growing medial debate as a result.

From an environmental perspective, the opinions are divided regarding the consequences of milk production and many knowledge gaps remains. Roughly, one can see it as beneficial for the Swedish countryside, with open landscapes and preserved biodiversity as a result, or as a big consumer of water and a producer of green house gases, due to the methane gas that is produced in cows during rumination and the nitrous oxide generated in the soil from biological processes. These aspects are attached to different environmental objectives, ranked differently amongst scientists and experts. (Wallman, Berglund & Cederberg 2013, Rööös 2012)

This debate stretches beyond the realm of science and is increasingly represented in media. “*The milk lobby ducks from climate impact*” (Petersson 2015), “*The advise from the Chalmers scientists: “Be vegan and save the climate”*” (Syrstad 2015) and “*Swedish milk is good for both people and the environment*” (Carlberg 2014) are examples published in Swedish newspapers. On the 29<sup>th</sup> of October 2015 the issue was debated on the public service TV show Debate.

Within the context of this discordance – what is the perception of the consumer? With the point of departure in a social constructivism perspective, this thesis explores the consumer perception of the milk industry from an environmental perspective and the perception of the debate thereof. When the information and advice are multifaceted, how do the perception of the industry emerge? In order to broaden the perspective, the perceptions of researchers and professionals who have been involved in the debate are also investigated.

## 1.2 Changed conditions for the Swedish milk industry

Most of the climate impact from milk products originates from the early stages of the production – on the farm. According to life cycle analysis on food and its emissions of CO<sub>2</sub> per kilo, cheese is listed as number three (after beef and lamb), and milk number eight (after pork, salmon, chicken and egg). (Röös 2012)

The milk sector is the most valuable branch of the Swedish agriculture and stands for a fifth of the total production value (Jordbruksverket 2016). Also, milk production with its grazing cows possesses a strong symbolic and cultural value in Sweden (Jönsson 2005).

Both production and consumption of fresh milk products (fresh milk, cream and fermented products) has decreased in Sweden. Since 1995, consumption decreased with 23 per cent and production with around 20 per cent. However, the Swedish consumption of cheese has increased with 30 per cent between 1995 and 2013, leaving the total consumption of raw milk unchanged, while the production of cheese decreased with a third. An increased amount of fresh milk products and cheese is today imported. The imported amount of fresh milk products was ten folded between 2000 and 2010, and the cheese import was more than doubled. (Karlsson 2015)

The Swedish milk industry is currently in a crisis, referred to by media and the industry as “the milk crisis”. Different circumstances have led to a surplus on the world market, pressuring the milk price. Since Swedish dairy companies operate on the global market, the prices on their products are pressured as well. It is relatively expensive to produce milk in Sweden and the decreasing profit has led to an alarming situation for Swedish farmers, where on average five milk farmers per week have to close their businesses. (Holmström 2014 & LRF n.d.)

The debate regarding the environmental impact of the milk industry adds another dimension to these changed conditions. How the different aspects of the changed situation relate to each other will not be further investigated in this thesis. However, in order to understand the situation it is important to bear these in mind.

### 1.3 Aim and research questions

Examining the consumer perception of the milk industry and the debate thereof is a way to explore the relationship between the contemporary society and its relation to food production and animal agriculture. Furthermore, since the information and advice from media and scientists are divided, the emergence of the perception is interesting to explore as it offers an examination on how social learning and mediated communication influence the perception of societal issues.

This study explores the perception of the milk industry from an environmental perspective, the debate thereof and how this perception emerges. To broaden the perspective, researchers on life cycle analysis and professionals from the milk industry who have been involved in the debate are also represented. Eight consumers and five experts are participating in the study. The thesis will evolve around the following research questions:

1. What are the consumers' and experts' perceptions of the Swedish milk industry from an environmental perspective? *What are the interpretative repertoires?*
2. How do the consumers' perception emerge? *What is the role of social learning and the new media?*
3. How do the consumers and the experts view the debate?

This thesis is written in collaboration with the dairy company Arla Foods, as a way for them to gain further understanding and knowledge about the consumer perception of the milk industry from an environmental perspective. The collaboration does not stretch further than together deciding the research topic and the wider aim of the study.

### 1.4 Concept definitions

*Perception* [Swe: uppfattning] refers to views, attitudes and interpretations, based on beliefs, knowledge and understanding. The different parts, their salience and how they relate to each other will not be accounted for in this thesis.

The term *environment* is broadly used in this thesis, including both climate and environmental aspects, such as biodiversity. In the interviews, the participants answer according to their previous understanding of the term. This means the definitions may vary between the interviewees.

*Milk industry* is the term used to describe the industry as well as production of cow milk and other cow milk products such as cheese, cream, yoghurt etc. In the interviews, both the term milk production and milk industry were used. To simplify the reading, only the latter term is henceforth used.

## 1.5 Previous research

The literature search for this study has not brought forward any study explicitly related to the perception of the milk industry from an environmental perspective. However, human relation to food in a wider sense has undergone considerable attention in different academic fields. Food can be seen as a “total social phenomena” helping us to create understanding about cultural and societal shifts in our time. (Jönsson 2005, p. 19) However, the aim for this study is not to investigate the consumer perception of *milk* but the agricultural *industry* surrounding it. Therefore, contributions on human relation to food production are better suited to frame this study.

Boogaard et al. (2010) and Fraser (2001) investigate the relation between contemporary society and animal agriculture. Boogaard et al. (2010) take their departure in what they call “the ambivalent relation between society and modern animal farming”. In the article, the authors examine the relationship between Dutch citizens and dairy farming with the help of a national survey, using modernity as a concept for analysis. The authors distinguish between the positive face and the negative face of modernity, connected to farming. The first refers to the development and search for the optimal, efficient and safe production of food with the belief in technological innovations, and the latter to the threat to “the natural” and the traditional values. The empirical findings of the study indicate that the respondents prefer the more traditional and natural type of farm. Further, the opinions about dairy farming were different depending on the amount of previous experience the respondents had with farm life. People with more experience showed a higher acceptance towards the contemporary dairy farm.

Fraser (2001) describes the polarized positions taken by the critics and defenders of animal agriculture, and the themes that emerge in their arguments and counterarguments. Fraser problematizes the role of scientists and ethicists in the field, arguing that the need for further research and analysis is big in order to prevent misleading and simplifications. For analyse, a concept called “the new perception” is used. This refers to the new ways of viewing animal agriculture, depicted as 1) negative to animal welfare 2) driven by corporate interests 3) motivated by monetary incentives 4) causing increased world hunger 5) producing unhealthy food and 6) damaging the environment. Agricultural organizations often respond to this depiction by stating the total opposite, that none of these claims bear any truth. This polarization, according to Fraser, creates confusion.

This confusion and ambivalence is also examined by Halkier (2004) and Sörbom (2002) whom with qualitative research examine this in relation to food consumption. Halkier (2004) finds that individuals often feel positive towards the offered strategies but at the same time insecure on how to use them. According to Sörbom (2002), people see possibilities in acting for the environment and their own consumption is seen as an important channel to express opinions. Yet, the interviewees are insecure about the results and describe the difficulty in knowing what information to trust and what action is the best.

Moving back to the context of the Swedish milk industry, Jönsson (2005) describes it from an ethnological perspective. By analysing production and consumption of milk products he explores the cultural values and ideas connected to it. His research suggests that national origin is of big importance for consumers when it comes to fresh milk. However, the nationality is not as important when it comes to other milk products, like cheese or yoghurt. Foreign cheese can in fact be seen as something preferable, as with mozzarella, parmesan etc. Jönsson explains this paradox with the strong national symbolic value fresh milk has and had since the time of the “milk propaganda”<sup>1</sup>.

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<sup>1</sup> The lobbying group of the Swedish dairies initiated in 1923 with the aim to increase the Swedish consumption of milk.

However, consumer preference for local products is salient when it comes to other food as well, and shown in numerous studies in numerous countries. According to a study from 2004 initiated by LRF, nine out of ten want to know where the food originates from and 79 % trust Swedish products more because they are experienced as more safe with regards to production and taste. (Klintman et al. 2008) National and local origin are often mixed together. This implies that the national belonging is stronger than the local when it comes to preference in food production – that the identification as Swedish is more important than the identification as for example northerner. One explanation to this might be that legislation is national, and another that we rather support Swedish production than production in other countries. This tendency is visible in other countries as well. (Klinatman et al. 2008 p. 29)

## 2 The backdrop

In the following, a theoretical framework is presented in order to help create understanding of the consumers' perception of the milk industry, how it emerges and the view of the debate. The framework rests on four pillars – 1) the concept of the “risk society”, 2) social learning theory, 3) concepts about “the new media” and 4) the MOA-model.

### 2.1 The risk society

In the introducing chapter, ambivalence towards agriculture and food production in the modern society is described. According to Klintman et al. (2008), whom refer to Bauman (1991), this can be a symptom of a general insecurity, coming from a duality in the development of modern society. Referring to Beck (1992) and Giddens (1991 & 1992) this duality is described as on the one hand consisting of positive developments such as an increased individualism and educational level amongst people. On the other hand, this development has resulted in a *risk society* with new sorts of risks, increased insecurity and distance between human and nature. The solutions to the problems often become part of the problem. In postmodern societies, the options as well as the freedom of choice is increased. In order to navigate in this new reality, people are increasingly dependent on experts giving them advice on how to behave. However, the advices provided are often contradicting, adding on to the feeling of insecurity. (Beck 1992)

This concept could contribute to the understanding of the perception of the milk industry, since food production and its impact on the environment is a field characterized by polarized opinions and debate. The polarized medial portrayal suggests a tension in how animal agriculture is perceived. The consumer is lifted as part of the solution of the problem with environmental sustainability, but according to Halkier (2004) and Sörbom (2002) people feel insecure about what actions are the best. Using the concept of the risk society as a lens in the analysis of the result will provide another dimension to this situation.

### 2.2 Social learning theory

In order to understand how the perceptions of the consumers *emerge*, social learning theory will be applied. However, there are discrepancies in how the concept is defined and used. The early conceptualizations of social learning theory put more emphasis on the individual, unlike the more recent versions. According to Bandura's (1971) social learning theory, learning is a social process that is triggered by observation. By watching the behaviours and practices of people in our social network, we learn. This observational learning is an important part of Bandura's theory, also referred to as *modeling* (modelling). Individuals tend to model their behaviour after people that are similar to them and/or of higher status.

However, external factors are not enough to explain how learning occurs according to Bandura (1971). Internal, mental aspects are also crucial in shaping learning and behaviour. Such intrinsic reinforcement can be pride or the sense of belonging. *Reciprocal determinism* means that environment (surrounding), cognition (personal qualities) and behaviour (modelled) interplay in the learning process.

According to Reed et al. (2010), social learning must include three criteria. 1) The individuals involved must show a change in understanding, on any level. 2) The learning goes beyond the individual and is situated in wider social units or communities of practice, i.e. between actors in a social network. 3) The learning occurs through social interaction, with direct communication or via other media.

## 2.3 The role of media

Social modeling often occurs with inspiration from people in the close surrounding. However, media and its symbolic environment also functions as model for human values, ways of thinking and behaving. The bigger role media plays in the lives of people, the higher the social impact. (Bandura 2001, p. 271) Moreover, media is the most important source of information about society and politics for citizens and is also significant for the construction of worldviews and what issues people rank as important and recent (Strömbäck 2015, p. 4). In our digitalized world, it is likely that media plays a role in the construction of the perception about the milk industry and the debate thereof. The theories and concepts in this section will add more knowledge to this possible influence.

### 2.3.1 *The new media landscape*

News consumption in Sweden has gone through big changes the last decades. The consumption that before was dominated by public service and daily press, has with digitalization since the 2000s increasingly come to consist of news sources mediated on the Internet. In this, social media gains ground as tool for sharing news, and its social and political importance is growing (Lee & Ma 2011, Ohlsson 2015 p. 435, Strömbäck 2015 p. 9).

The supply of information has never before in history been this big. (Ohlsson 2015 p. 435, Strömbäck 2015 p. 9) However, the question is whether this increased amount of information has made citizens more informed? Strömbäck (2015) problematizes this common assumption, arguing that the amount of *disinformation*, information that is false or biased, might have increased even more. The increased supply will also make personal preferences, interest and cognitive capacity more important in the choosing of media and news (Ohlsson 2015 p. 436).

One consequence of the more personalized media environment is that different groups gets segregated from each other, into online clusters where homogeneous opinions, worldviews and perspectives can stand alone without being questioned. (Strömbäck 2015 p. 15, Sunstein 2007) According to Sunstein (2007), this is negative for the democratic dialogue since it isolates from information that challenges ones beliefs.

This is partly the result of algorithms used by companies like Google and Facebook, created to make the content on your browser more personal and customized. Different people using the same key word when searching for information will get different content, depending on their previous patterns, “cookies”, online. This is referred to as the “filter bubble”, putting Internet users in their bubble, in peace and calm from contrasting viewpoints. (Bozdag & Hoven 2015)

Agenda setting, conceptualized by McCombs & Shaw (1972, 1993), was originally a phenomenon observed during elections: that the news medias set the agenda. Agenda setting does not decide the opinions as such, but influence the topics on which people have opinions *about*. (McQuail 2010 pp. 512-515) According to Le & Ma (2011 p. 332) agenda setting can be present on social media as well, since users actively participate in creating the content by submitting, sharing and commenting news stories. This type of agenda setting might be even more effective, since the social clusters online help spreading news stories and opinions much faster than traditional media channels.

Consequently, this section has suggested that the increasingly fragmented media landscape creates clusters of shared meaning rather than encourages a more diversified perspective amongst the media consumers. It is possible that social media today can function as agenda setter, which then could lead to a further segregation online.

## 2.4 The MOA-model

One of the aims of this study is to explore how the consumers view this debate. Crucial in this is whether they recognize it as salient or not. The MOA-model, also known as the OMA-model, can help in creating understanding of how much of the debate the consumers have recognized. Initially proposed by MacInnis and Jaworski (1989), the MOA-model understands human will of processing information as consisting of three factors: motivation, opportunity and ability. *Motivation* is in the MOA-model conceptualized as the readiness, interest, willingness and desire to take part of information. In the context of this study, motivation for information processing about the environmental sustainability of the milk industry is examined. *Opportunity* refers to how well a situation is adapted in order to achieve a desired outcome. Time, attention and number of distractions are factors that will affect the opportunity to take part of information, in this case about the milk industry. *Ability* reflects the cognitive abilities of an individual such as knowledge and intelligence in order to take part of information. Extending this understanding to the context of information acquiring about the milk industry, ability to take part of information regarding environmental issues is important. (Gruen, Osmonbekov & Czapslewski 2005)

With today's diverse media landscape, the opportunity to choose is increased, which according to the logic of the MOA-model means that our preference (motivation) and abilities can play a bigger role in what we consume. According to Strömbäck (2015 p. 14) this might lead to a bigger fragmentation between groups in how they consume media and what information they take part of.

## 3 Procedure of the study

In this chapter, the process of conducting this study will be accounted for. Firstly, the methodological approach is presented and motivated, thereafter the procedure of the interviews and the analysis are described. Finally, the methodological choices are discussed critically.

### 3.1 Methodological approach

The previous research about the environmental perception of the milk industry is limited and the questions surrounding the thesis are open. Therefore, an exploratory research approach was best suited. With this methodological choice, the risk of blocking potential explanations was minimized. (Bryman 2011 p. 341 & 2007 p. 474) Flexibility between empirics and theory was, for the same reason, desirable. The more knowledge gained from the interviews, the clearer the need for the theoretical framework got, why an *abductive*, process was to prefer. In this, the knowledge emerged successively in a process that moved between theory and empirics (Alvesson & Sköldberg 1994 p. 41).

The study was conducted with a qualitative research design, which is characterized by its inductive view on the relation between theory and practice. The research is based on interpretation and takes its departure from the notion that reality is subjective and constructed socially. (Bryman 2011 p. 341) The absence of objective facts or one truth is also directive for *social constructionism*. This view also emphasizes the importance of history and culture and a critical stand towards taken-for-granted knowledge. Further, the standpoint is that knowledge is sustained by social processes, through social action. (Burr 2003) These outsets permeated this thesis, and motivated the content of the theoretical framework, where social learning theory is central.

### 3.2 Semi-structured interviews

In order to explore the consumer perception of the milk industry and how it emerges, personal semi structured interviews were conducted. Semi-structured interviews was a suitable way to find answers to the research questions, since it is flexible in its design and leaves room for adaption to the uniqueness of each interview situation. The interviews followed an interview guide with specific themes and questions (see Appendix 1), but the conversation did not always follow the same order and the questions were formulated in varied ways. New questions sometimes came up during the interview, which later were added to the interview guide. This open and flexible way of interviewing is good for creativity and the exploration of new aspects.

Semi-structured interviews were chosen instead of unstructured interviews because of the relatively clear focus for the interviews. The perception of the milk industry from an *environmental* perspective and not in general was the aim to investigate, and the semi-structured interview allowed to steer the conversation to a higher extent. With this, a minimum of structure was achieved, still giving the respondents much freedom in expressing their thoughts. (Bryman 2011 pp. 415-416)

### 3.2.1 Selection of participants

This study examines two groups – consumers and “experts”. A consumer group of interest to investigate is students, in the later part of their education or recently graduated. This is a young consumer group that often takes part of discussions and show interest in societal topics. In this interview study, agronomists and environmental communicators constituted the majority of the sample. Consumers from environmental and veterinary sciences were also included. By choosing participants from educational disciplines of relevance to the field of research, the chance of receiving comprehensive answers was increased. This *goal-oriented selection* was a strategic way to find a sample that is coherent with the research questions (Bryman 2011, p. 434). Two participants with education less relevant were also included in order to secure that different phenomenon was not limited to a certain disciplinary group. However, their answers are not considered of less relevance. Eight Swedish consumers, four males and four females between 25 and 30 years old, were interviewed.

In order to broaden the perspective, five scientists on life cycle analysis and experts on the environmental aspects of food production were also included to the sample. Out of these, who henceforth will be referred to as “the experts”, three are operative at Swedish Universities and two in the Swedish milk industry. Their different backgrounds will be discussed further in the analysis of the findings.

The interviews with the consumers aimed to answer all three of my research questions, while the interviews with the experts aimed to answer the first and the third. The reason to this is that the primary focus of the thesis lies upon the consumer perception. This study does not aim to explore the emergence of the expert perception, why they were not asked about this. The experts’ perceptions of the environmental impact of the milk industry is interesting to discuss in the light of the consumers’ perceptions, and their involvement in the debate brings valuable insights. However, they are not experts on societal debates and their answers are not treated as facts.

For the two interview guides and a list of the participants, see Appendix 1 and 2.

### 3.3 Data collection

The interviews took place at different locations, suitable for the participants. Before the interview, the aim of the study was described, that the participant did not have to answer all the questions and that he or she could end the interview whenever they wanted. The participants were also informed that their personal information and the content of the interviews would be handled with confidentiality. Finally, permission to record the interviews was asked for. These steps are part of the Swedish science council’s ethical guidelines. (Vetenskapsrådet 1990)

Due to time and space restrictions, some of the interviews were conducted via telephone. Telephone interviews have, according to Bryman (2011 p. 433), shown to be similar to personal interviews when it comes to reliability. The absence of visible body language and expressions are compensated by the possibility that the distance between the interviewer and the respondent creates a safer surrounding that encourages more honest and personal answers. To compensate for the lack of visible body language the aim was to be especially attentive regarding emphasises and hesitations in the language of the interviewees. No differences between the two types of interviews were detectable in the analysis of the material.

### 3.4 Analysis

The interviews were transcribed in their full length, only leaving out shorter, irrelevant passages. Verbal details, such as hesitations and emphasizes, were accounted for to contribute to a deeper analysis.

Because of the exploratory character of this study, a discourse analysis was conducted. Discourse analysis stands out from other qualitative methods that aim to explore how social reality influences actors in that it also attempts to answer how that particular social reality was produced. Since no pre-given answers were at hand, it was important to stay flexible throughout the process. The aim was to analyse the participants' answers within their context. (Herrera & Braumoeller 2004 p. 19)

#### 3.4.1 *Interpretative repertoires*

A discourse analysis method suitable for the study was *interpretative repertoires*. Originally developed by sociologists Gilbert and Mulkey (1984), and further by Wetherell and Potter (1987), the concept of interpretative repertoires refers to the shared understanding of different phenomena which can be traced down in clusters of terms, descriptions and figures of speech in language. Characteristic for interpretative repertoires compared to other sorts of discourse analysis is the stronger emphasis on agency and the lesser on power structures. Interpretative repertoires are a resource in gaining insight into the social action, communication and construction of the self and the world. (Jørgensen & Phillips 2002 p. 117) When the respondents talk about the milk industry, they can draw upon a number of prevailing ways to talk about it. Looking for those repertoires is a way to gain understanding about the broader depiction of this phenomena and how the participants construct their understanding. Since the interview questions were open, the interpretative repertoires emerged without encouragement or inspiration from the interviewer.

Following this analytical approach, the coding of the material started with reading through the transcriptions several times, searching for shared interpretative repertoires and themes. The themes were then analysed in accordance to the theoretical framework. The aim was not to categorise the text according to the theoretical framework, but to let new findings emerge and then adapt the framework accordingly. (Jørgensen & Phillips 2002 p. 124) The findings are presented within three main categories in accordance to the research questions. The names of the participants have been erased in order to maintain their anonymity.

### 3.5 Reservations of the procedure

This study could have been conducted in other ways. With a quantitative method, knowledge about a larger population would have been acquired, making it possible to generalize the results. However, a qualitative approach was chosen mainly due to the unexplored character of this area. With a survey it would not have been possible to adapt the questions nor to ask follow up questions. Since the outcome of the study was unknown, an exploratory, qualitative method was better suited.

One objection with individual interviews as method is to what degree the researcher influences the interviewees. The presence of the researcher and how that affects the respondents is therefore important to bear in mind. Another objection is that qualitative method includes elements of interpretation. This is always a risk, since it is impossible to erase one's previous knowledge and prejudices. This awareness contributed to an increased carefulness in the analysis and a critical stand towards the study.

This thesis takes its departure from the consumer and her role in reducing environmental problems, as increasingly lifted in the public debate, amongst authorities, politicians and environmental organizations. However, the power of the consumer is questioned in much research. The freedom of choice of the consumer is suggested by Miles (1998) to be an illusion, and Schnaiberg (1980) state that the choice is more driven by political and marketing forces than individual agency (Klintman et al. 2008 p. 13). How this relates will not be accounted for in the thesis but it is an important mark to make.

## 4 Findings

In this section the result of the interviews is presented. It follows three main thematic headings in accordance to the three research questions:

1. Participants' perceptions of the environmental sustainability of the milk industry
2. Possible emergences of this perception
3. Participants' perceptions of the debate

In the first part, interpretative repertoires of consumers and experts are presented. In the second part, only the consumers are present, analysed with the theoretical framework. In the third part, both consumers and experts are present, connected to the theoretical framework. For a list of the participants, see Appendix 1.

### 4.1 The environmental perception of the milk industry

This section is based on the answers on how the respondents perceive the milk industry from an environmental perspective. Firstly, the interpretative repertoires of the consumers are presented and secondly, the experts.

#### 4.1.1 *Swedish industry as essentially different*

The origin of the milk products is often brought up as one of the first topics during the interviews, which is especially clear when the participants are asked if they think about something in particular when they buy milk products. All consumers except one (consumer 7) claim that they buy Swedish products, and that this is of big importance for them. The participants state that they exclusively buy Swedish fresh milk. However, when it comes to other milk products such as cheese, the participants express less demand on the product being Swedish. This is problematized by consumer 6 (who questions the milk industry from an environmental perspective), saying: "... *that is kind of interesting really, because cheese is worse in many ways... It takes very large amount of fresh milk to produce*". One reason to why cheese, as well as cream and butter, fall outside the radar, might according to the same consumer be that these products do not have as clear markings, which makes it difficult to establish the origins.

The repertoire of distinguishing Swedish production as something essentially different is prominent amongst the participants. Different arguments for this are brought up. Consumer 3, 5, 7 and 8 bring up the superior animal welfare of Swedish production. However, consumer 3 also problematizes the Swedish production from this aspect, saying that there is still much work left to do. Consumer 1 explains her standpoint with the smaller scale of the Swedish production, and the production as contributing to open landscapes. Consumer 2 states that grazing animals contribute to biological diversity, and that we would have had forest on those areas if it were not for milk production. He adds that "... *Swedish production cultivates the land instead of consuming it...*". Consumer 4 and 5 claim that the Swedish production is more environmentally friendly, but do not develop the reasoning further. Consumer 8 sees the Swedish industry as "honest" compared to other industries. The smaller scale of the Swedish production is mentioned by several of the respondents as a reason for it being better. Consumer 3 and 1 explains it like this:

“From an environmental perspective, it’s on a smaller scale in Sweden in a way. So it’s a bit easier to overlook the environmental aspect, compared to when you see these huge farms abroad, that it gets so much more distinctive in a way, that they ruin the environment with emissions, and that the environment is damaged.”

“I believe we have very good conditions in Sweden to have a good milk production, compared to other countries. [...] Still, if it gets very large scaled it’s difficult.”

This divergence between small-scale and large-scale production is a clear interpretative repertoire amongst the respondents. The small-scale is referred to as positive and connected to Swedish production while the large-scale “animal-factories” are described as something inferior, connected to foreign production.

Lifting the Swedish production by comparing it to the “foreign” [Swe: utländska] production is a salient repertoire amongst the participants. In this comparison, the Swedish production is not only referred to as better, the “foreign” production or the production “in other countries” is also referred to as inferior. The usage of the notion “the foreign” is interesting, because it is often brought up in a negative context. Consumer 3 states, in affect, that it would be a “catastrophe” if we had to rely on “the foreign one”, and consumer 5 states that she “obviously” prefers Swedish production over “foreign” because of environmental and ethical reasons.

Another repertoire drawn upon by numerous of the respondents is to “support the Swedish production”. According to consumer 4 it is important to uphold the Swedish production and she is strongly against the import of milk products. On the question to why this is so important for her, she answers:

“I want to support my country but I also think about the future, to have as much as possible locally. Not only because it’s environmentally friendly but also because if something would happen, we’re not dependent on everyone else”.

This notion of “something will happen” will be discussed further in the following.

Consumer 3 states that she “support consumes” [Swe: stödkonsumerar] Swedish milk products. If she does not eat them herself she buys them for her cohabitant or friends.

For the experts it is not as obvious that Swedish production is environmentally better than production in other countries with similar conditions. Expert 1 says that other values are often mixed together with the environmental:

“It is very much driven by emotions. Something underrated that you don’t talk about but underlies it all is that one think it’s nice to have grazing animals in the landscape. [...] It’s hard to find hard facts that favour Swedish production over production in other countries that have similar production systems.”

Expert 3 expresses the same repertoire, and urges for the need to separate between different things. Open landscapes are one thing and natural grassland something else, and the latter is what has an environmental value.

Expert 5 and 4, who both work within Swedish milk industry, exhibit a more positive repertoire towards the Swedish production. According to expert 5, an advantage with the Swedish milk industry is all the well-educated milk farmers. Traditionally, Swedish milk farmers have had close communication with the authorities and scientists. The Swedish climate is also beneficial for milk production, according to her. Also expert 4 distinguishes between Swedish and global milk production. According to her, Sweden has come much further with the environmental work compared to other countries. The Swedish environment benefits from having milk production and without it the environmental goals would not be achieved.

Consequently, the depiction of Swedish milk industry as something essentially different is not as salient amongst the experts as the consumers. The experts who work within the milk industry lift the Swedish production more, which is somewhat expected. The discrepancy between the interpretative repertoires of the consumers and the experts regarding the benefits of Swedish milk industry suggests that, in accordance to what expert 1 said, other reasons than merely the environmental might underlie this perception. This will be further elaborated on in the following section.

#### 4.1.2 Multifaceted environmental perceptions

Although Swedish production is depicted as relatively better amongst the consumers, the perceptions of the general environmental impact of the milk industry are divided. The amount of conviction and emotion regarding this also differs between the consumers.

Consumers 5, 6 and 7 express clear opinions about the milk industry as bad for the environment. Consumer 5 expresses both clear conviction and strong emotion, describing the milk industry as “*negative for the planet*”. Also consumer 7 is convinced that the milk industry is negative for the environment, saying that: “*from environmental perspective definitely very negative*”. This is not uttered in as much affect as in the case of consumer 5. For consumer 6, the biggest concern is how industrialized and large-scale the production often is. Both consumer 5 and 6 are vegetarians. Consumer 5 has decreased her consumption of milk products, and consumer 6 is considering doing it. Consumer 7 is not a vegetarian and has no plan to change his diet. Although he is convinced milk production is negative for the environment, he legitimizes his consumption referring to milk products as healthy, good and affordable.

Consumer 2 expresses strong conviction, saying that milk industry is solely positive for the environment due to the increased biological diversity that comes with grazing animals. The rest of the participants express mixed perceptions. Consumer 1 can recognize parts that are positive and parts that are negative. The positive parts, such as an open landscape, are most emphasized.

Several of the respondents state that their view of the milk industry has changed. This change is said to be recent. For consumer 3, it is mostly the animal welfare aspect that concerns her. As a veterinary student she has visited different farms, which have made her more sceptical:

“Even though Swedish is good, it’s not “the Bregott cows”<sup>2</sup> so to speak, that walk around on a meadow. When you see it behind the scenes you get more sceptical towards it all, so it’s changed, absolutely.”

Consumer 8 says that:

“It feels kind of given with dairy products, I haven’t reflected over it before, it was more like milk is good and does good, but in some way... the awareness has increased the last years about how the milk industry works and more towards the negative I would say...”

Asking why consumer 8’s perception has changed, he answers that “*the general consumption of animal products and how it affects our nature*” is a reason.

The changed perception is expressed by consumer 7 as well, who says that it has changed during the last half a year. Also consumer 1’s perception has changed, but for her it has more to do with the knowledge about the milk industry from a more professional point of view, as agronomy student. She states that she can evaluate it more critically now,

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<sup>2</sup> *Bregott* is a Swedish brand of butter, which commercial shows cows in a rural idyll.

having obtained a more diverse new perspective through her studies. Whether this changes in perceptions originate from personal reasons or because of an increased public debate is not made clear in the interviews. How the perceptions emerge will be further elaborated in the next section.

The equivalence of the milk and the meat industry is a repertoire drawn upon by two of the consumers (7 and 8), who state that they see the two industries as much similar when it comes to environmental impact. Since there have been so much reported about the meat-industry, consumer 8 assumes the milk industry is bad for the environment as well. However, a difference is that meat feel unhealthy, but he cannot find the same health related reasons to consume less milk-products. Therefore, the meat consumption is what he would change first.

A repertoire drawn upon by some of the consumers (8, 6 and 4) is about something bad waiting around the corner. When asking about consumer 8's view of the debate, he refers to himself as a "naïve consumer" who needs "alarming reports" in order to awaken his interest. When asking him to explain what he means with alarming reports he refers to our meat consumption, that he expects alarming reports because of "*how much we eat*":

"If it spreads to other countries, where they don't eat so much meat today... if that is so bad, I assume there is also ground for milk products having a negative impact on the environment."

This repertoire is also drawn upon by consumer 6. After describing how an increasing amount of his friends has come to question milk products for environmental reasons he adds that: "... *but then also it's connected to an increasingly alarming feeling that we have huge changes that need to be done in the type of impact our society has on earth.*" Also consumer 4 (as illustrated in 4.1.1), talks about the weight to keep the Swedish production partly to not being dependent on everyone else "*if something would happen*". Neither of them develop their reasoning further, but it can be interpreted to imply some sort of expectation of worse times waiting around the corner.

The experts express different opinions regarding the environmental impact of the milk industry. According to expert 5, the environmental impact from milk production is difficult to calculate because it is so complex. Most of the emissions originate from the farms and often one need to rely on theoretical calculations and modelling. Therefore, from a life cycle perspective, the milk industry has a challenge. According to expert 4, the environmental impact is very different depending on location. In Sweden, the conditions are good for milk production. Deforestation is a problem globally, but in Sweden the problem is the opposite and grazing cows are good for biological diversity.

Expert 1 and 3 express more critique towards the industry. According to expert 3, milk production has historically got away too easy when it comes to highlighting its environmental impact. Expert 1 says that milk production is "*definitely burdening for the environment*" but emphasizes that it depends what you compare it with and what we could exchange it with. It is also a complex situation since you need to take many aspects into account. The biggest problem according to expert 1 is that we consume so *much* milk and meat. It is important to distinguish between production and consumption. Consumption of animal protein in total needs to be lower, but the production does not, since we import as much as we do. Expert 3 emphasizes this divergence as well.

Consequently, the experts express less certainty in their opinions regarding the environmental impact of the milk industry. However, a general disagreement is visible. This disagreement resembles the concept of the risk society, as described by Beck (1992). Since the experts interviewed are active in the debate, their disagreement could be a contributing reason to its polarization. This could be a reason for the multifaceted perceptions amongst the consumers and will be discussed further in chapter 5.

## 4.2 Emergence of perception

This section is based on how the consumers' perceptions of the milk industry emerge. The emergences of perceptions are complex, why this should be seen as an exploration of possibilities. A reservation is made that other, perhaps more underlying, factors can coexist with those accounted for here.

Social network, education and media are brought up as important for the emergence of the perception about the milk industry and its environmental sustainability. What the primary source is differs between the interviewees, and some respondents also make a division between sources for shaping the perception and sources for information and knowledge.

### 4.2.1 Social network

Social network is mentioned by all consumers except one (7), as an important factor in the emergence of their perceptions about the environmental sustainability of the milk industry. Friends are an influential part in this, and mentioned more frequently than family. All of the respondents except consumer 7 state that this is something they discuss with friends. The reason for not discussing it is according to consumer 7 that he is not in the right "circle" [Swe: krets] for discussing that kind of topic. He states that he is not in an "environmental circle" [Swe: miljökrets] and therefore does not discuss it with friends. Consumer 8 and 6 use the repertoire of the circle as well, saying that:

"It probably has a lot to do with social circles... all people have different interests and when it comes to the environment, if you spend time with people who are very interested in it, it spreads to others. So my close circle probably affects me a lot, and my network in general".

"There are always norms of course around what you... how you view different products and such. In my social circle it feels like many more reflect about milk products today than they did a year ago. I don't know what the numbers are for Sweden in total, but amongst the people I know, many more buy alternative products like soy and oat. [...] Every time you see someone else doing it you get like, why did you do it, and maybe I should too..."

Many of the respondents experience that people around them share the same opinion and attitudes about this. Consumer 6 says that: "*I experience that many think like I do about this*". Consumer 8 says he has some friends viewing this as an important topic and some who do not. He adds that "*... the stronger the persons with opinions are and the more they get, more people who do not have any opinion embrace it*". How this is occurring is not accounted for by the respondent. However, it implies a view on this topic as growing, and could go in line with the changed perception of the milk industry as discussed in 4.1.2.

### 4.2.2 Education

All of the respondents whose education is related to agriculture or environment bring up this as an important influence for their perception and for the acquiring of information and knowledge. They say that their interest in this were awakened when they started their studies, and that their knowledge completely or mainly come from there. Consumer 1, who studies agronomy, says that: "*If I didn't study here I basically wouldn't know anything about the milk industry, so then I absolutely believe I could have been influenced by something else.*" Consumer 3 reasons similarly, saying "*But it's probably much school that shaped me*". The usage of the notion "shape" [Swe: forma] is interesting, because it implies not only that the

education has brought her more knowledge, but also that it has changed her. This can be seen as a part of social learning theory, where not only knowledge but also norms, ideals and worldviews in a wider sense can be taught and influenced through social interaction. Being part of an education and being surrounded by the group of people who study the same subject probably have big influence on more than just the knowledge connected to the education. Furthermore, education and social life often go together, making a distinction between the two spheres difficult. The complex relation of educational and social life of the participants is not investigated, why the mechanisms of this socializing cannot be accounted for within the frames of this thesis.

One reason for the education being important in this “shaping” might be its high credibility, as explained amongst others by consumer 3, who says that:

“You listen more to lecturers than for example newspapers just because it's a bit difficult with credibility. There are a lot of articles to take part of but it's a bit difficult to evaluate the sources and often it's someone's personal opinions instead of facts”.

To be critical towards the sources is a repertoire brought up by all consumers. This will be elaborated further in 4.2.3.

According to Bandura's social learning theory, environment, modeling and internal forces are at interplay in shaping perceptions and knowledge. In the interviews, especially the modeling part of the theory is visible. In modeling, people of higher status than you are often sources for inspiration and learning. Many of the respondents mention teachers, lecturers and other people in their education. A teacher or a professor maintains a higher status than their students, why this can be seen as a sign of modeling. All the respondents mention friends as important for the emergence of their perception, which could also be a sign of modeling since modeling also occurs from people who are similar to you.

Several of the consumers state that their perceptions are shared with the people in their close environment and that this is something they talk about with friends. The reference to “circles” is common. This also points in the direction to social learning, because it implies perception emerging in a social interplay. According to Bandura, a sense of belonging is an internal part of importance in social learning. This also goes in line with the more recent versions of social learning theory that emphasizes learning more as a collaborative process. However, social learning does not necessarily need to shape the respondents' attitudes in favour or against the milk industry. The social learning can also teach you that it is a topic of less significance and importance, which might be the case for consumer 7.

Social learning according to Reed et al (2010) includes a change in understanding, that the learning is situated in a wider social context and that the learning occurs through social interaction. All three criteria are met in the findings of this study. However, since the interviews did not go in depth on exact occasions or details of the emergence of the perceptions, it cannot be determined exactly how it occurred. Yet, it is probable that social learning according to this definition also is a part in it.

#### 4.2.3 *Media*

Media – social media, news and documentaries, are mentioned as central for shaping the perception and spreading information about the environmental sustainability of the milk industry. In this, social media and Facebook in particular are mentioned by several respondents as important. Content that is “shared” amongst users are often referred to. Consumer 8 use an interesting term to explain the consequences of sharing for example news articles – that it “accelerates” [Swe: spinner vidare]. All of the participants use Facebook on a daily basis and several mention that they are members of Facebook groups

where discussions about this topic are held. Consumer 5 is a member of many groups on Facebook, because she wants to take part of the discussions. She says that:

“These discussions come up on my Facebook everyday and you can take part of different opinions. [...] I get it fed to me everyday, which I believe affect me very much. It makes me think about this all the time...”

This implies that there are vivid discussions on the subject, and that social media can help to encounter diverse opinions. However, one question that will be discussed more in the following is whether groups on Facebook rather tell you *what* to have opinions about. This would then resemble agenda setting as described in the theoretical framework.

The respondents emphasize that the information provided in social media often is questionable and the sources biased. However, it is seen as important for spreading a message, and consumer 1 problematizes it like:

”I think you get more affected by Facebook than you might think. And that it’s influencing others very much. Stuff turns up in your feed and maybe you just scroll past it very quickly but you still take it in and start to think about it...”

The criticism towards the sources extends beyond the realm of social media. Other media brought up as important sources for the emergence of the perception – newspapers, TV, and documentaries (the documentary *Cowspiracy* in particular) are also viewed critically. All of the respondents who state that these are sources for information add that the quality of the source is questionable and that it therefore always is important to have a critical stand towards it. Newspaper articles are not always to be trusted, according to some of the respondents. Consumer 8 explains this like: “*there are very much opinions and many actors who have an interest in how this is portrayed*”. Consumer 3 reasons similarly, and continues by saying that journalists often lack the knowledge they would need in order to portray this in a reasonable way. This criticism towards the sources permeates the interviews and is frequently brought up by the respondents, as also illustrated in 4.2.1. Consumer 6 experiences that it is not always easy to know which actors that are the senders, and that there are a lot of information but not easy to know what is the “right” information.

Even if the respondents dissociate themselves from social media as source for information and knowledge, the power of the medium and the potential for spreading information to *others* are not underestimated. The ability of *other* people to be critical towards the sources is viewed more pessimistically. Consumer 3 describes his view on Facebook like:

“With Facebook and social media today, much crap is spread very fast. You can take a picture on the dairy industry in USA and it spreads like a wildfire. If you don’t know what it looks like in Sweden it’s easy to think, ”iew, I don’t want my milk to be produced in that way”.

Consumer 1 reasons similarly, saying that: “*Things you don’t know much about you are very easily influenced in, if you read something from someone who is a good writer*”. These quotes, especially the latter, imply a view that the less you know, the more easily you get influenced. Both consumer 3 and 1 are agronomy students, possessing technical knowledge about the milk industry. Consumer 3 shows much affect and almost frustration describing his view on this.

Both consumer 7 and 8 would turn to Internet if they wanted to gain more knowledge about this subject. Both of them say that they would “try their luck” on Google and then see. Also consumer 5 mentions Google as her primary source of information. Neither

consumer 8 nor 7 say that education is an important source of information for them, which could be a contributing reason to the emphasis on Google.

According to Bandura (2001), social learning can occur through mediated communication. Today, an increased amount of the social interaction takes place online, which implies that this tendency is growing. The theoretical framework suggests that the media landscape gets increasingly fragmented and that online clusters decrease the cross-border dialogue. Could this be a contributing reason to the divided consumer perceptions of the milk industry expressed in this study? According to Strömbäck (2015), the amount of *disinformation* is growing. The urge expressed by the respondents to be critical towards the sources could be a symptom of this.

The participants with educational backgrounds related to agriculture or environment rank their education as important for the emergence of their perceptions. However, social network and media are also referred to as important sources. How these different sources interplay in the emergence of the perceptions is not developed further by the respondents, but some of them imply that the sources are used for different purposes. While education and Google are used for acquiring of information and knowledge, media and social network are referred to more as sources for inspiration and new ideas. This interplay is not examined in this thesis, but would be an interesting aspect to take further into account in future research.

### 4.3 Perception of the debate

The perception of the salience of the debate concerning the milk industry from an environmental perspective differs between the consumers. Consumer 4 and 7 say they have not recognized any debate at all, while consumer 5 experiences it as very noticeable. The rest of the respondents - a clear majority, claim they have come across the debate but do not recognize it as salient or central in any way.

All of the respondents are aware of the problematization of the industry from an environmental perspective, but the opinions about this differ. Consumer 5 suggests that there should be more debate, that this question is too little addressed. Consumer 2 on the other hand considers it to be “silly”, a “temporary trend” and “without any ground”. He develops his reasoning like:

“I think it comes from that people are further away from the production than they were before. Amongst my friends who grew up on the countryside, they have a very hard time seeing that it would be so harmful, for the environment.”

This reasoning is similar to his view on the influence from social media, suggesting that it is a lack of knowledge that leads people into having another standpoint than him.

The constructiveness of the debate is questioned amongst all of the respondents who have noticed it. It is described in terms like “emotional”, “attacking”, and “with underlying agendas”. Consumer 6 puts it like this:

“I experience it [the debate] as extremely emotive. That it’s driven by people who have... an engagement in the matter, which is not grounded in that they investigated this them selves but has other things that they advocate. For example that no one should drink milk, and then they are very positive about spreading those kinds of articles.”

Consumer 1 reasons similarly:

“The debate is very “attacking” from both sides, I think. Either you are pro or you are very much against, and it gets more like attacks, instead of having a vivid debate, a vivid discussion.”

The lack of dialogue is brought up from others as well. Consumer 2 does not recognize a dialogue and consumer 5 agrees, saying that she feels like people often talk across each other, without understanding each other’s viewpoints. Consumer 7 sees the debate about the meat industry as much more salient. Consumer 3 expresses the same opinion and adds: *“for those who eat meat, and you start talking about dairy products, you draw it too far. They are not really open for that discussion.”*

One way of understanding how the perception of the debate differs between the respondents is with the MOA-model. Presupposed that the perception of the salience depends on how much the respondents have been acquainted with it, the MOA-model can help to create understanding to why it differs. According to this model, human will of processing information constitutes of three factors: motivation, opportunity and ability.

Differences between the respondents connected to the factors of the model can be argued for. To begin with, the motivational factor depends partly on personal interest, which seemingly varies between the respondents. The participants from educations related to environment or agriculture could have a higher extent of motivation to take part of information regarding this, which also seem to be the case. Opportunity, according to this definition, refers partly to attention. How attentive are the respondents towards this subject? For instance, the opportunity is increased for someone who is a member of a Facebook group where this topic is discussed. The ability factor, which in this context refers to cognitive ability to take part of this debate should be equal when it comes to evaluate its salience. However, the *understanding* of the debate and the evaluation of the arguments might be easier for some of the participants. This could be a reason to why consumer 2 refers to the debate as “silly” – that he has another perspective on its content and therefore rejects it.

Asking the experts about their perception of the debate about the environmental sustainability of the milk industry, all of them say that they see it as very salient. However, a reservation is made, that this partly might be because of their professional involvement, influencing their perspectives.

All of the experts except one (1) say that they see the debate as disproportionately big, compared to other topics. According to expert 2, *“it almost sounds like if we would stop eating meat and drink milk, we would solve the environmental and climate problems.”* Expert 4, 2 and 5 all bring up one special example as a way to illustrate the, according to them, paradoxically big focus on food in the climate debate – that the oil company Preem has launched a sausage with less meat, advertised as “climate safe”. According to expert 4 that *“says something about where we stand in the debate”*, and that *“the oil companies must laugh all the way to the bank.”* To further illustrate this paradox, expert 5 exemplifies with persons taking away the milk from the dinner table but still shop a lot at H&M and go to Thailand for vacation.

Expert 1 has a different view on the debate and its size:

“Some people say that oh it’s so much about the meat nowadays, and we should talk about the car driving. I don’t know about that, if it works that way... that you become a vegetarian but keep the car, but if you hadn’t become vegetarian you would have started to bike? I don’t know how people function really. Then there are studies suggesting that if you start to do one thing you will continue to do next and next...”

Both expert 5 and 3 argue there are other, underlying reasons to why this debate has become so big. Expert 3 develops his reasoning like this:

“People talk about it a lot. And it gets a bit like... a way to show how environmentally friendly you are, how much meat you eat and maybe not as much how much you fly. So its been a... before the question was forgot, but nowadays it might be, now you might drop other balls [tappa andra bollar] instead. It seems to de difficult for the debate to focus on two things at the same time.”

The reason according to expert 5 is that food is so “close”, and that it awakes so many feelings. The “*ethical dimensions*” add another value as well. Expert 3 expresses similar thoughts on why the debate has become so big: “*Now there are several different interests pointing at the same direction*”, referring to the environmental aspect which is now added to the previous health and animal protection aspects. Additionally, this is a way to express identity according to expert 3. It has become trendy to exclude animal products.

Expert 2 is worried the debate will lead to other consequences than the desired. She says that the debate has a very big impact on the Swedish production instead of reducing the imported volume.

“The farmers get very affected from this debate, which is not good since they need all the support they can get right now, the ones who’s left... Five milk farmers per weak quits now. It all falls apart. So it’s very serious actually.”

Expert 5 reasons similarly, saying that the Swedish milk farmers have a very tough time economically, and to on top of that be called “*environmental villains*” [Swe: miljööbovar] is unfortunate. Expert 2 also uses the word “environmental villain” to describe how the farmers feel like they are being portrayed.

Expert 2, 4 and 5 argue that this debate might steel focus from other areas that we should improve for the environment, such as reducing the use of fossil fuel. According to expert 5, this “*enormous simplification*” gives a “*false feeling that this is the solution.*”

The experts view the debate about the environmental sustainability of the milk industry as very salient, unlike the consumers, who view it as much more modest. One reason to this is brought up by the experts themselves – their professional involvement. Still, since some of the consumers are also involved in this through their education, the difference between the perceptions of the two groups is surprisingly big.

## 5 Wider implications

In this chapter, the wider implications of the study will be discussed, connected to the introduction and the previous research.

Buying Swedish products is said to be of significant importance for the consumers interviewed in this study. Several draw this as far as saying that if they cannot find Swedish products, they do not buy milk products at all. However, it is clear that this strict standpoint is weaker amongst many of the respondents when it comes to other milk products than fresh milk, such as cheese. This goes in line with previous research from Jönsson (2005), who suggests that fresh milk possess a stronger symbolic value than for example cheese. One explanation to this can according to Jönsson be the legacy of the “milk propaganda”. However, research by Klintman et al. (2008) implies that the preference towards domestic products is visible when it comes to other food as well, and in numerous different countries. What this strong preference for domestic products come from is not accounted for in this thesis, but according to a study initiated by LRF, the production of domestic food is often seen as more safe. Wanting to support the domestic production is brought up by the consumers as another reason to choose Swedish products. It is likely that the occurring milk crisis is one reason for this urge.

According to the experts, the difference between Swedish production and production in other countries with similar conditions is not significant. The strong contradicting conviction amongst the consumers is interesting, and implies there are other reasons than environmental. Aesthetical values are brought up by the experts as an underlying contribution. Aesthetical aspects are not included in the definition of environment as used in this thesis. However, the weight of this aspect should not be underestimated.

The consumers’ perception of the environmental sustainability of the milk industry is multifaceted. Some see it as completely negative environmentally while others exclusively see it as positive. However, the majority of the consumers express mixed feelings. This is partly directly outspoken, partly detectable in the contradicting repertoires and in the insecurity and hesitation this is spoken about. A repertoire drawn upon is that everything is not as it should be, that bad events wait around the corner. This general insecurity is interesting to discuss in relation to the concept of the risk society by Beck (1992), who argues that modern society is characterized with crisis and new sorts of problems.

According to Boogaard et al. (2010), young people are often sceptical towards animal agriculture because of the distance between people of today and the realities of farming. The authors suggest that people with less experience and insight into agriculture show bigger scepticism towards it. However, this is not traceable in the results of this study. Many of the respondents claim that their viewpoint have got more negative, the more knowledge they have acquired. Consumer 3 for example, describes how visiting different farms left her more negative than before. Consumer 1 expresses similar thoughts, saying that her education as agronomist made her more critical towards large-scale production. Due to the methodological differences between the study by Boogaard et al (2010) and this, a direct comparison might not be recommended. The perceptions of the participants could have been interpreted differently if represented in a survey. The qualitative method conducted in this study opens up the possibility to express the kind of uncertainties and multifaceted perceptions as manifested in the result.

Fraser (2010), Halkier (2004) and Sörbom (2002) argue that today’s human relation to food and agriculture is ambivalent. According to Fraser, this is partly due to the polarized positions taken by experts. The experts interviewed in this study express different standpoints regarding the environmental sustainability of the milk industry. Not saying they are representative in any way, it is still worth taking into consideration. Sörbom (2002) suggests that the different advices from experts lead to insecurity amongst consumers on

what information to trust. The modern society as dependent on expert advice is problematized by Beck (1992), who argues that this is a consequence of the risk society. Another reason for the ambivalence is according to Beck (1992) the increased supply, which leads to an increased freedom of choice. According to Strömbäck (2015) this tendency is also visible on the media market and leads to an increased individualization in the media consumption. This in hand creates a more fragmented media landscape.

The consumers are sceptical towards the credibility on information spread on social media. Therefore, education and social network are said to be more important for acquisition of knowledge. The group investigated in this thesis are students or recently graduated students. If another group was investigated, the answers might have been different and other sources for information could have been lifted. Social media should therefore not be underestimated as source for information and knowledge. One of the consumers claims that she probably gets more affected than she thinks, because content passes her by all the time. How this constant flow of impressions and information influence the social media consumer cannot be answered within the frames of this study, but would be interesting to investigate in future studies. Social circles are brought up by the consumers as affecting them in their perception. Today, when much of the social life occurs online, it is possible that these circles are also present in these spheres.

Discussions on social media, and groups on Facebook in particular, are said to offer contrasting viewpoints. This contradicts the suggestion of the fragmented media landscape as only providing reflections of the same opinions. However, this might still set the agenda, in line with the concept of agenda setting by McCombs & Shaw (1972, 1993). According to this logic, these groups can contribute with a depiction of what topics are “on the agenda”. Someone who does not come across this debate might not view as salient, unlike someone who follow these discussion groups and gets exploited for them everyday. Whether this is a contributing reason to the different perceptions of the salience of the debate cannot be established, but it is likely this is a contributing factor.

The point of departure of this thesis is the notion of the consumer as an important actor in reducing environmental problems, a notion visible in the public debate and embraced by politicians, authorities and environmental organizations. Yet, there is no scientific consensus regarding the actual influence of the consumer. Leading the consumer into the conviction that her choice is crucial for the development regarding the environmental sustainability is not unproblematic. The consumers participating in this study show a general ambivalence towards the environmental sustainability of the milk industry and express wider worries regarding the environment. The huge amount of, often contradicting, information could lead to further insecurity and it is possible that the depiction of the consumer as powerful contributes to this ambivalence and general worry.

## 6 Conclusions

This study aimed to explore the consumers' perceptions of the milk industry from an environmental perspective and the perceptions of the debate thereof. The study also aimed to find possible explanations to how the perceptions of the milk industry emerge.

The result of the study suggests that within the consumer group, the environmental perception of the milk industry differs and is multifaceted. The consumers draw upon different interpretative repertoires when describing their perception, where the most salient is 1) the Swedish industry as essentially different, and 2) ambivalence regarding its environmental impact. Conviction both in favour and against the industry is visible, suggesting a polarization. However, a majority of the respondents express insecurity. Amongst the experts the perceptions are divided and a general disagreement is visible.

The result further suggests that social learning is applicable to how the perceptions emerge. Media and social media in particular can also be of help in order to understand this emergence. The results imply that social learning also occurs through mediated communication. Social media's role as agenda setter is visible, although the consumers distance themselves from its influence.

The perception of the debate differs between the consumers, but overall it is not seen as salient or central in any way. However, it is perceived as emotional and polarized. This view is shared with the experts. Unlike the consumers, the experts view the debate as both central and salient.

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# Appendices

## Appendix 1 – Participants

<b>Consumers (duration of interview)</b>	<b>Age</b>	<b>Gender</b>	<b>Education</b>
<i>Consumer 1 (20 min)</i>	25	Female	Agronomist
<i>Consumer 2 (39 min)</i>	26	Male	Agronomist
<i>Consumer 3 (35 min)</i>	24	Female	Veterinary
<i>Consumer 4 (30 min)</i>	25	Female	Environmental communication
<i>Consumer 5 (44 min)</i>	25	Female	Environmental communication
<i>Consumer 6 (49 min)</i>	30	Male	Environmental science
<i>Consumer 7 (20 min)</i>	25	Male	Law
<i>Consumer 8 (39 min)</i>	27	Male	Economy and IT

<b>Experts (duration of interview)</b>	<b>Gender</b>	<b>Occupation</b>
<i>Expert 1 (51 min)</i>	Female	Researcher on the environmental impact of food at a Swedish University
<i>Expert 2 (33 min)</i>	Female	Senior Lecturer in animal nutrition at a Swedish University
<i>Expert 3 (23 min)</i>	Male	Researcher on strategies to decrease environmental impact from food production at a Swedish University
<i>Expert 4 (48 min)</i>	Female	Expert on climate and environment at a branch organization for milk farmers
<i>Expert 5 (47 min)</i>	Female	Sustainability manager at a Swedish dairy company

## Appendix 2 - Interview guides

### 1 Consumers

#### Introduction

- Occupation
- Age
- Diet
- How do you choose milk products?

#### Perception of milk industry

What is your perception of the milk industry/production?

- *Positive/negative/neutral?*
- *Any difference between Swedish production and production in other countries?*

From an environmental perspective?

- *Positive/negative/neutral?*
- *Why?*
- *How would you define “environment”?*

Have your opinions regarding this always been the same?

- *If they have changed: what reasons could there be?*

Have your consumption of milk products always been the same?

- *If it has changed: for what reasons?*

#### Origin of perception

What do you believe have shaped your perception?

What is the perception of your friends and family?

- *Do you think your perception would have been different if you had another social life?*
- *Do you think you have influenced someone else in this?*

If you want information about this, where do you turn?

- *Do you see these sources as reliable?*
- *Is it easy to find information?*
- *Would you say you actively seek information about this?*

#### Debate

Do you view this as a topic that is debated?

- *If yes: how do you view the debate?*
- *Have you been engaged in it?*

Do you see the debate as proportionally sized?

- *In relation to other societal issues?*

Do you experience a dialogue regarding this?

Do you talk about this?

- *If yes: In what forum? With whom?*

Do you do anything to influence in these question?

- If yes: how?
- Do you feel optimistic towards your possibility to influence?

What do you think will happen in the future?

- *If you could decide, what would happen?*

Is there anything else you have thought about related to this?

## 2 *Experts*

Who are you and what is your occupation?

Tell me about your research

How do you view the milk industry from an environmental perspective?

How do you view the debate?

- *How have you been involved?*