Organic Conversion

Converting Farmers' Motivations and Experiences

Integrated Food Studies

Master's thesis by Camilla Lund (study no. 20141112)

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Abstract

This Master's thesis investigates converting farmers' motivations behind and experiences with organic conversion. The interest in the subject was founded in the rapid increase and interest in organic conversion among farmers during recent years. The relevance is resting on that there are no newer research available on the subject. Therefore, semi-structured interviews with five converting farmers on Mid and North Zealand were carried out in March and April, 2017. Before doing the interviews, a review of previous studies was done, to which the new findings are analytically compared by using a modified Socio Ecological Model. Factors such as economy, the organic mind-set, culture and values, the social accept of organic production from the surroundings, administrative issues and rules, and the inspections were some of the main themes found to have an influence on the farmers' choice of and experiences with organic farming. The findings from the new study with the five farmers represents only a small geographical area of Denmark, and generalizing conclusions must therefore be done with caution. However, they are evaluated applicable to other areas with similar demographic structures. Simultaneously, they are assessed a valuable foundation of subsequent research with focus on for instance the same influential factors in other geographical areas, or with an in depth focus on one or two of the themes detected, e.g. the social accept of organic production.

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1.0 Introduction

One sunny spring morning, driving on narrow roads, and with the early sun making the dew sparkle on the open hilly grassy fields, made it difficult to not loose oneself into tell an enchanted narrative of organic farming. Arriving at the farm, the fresh cold air tickled the nose and distanced cow roars welcomed us. The aim of the visit was to make an organic conversion check, which immediately replaced the astonishment with a professional seriousness, underlining perfectly that conversion to organic farming contains other perspectives than just a vision of living in harmony with nature. To the farmer, it is business and livelihood.

This small snapshot of an experience, received during the data collection of this thesis, rather well introduces the background of the chosen subject and aim of the research. Statistics show that since 2015, there have been a rapid increase in the interest of organic conversion (Brandt, 2016). And in the end of 2016, The Ministry of Environment and Food of Denmark published that 1.128 farmers had applied for financial support to organic conversion or expansion of their organic area (Landbrug og Fødevarer, 2016, c). Based on this, a total increase of organic farm area of 34 percent in 2016 and 2017 has been estimated. Simultaneously, SEGES, the Danish Knowledge Centre for Agriculture[1], reported in February 2017 an increase in booked conversion checks from 287 in 2015 to 450 in 2016. With an expectation of the same request in 2017 (Landbrug og Fødevarer, 2017 a). By publishing The Organic Plan 2020 in 2012, also The Danish Government have shown an interest in and support of the Danish organic production, with the main goal to increase the organic agricultural area by 50 percent before 2020 (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 3).

The reason behind centring this Master's thesis around organic production was primarily due a personal interest from the author. Whereas the choice of focusing the investigation on organic conversion was fostered particularly by the many releases mentioning the rapid growth in organic conversion, as outlined above. Therefore, an interest in the farmers' motivations behind choosing to convert to organic production arose, which immediately became the research aim of this thesis.

In 2008 Egon Noe published a literature review of qualitative and quantitative researches and personal studies, carried out since the 1990's on the drivers and barriers behind organic production, that, at that time, had essential influence on conversion to organic farming (Noe, 2008, p. 293). Based on measurement of the interest in organic conversion, he found that only few farmers had serious considerations about organic

[1] SEGES is a non-profit research organization, owned by the Danish Agriculture and Food Council. It is the main supplier of professional knowledge for the agricultural professions, aiming at providing the Danish farmers and horticulturalists with the best tools for running their businesses more profitably and with attention on the environment and animal welfare (Seges, 2017).

conversion in the future, and concluded that a new 'conversion-wave' seemed unrealistic *"under the current circumstances"* (Noe, 2008, p. 284+286). In perspective to the rapid increase in organic interest and conversion during the last couple of years, described above, this is an interesting conclusion. And therefore, it seems relevant to re-investigate the conditions and factors motivating the farmers today, compared to the results from research done previously. Simultaneously, Noe (2008) points to the fact that since the beginning of 2000, research on this topic has been limited (Noe, 2008, p. 273), which is also a central incentive for choosing this subject and for carrying out a new research. Therefore, semi-structured interviews have been made with five converting farmers on North and Mid Zealand, to investigate the motivations behind the farmers' interest in and experiences with organic conversion.

With inspiration in The Socio Ecological Model, a Modified Socio Ecological Model (MSEM) has been developed as a tool to visualize and analyse the factors motivating and influencing conversion from different societal layers. It is used as frame for comparing the findings from the five new interviews against results from previous studies, to answer following research question.

1.1 Research question

Based on interviews with converting farmers on North and Mid Zealand, this thesis investigates:

What are the farmers' motivations behind and experiences with the choice of converting to organic production? And how are they corresponding to findings in previous studies?

2.0 Delimitations and specifications

The thesis will only be focusing on the motivations and expectations from the perspective of the farmer, and therefore not including for instance political or counsellor viewpoints. Also, the focus within the thesis is solely on farmers resident on North and Mid Zealand that are in the conversion phase.

An insight to organic subsidies, applications and duration is given, whereas the policies behind the organic subsidies are not included. However, a discussion of whether subsidies is the right way to increase organic produce and area or not is discussed in the end of the thesis.

Additionally, focus is only on subsidies provided in relation to organic conversion and farming, and is therefore not including other agricultural financial grants.

Knowledge from studies about organic conversion from other countries than Denmark is included to get a broader perspective on conversion to organic farming. However, research about conversion and organic farming from Denmark has been preferred, as the surrounding circumstances within Danish farming may differ from other countries – e.g. in relation to subsidies, consumer and retail demand, infrastructure, marked conditions, etc. – and will therefore serve as a better basis for comparison with the new research of this thesis.

In relation to organic conversion, a lot of debate and research is available in relation to whether organic production is more beneficial for the environment and/or economically profitable for the farmers and the society or not. Though, these are important discussions in relation to organic production, this perspective is not included in this thesis, as the focus is directed converting farmers, who have already taken the decision of organic production.

Quotations used from Danish literature have been translated into English as close as possible to the original text. Likewise, have all quotations used in the results and analysis from the interview transcriptions.

Because the thesis had to be handed in at June 8^{th,} 2017, new developments and statistics on organic farming occurring after the beginning of May 2017 has not been added.

Since the interviews with the organic counsellors, Landboforeningen (The Agricultural Association) Gefion have changed its name to 'Viden til vækst', VKST. This new name will be used, though called Gefion at the time the data was collected.

3.0 Glossary

A description of the different terms used during the thesis:

- Converter: an organic farmer converting or having converted from conventional farming
- Beginner: an organic farmer with no previous farming experiences
- Full-time farmer: a farmer, whose total income comes from agriculture
- Part-time farmer: a farmer with secondary work and income beside from farm production
- Spare-time farmer: a farmer, whose main income comes from non-agricultural employment
- Defector: a farmer that ceased organic farming and/or converted back to conventional farming
- ERFA-network: a smaller group of people with the same professional interests

4.0 Thesis reader guide

The thesis is divided into three parts:

Part 1 includes general information on organic production and counselling, as well the philosophy of science and theory used.

Part 2 contains an elaboration of the development of organic area and farmers since 1970, as well as The Danish Government's two Organic Actions Plans. This part also presents the results from the literature review done on farmers' experiences and motivations behind organic production.

Part 3 contains the research carried out in relation to the thesis, describing the methodology, the results, the analysis and the discussion hereof. Part 3 is finished with conclusions and further perspectives.

Each of the tree parts will be introduced throughout the thesis.

PART 1

The first part of the thesis begins with a general information on the chosen geographical area of research and of organic production, legislation and counselling. This is followed by an elaboration of the philosophy of science and theoretical framework used as frame within the thesis. The latter including a description of the Socio Ecological Model and the qualitative interview as research method.

5.0 Organic farmers in North and Mid Zealand

In several studies of organic conversion in Denmark it has been found that there are huge variations in the conversion density across the country. Particularly smaller farms centred around the larger cities have been converting more frequently, such as for instance in the Metropolitan area of Copenhagen (Frederiksen & Langer, 2010; Risgaard, Frederiksen & Kaltoft, 2007). In a study, comparing West-Zealand with Ribe in Jutland, it was found that the number of organic *beginners* in West-Zealand was twice as high compared to Ribe. The possible explanation was that urbanites from the Metropolitan area of Copenhagen moved to the countryside (Tress, 2001, p. 136). In the same study, it was found that in West-Zealand mainly spare-time farmers with mixed productions was represented. For both areas, one third the conventional farmers lacked a professional education, but in west-Zealand, these farmers were more positive towards organic conversion than the farmers in Ribe (Tress, 2001, p. 140). Though, these studies have been made some years ago, the composition of mainly small spare-time farmers resident on Mid and North Zealand have been confirmed in the interviews with the organic counsellors done in relation to the research of this thesis (own research). Additionally, percentages from the conversion checks carried out by VKST in 2016 shows that 41 percent have chosen to convert and that 41 percent were mixed spare-time productions (Ibid).

6.0 Organic Counselling and Conversion Checks

On Zealand, the main part of the organic counselling and conversion checks are performed by 'Økologisk Rådgivning' (Organic Counselling) – part of the Agricultural Association VKST resident in Sorø on Mid Zealand, and by Agrovi – owned by the Agricultural Association of North Zealand (Nordsjællands Landboforening). But also, Organic Denmark have a few counselling activities on Zealand (information based on telephone conversations with counsellors from Organic Denmark). They provide counselling about organic legislation,

subsidies, principles and optimization of the organic production, etc. to both organic farmers and farmers considering organic conversion (Agrovi Videncenter, 2017; ØkologiRådgivning Danmark, 2017).

Before making the decision of converting to organic production, the conventional farmer has the possibility of receiving a free conversion check of the farm. As it will be described later, in the elaboration of The Government's Organic Plan 2020, the funding of the conversion checks are by The Government assigned the different providers carrying them out; in the case of this thesis 'Organic Counselling', 'Agrovi' and 'Organic Denmark'. The conversion check is carried out on the farm by a conversion consultant, who examines the potentials and possible barriers to conversion for the individual farm. Concurrently, the farmer is oriented about rules and subsidies as well as factors such as production possibilities and changes hereof, marketing, time schedule for conversion, and so forth. After the check, the farmer receives a summary including a conversion plan (Økologisk Rådgivning, 2017; Økologisk Landsforening, 2017), which helps the farmer's subsequent decision-making. A report by The Danish Agriculture & Food Council from 2011, interviewing 20 farmers, who had received a conversion check, showed that 60 percent found it very useful and that 25 percent chose to convert afterward (Landbrug og Fødevarer, 2011, p. 1-2).

7.0 Organic Production and Legislation

The organic philosophy centres around four basic principles: 'The Principle of Fairness', 'The Principle of Health', 'The Principle of Ecology' and 'The Principle of Care' (Seges, 2015, p. 2). When producing organically, the aim is to use the resources of the nature, rather than controlling nature, as nature is perceived as one unit with its own significance (Jacobsen, 2001, p. 9-10). The goal of organic farming is therefore to pursue a sustainable production that takes care of the environment, nature, and animal welfare, meaning that: the living conditions of the farm animals must correspond with their natural behaviour and needs, that the natural fertility of the earth should be preserved, e.g. by crop rotations, and only to use green and livestock manure and not chemical fertilizers and pesticides, to mention a few (SEGES, 2015, p. 1-2; Jacobsen, 2001, p. 10).

The principles and rules attached to organic production have influence on the farmer's possibilities, which results in organic farming being less intensive and therefore with a lower yield. The comprehensive rules on organic production, processing, distribution, labelling, and inspections are developed by the EU, described in a series of Regulations. They must be applied in all EU member states. With basis herein, a Danish organic law have been adopted, which is pronounced in several notices and instructions, and have for instance implemented more strict rules within organic livestock and pig-production (SEGES, 2015, p. 8; Miljø- og

Fødevareministeriet, 2017; European Commission, 2017). They will not be elaborated further into details within this thesis, but can be reached at: Official Journal of the European Union (2007) and The Danish Agrifish Agency (2017) (see references).

The conversion to organic production takes two years and principally, all animals must be born and live their entire live in accordance to the organic rules, before they can be sold as organic (Landbrug og Fødevarer, 2016 a). The organic authorization in Denmark is approved by The Danish Agrifish Agency, requiring that the production is satisfying EU and Danish national regulations, which is also the case if financial subsidies must be approved (Landbrugs- og Fiskeristyrelsen, 2017 a). The farmer obligates for a five-year period. The main part of the financial aid schemes is provided from the EU, but are in Denmark administrated by The Danish Agrifish Agency and provided as organic area-subsidies with a possibility of supplementing conversion subsidies of 1.200 DDK/Ha/year within the first two years of the conversion period. The subsidies must be applied every year (Landbrug og Fødevarer, 2016 a; Landbrugs- og Fiskeristyrelsen, 2017 b). Once a year, inspections of the organic farms are carried out by inspectors from The Danish Agrifish Agency. These inspections are announced beforehand, but also extra unannounced inspections are performed each year (Seges, 2015).

8.0 Philosophy of Science

Thurén (1997) describes philosophy of science as the foundational position behind peoples' opinions (Thurén, 1997, p. 9). The phenomenological and hermeneutic philosophies serve as scientific foundation of this thesis. Phenomenology is used particularly as basis to understand the perspective from where the data has been collected and later presented. Whereas, the hermeneutics is more a backbone of the research of this thesis. The two philosophies and their usage within the thesis are presented in the following.

8.1 Phenomenology

Phenomenology as philosophy was first introduced in 1900 by Edmund Husserl, as a reaction against the scientific view of positivism, because natural science performed a strict, objective and unbound connection to subjective matters (Gyldendal Den store Danske, 2017 a; Zahavi, 1997, p. 139). The publishing of his first phenomenological work *Logische Untersuchungen (1900-1901)*, was a breakthrough of the philosophy of phenomenology, as this contained the first detailed analyses of its key concepts (Zahavi, 2001, p. 15). It was later developed by Martin Heidegger, Jean-Paul Sartre and Maurice Merleau-Pontry in more existential philosophical directions (Kvale & Brinkmann, 2015, p. 48; Gyldendal Den store Danske, 2017 a).

Phenomenology is a theory of knowledge, which involves a focus on consciousness and *lifeworld,* with an openness to and with the aim of exploring and describing experiences from the perspective of the subject. Phenomenology perceives subjectivity as essential to the construction of reality, as the structure and appearance of the world is depended on and made possible by the subject (Zahavi, 2001, p. 81+83-84). It is an experience philosophy, investigating occurrences before they are subsumed into a conceptual system (Gyldendal Den store Danske, 2017 a). "*The Lifeworld is a realm of original self-evidences"* (Neamathisi.com), defined by Husserl as "*a place distinct from and different to the more systematic observation and considered reflection that characterizes science"* (ibid) and is characterized as a world of situated, perspective, and approximative truths (Zahavi, 1997, p. 139; Zahavi, 2001, p. 186). *Lifeworld* is connected to an *acting physicality* of urges and needs, birth and death, fellowship and tradition (Zahavi, 2001, p. 195).

Phenomenology is commonly used as conceptual framework within qualitative studies, seeking to describe – as accurate as possible – the experiences of social phenomena and world-experience from the viewpoint of the subjects (Kvale & Brinkmann, 2015, p. 48+69.) Simultaneously, the researcher must try to "*put foreknowledge in brackets"* in the searching of "*unalterable essential meanings of the descriptions"* (Kvale & Brinkmann, 2015, p. 81) – called *Reduction,* – meaning that the researcher must face the phenomenon without referring to previously obtained experiences and theories related to the phenomenon (Norlyk & Martinsen, 2008).

In the 1930's Alfred Schultz developed *phenomenological sociology,* which, like traditional phenomenology, studies phenomena in people's lifeworld. In extension, the aim is here to study the changes of the phenomena, e.g. changes of daily habits and routines, and to interpret activities and social relations of the cultural patterns and social structures, in which our everyday life is deeply integrated. In contrary to Husserl, Schulz focused more on inter-subjectivity and the reciprocal understanding of face-to-face relations, indicating that the micro-world of our everyday life can be connected to structures formed by the society (Gyldendal Den store Danske, 2017 b).

8.1.1 Phenomenology in this thesis

In this thesis, phenomenology is used as the philosophical approach behind the collection and handling of interview data, trying to investigate the interviewed farmers' perspectives on conversion to organic production. However, in contrary to the intention of phenomenology of leaving out foreknowledge, it was found important to gain background knowledge of organic production and of research on organic conversion, before doing the interviews. This perception of preunderstandings is central within hermeneutics, which is elaborated in the following.

8.2 Hermeneutics

With inspiration in Martin Heidegger's theory of the human understanding, Hans Gadamer presented his perspective on philosophical hermeneutic in 1960, unfolding the perception, that people will always have a historical preunderstanding. This means, that people not only perceive the surrounding world through its senses, but that our preunderstandings becomes an active and essential element in the understanding of a given phenomenon (Norlyk, & Martinsen, 2011; Gyldendal Den store Danske (2017 c).

Hermeneutics means "the science of text interpretation", where the understanding of *text* has developed through out time to also include discourse and acting. Therefore, the knowledge about motives behind people's acting and expressions is always incorporated into the context of other assumptions, values and practices (Kvale & Brinkmann, 2015, p. 80-81). The interpretation of meaning is starting as an often unclear and intuitive understanding of the text 'as one whole', and is a continuous interpretative and reflective process back and forth between parts and whole. This circular interpretation, which makes it possible to obtain a deeper understating of meaning, is a central concept within hermeneutics (Kvale & Brinkmann, 2015, p. 275). The philologist Friedrich Ast was probably the first to describe the circularity of interpretation, presenting in 1829 that: *"the same way that the whole is, of course, understood in reference to the individual, so too, the individual can only be understood in reference to the whole"* (Stanford Encyclopaedia of Philosophy, 2016). The hermeneutic circle – or "hermeneutic spiral", which might be a more accurate definition – creates a better preunderstanding due an improved expertise obtained throughout the interpretation (Thurén, 1997, p. 57).

In relation to qualitative studies, hermeneutics makes it possible for the researcher to analyse an interview as a text, and thereby enables to "*notice the contextual horizon of interpretation as history and tradition represents*" (Kvale & Brinkmann, 2015, p. 81). The researcher's preunderstanding – e.g. a theory – can be integrated in the research process as a starting point, but also incorporated at a later state during the research (Norlyk & Martinsen, 2011).

The qualitative interview takes place in an interpersonal context; therefore, it is more a meeting – and ideally a fusion – between two '*horizons of understanding'* rather than a perception of understanding as a reconstruction of the researcher's intention (Kvale & Brinkmann, 2015, p. 84; Gyldendal Den store Danske, 2017 c).

8.2.1 Hermeneutics in this thesis

The hermeneutic perspective, that the researcher has preunderstandings when doing qualitative data collection, was used as philosophical frame in the interviews with the farmers and counsellors. This will

influence both the interview situation as well as the later interpretation, which will be described and discussed later.

Particularly, the hermeneutic spiral is used as a basis for describing the ongoing reflection between interpretation and (pre)understanding after every interview was carried out. This process will be picturized in '*The Development of Methodology'*. Also, the hermeneutic spiral serves as inspiration in the analysis of the gathered interview data.

9.0 Theoretical Framework

The Socio Ecological Model (SEM) serves as inspiration to the theoretical framework of this thesis, from which the data collected will be structured and analysed. This choice of theory is partly founded in Noe (2008) pointing to the fact that from a sociological perspective: *"organic is not a construction of cultivation rules; but a living organization, which is developed and maintained by the actors that are mobilized into and contributes to the organic network"* (Noe, 2008. P. 281).

In the following; at first, the original model will be described, offering a smaller insight to the origin, development and usage of the model. After this, a Modified Socio Ecological Model (MSEM) is introduced as a frame for describing an analysing the factors influencing farmers converting to organic. Also, the MSEM will be used later to visualize the findings of reasons behind organic farming in previous studies compared to the findings from the research of this thesis.

9.1 The Socio Ecological Model

In the 1970's, Urie Bronfenbrenner first introduced his ecological paradigm, which he developed into an ecological systems theory to explain how everything in the surrounding environment of the child had influence on its growth and development (Oswalt, 2017). Picturized by referring to Russian dolls, he described how he saw behaviour as influenced by a series of layers impacting each other (VCE Physical Education, 2011–2014). He argued that *"in order to understand human development, one must consider the entire ecological system in which it grows"* (Bronfenbrenner, 1994, p. 37). The theory describes five social systems: the micro-, meso-, exo, macro- and chronosystem, where the innermost level, *the microsystem*, represents the individual, whose development is related to and a function of the interaction between the different levels of the surrounding environmental layers (VCE Physical Education, 2011–2014; Bronfenbrenner, 1994, p. 37). The *microsystem* is the direct environment of the individual, e.g. pattern of activities, social roles and interpersonal relations; the *mesosystem* is the relationship between two or more settings within the

individual's microsystems; the *exosystem* contains two or more contexts, in which the individual is not actively participating in at least one, but which influences the individual's development; the *macrosystems* is the actual culture or sub-culture of the individual, which includes patterns of the micro-, meso-, and exosystems e.g. the socioeconomic status, ethnicity, material resources, life-styles, hazards, etc. and; the *chronosystem* is an extension of the environment into a third dimension, as it contains shifts or consistency within the lifespan of the individual (Sincero, 2017; Bronfenbrenner, 1994, p. 39-40).

With inspiration in Urie Bronfenbrenner's Ecological Systems Theory, in 1991 Göran Dahlgren and Margaret Whitehead developed the *Dahlgren-Whitehead 'rainbow model'*. The purpose of the rainbow-model was to explore the social factors influencing the health of individuals, and therefore maps the relationship between the individual, their environment and health (Economic and Social Research Council, 2017). The rainbow-model (Figure 1), also known as the Socio Ecological Model (SEM), – which will be the term used in this thesis – has been used as inspirational source and modified to fit various of other researches on behaviour, as well as different classifications of environmental influences, particularly within health studies (VCE Physical Education, 2011–2014). For instance, it has been used in an investigation of common barriers to healthful eating and physical activity, it is used by the Colorectal Cancer Control Program as a multi-level approach to colorectal cancer prevention (Fitzgerald & Spaccarotella, 2009; CRCCP, 2015), but also in relation to describe influences of different levels of foodscapes on meal-experiences and healthy eating environments (Mikkelsen, 2011, p. 212).

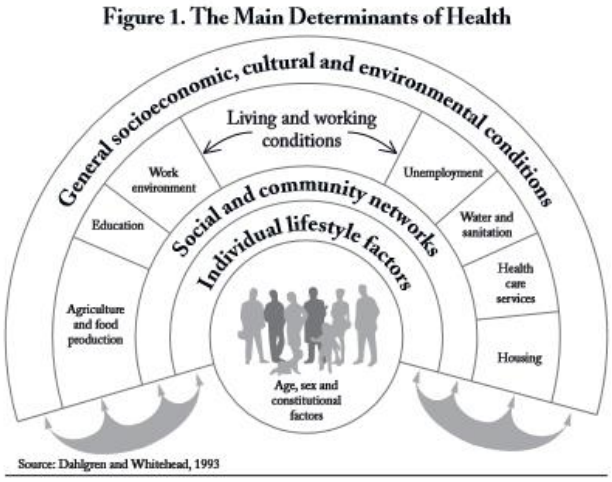

Figure 1: The Dahlgren-Whitehead 'rainbow model' by Göran Dahlgren and Margaret Whitehead from 1991 (Dahlgren & Margaret Whitehead, 2007, p. 20)

The centre represents the individual, surrounded by the four hierarchical levels of influence: interpersonal, organizational, community, and policy (CRCCP, 2015). The *individual* level represents the personal characteristics e.g. knowledge, attitudes, age, gender, values, developmental history, level of education, motivation, skills, and so forth. The *interpersonal* level includes formal (and informal) networks, the intermediate community, family, friends, professional networks, etc. The *organizational* level includes organizations and social institutions with rules and regulations for operations as well as social and community networks. The *community* level is the living and working conditions and is including the build ('man-made') environment, access to essential goods and services, businesses, associations, and the relationship among organizations, informal networks, etc. The outermost layer, the *policy* level, is referring to the overall society, containing local, state, national, and global laws, regulatory or policy making actions as well as economic, cultural and environmental factors with influence on the conditions analysed within the individual level. (www.unicef.org, 2004; VCE Physical Education, 2011–2014; Dahlgren & Whitehead, 2007).

Though, the original model by Dahlgren and Whitehead visualizes and analyses the social influences on health behaviour (Dahlgren & Whitehead, 2007), the model has been modified to fit the subject of this thesis, as a frame for investigating the social layers of determinants influencing the motivations, barriers and experiences of farmers converting to organic production (Figure 2).
In the Modified Socio Ecological Model (MSEM), the community and organizational levels have been assembled into one layer, as this was persuaded more appropriate in the case of mapping the social influences of the converting farmers.

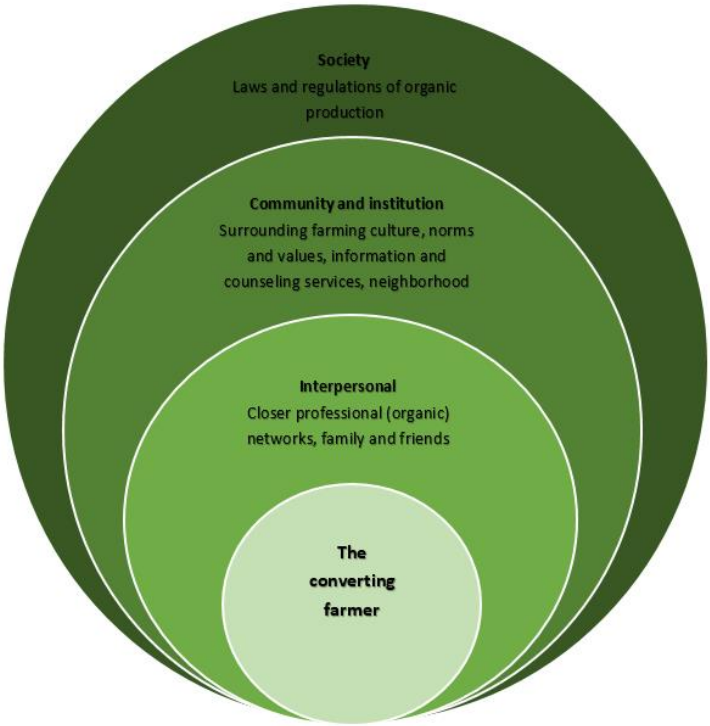

Figure 2: The MSEM for mapping influences on farmers converting to organic production

The MSEM shows 'the converting farmer' in the inner circle, to whom the influences and consequences of the surrounding layers are related. This layer is representing the *interpersonal* level, describing the personality traits of the farmer. The *interpersonal* layer represents the closer professional and familiarly networks of the farmer, who have a direct influence on the choices of considering, entering or deselecting organic conversion. The *community* and *institutional* level contains the more distanced aspects affecting the choice of organic production. That might be access to relevant information about the conversion possibilities or costs, norms, and culture about farming in the surrounding area, e.g. how organic is perceived by other farmers nearby. The outer layer, *Society,* represents the policy-level, referring to influences both at a global level of organic EU legislation as well the Danish laws and regulations, political actions, strategies in the local municipality, etc.

All layers are interconnected, as "*the interrelationships between people and their environment are dynamic*" (VCE Physical Education, 2011–2014), defining that changes occur due to a combination of influences from both individual and environmental/policy levels (ibid). Projected to the subject of converting to organic farming, this means that the choice of conversion is a function of a reciprocal impact between the individual farmer's personal features and the surrounding layers of the (organic) farming society and networks.

The MSEM will be used later to map and visualize the influential factors found in existing literature as well as the findings from the interviews done within this thesis, as a methodological frame for analysing and discussing the findings against each other.

9.2 Qualitative Research

The following is a basic description of the qualitative interview, which is used as research method within this thesis. It contains an elaboration of the strengths and weaknesses of the qualitative interview, a definition of the term semi-structured, the relationship between the researcher and interviewed, ethical considerations, and a description of *gate-keepers,* with an insight to the strengths and weaknesses hereof. The elaboration ends up with a description of the 7 steps of the qualitative interview as research methods, including references to how the steps have served as structuring tool of the thesis.

The philosophical foundation of the qualitative research done in relation to this thesis is resting on both a phenomenological and a hermeneutic perspective, as elaborated above. The development of particularly the thesis subject and interview guide, due to a continuing interaction between (pre)understanding and reflections of the hermeneutic circle, is described thoroughly later in '*Development of Methodology'*.

9.2.1 The qualitative interview

Kvale & Brinkmann (2015) describes that, the qualitative research interview *"seeks to understand the world from the viewpoint of the subjects, unfold the meaning of their experiences and uncover their lifeworld prior to scientific explanations"* (Kvale & Brinkmann, 2015, p. 19). Therefore, the qualitative research enables a production of knowledge that gives rich, complex and compelling descriptions about the research subject, investigated from the perspective of the interviewed (Kvale & Brinkmann, 2015, p. 75; Trost & Jeremiassen, 2010, p. 25). In comparison, the quantitative research aims to – at a broader level – investigate exact and general tendencies and conditions, and to indicate frequencies that are representative of a given area (Trost & Jeremiassen, 2010, p. 32; ku.dk).

Though qualitative research has gained more respect as research method, its challenge is still that quantitative research data often receives more attention and is more frequently referred to, whereas qualitative studies at times are perceived less relevant or less credible – or even as "*preliminary studies to the "real quantitative studies"* (Trost & Jeremiassen, 2010, p. 26-27+32-33). Still, it is important to remember that qualitative data is not suitable for hypothesis testing, and will not be statistically representative due to the often limited numbers of interviewed persons (Trost & Jeremiassen, 2010, p. 35+148; Kvale & Brinkmann, 2015, p. 153). Nevertheless, the choice of research method is dependent on the purpose of the research, where the qualitative study is most appropriate if the aim is to investigate certain patterns and understand

cultural, situated, and everyday aspects of the human mind and acting more into depth. In reference to phenomenology, the theme of the qualitative research interview is an open-minded description of the lifeworld of the interviewed (Trost & Jeremiassen, 2010, p.33; Kvale & Brinkmann, 2015, p. 31-32+50).

9.2.2 The Semi-Structured Interview

An interview is a social interaction between interviewer and the interviewed, and in general, the qualitative interview is characterized by having a high degree of structure and a low degree of standardization (Trost & Jeremiassen, 2010, p. 46). Standardization refers to the uniformity of the questions and of the situation in which the different interviews were carried out. Variations in the types of interviews can be reflected in the level of structure, referring to the degree of details of the questions and possibilities to answer (Trost & Jeremiassen, 2010, p. 46.). In reference to Kvale & Brinkmann (2015) the term 'semi-structured' interview is used as theoretical frame in this thesis. The semi-structured interview is carried out as a professional conversation, using an interview guide, and is characterized as something placed in the tension between the open everyday conversation and a closed questionnaire (Kvale & Brinkmann, 2015, p. 49). The semi-structured interview guide contains all questions to come across during the interview, but they are open to changes, and do not necessarily need to be followed in a strict order, as it is important to follow the specific answers, associations, and histories told by the interviewed (Kvale & Brinkmann, 2015, p. 178; Trost & Jeremiassen, 2010, p. 58). However, Trost & Jeremiassen (2010) disagree with the term 'semi-structured' arguing that it is an unclear definition. Rather they find it appropriate to define the interview as structured – as it investigates only one topic – and where the questions are open (Trost & Jeremiassen, 2010, p. 44).

9.2.3. Interaction Between Interviewer and The Interviewed

As mentioned above, the qualitative research interview is a professional conversation and a constructed interaction between two people, equally acting and affecting each other (Kvale & Brinkmann, 2015, p. 53). Therefore, the power relationship between the researcher and interviewed will always be asymmetrical as; on the one hand, the interviewed is an expert in his own life, but, on the other hand, the researcher is an expert in his field and the only one knowing the questions to be asked, and is thereby directing the focus of attention and questions towards the topic investigated (Kvale & Brinkmann, 2015, p. 22+55; Trost & Jeremiassen, 2010, p. 96). Besides this, the aim is to pursue an equal relationship, be solidary and, in an ethical perspective, be aware not to "seduce" the interviewed to say something not intended to say (Trost & Jeremiassen, 2010, p. 96+97).

9.2.4 Ethics

Considerations about ethics are important in relation to the qualitative investigation, because, when gathering in depth insight to the interviewed persons' motivations, values and lifeworld, this holds a risk of violation if exceeding the limits of the interviewed (Kvale & Brinkmann, 2015, p. 106). The interview is a

tension between a goal of exploring the private life of people and a simultaneous wish of respecting the interviewed, but risking that the empirical data only *"scratches the surface"* (Kvale & Brinkmann, 2015, p. 106).

The general themes arising when considering ethics in relation to qualitative research are: 1) *Informed consent*; the participants must be informed about the content and aim of the interview, as well as the risks and benefits of participating (Kvale & Brinkmann, 2015, p. 116). However, Trost & Jeremiassen (2010) disagree in the latter, arguing that it seems impossible to define what the interviewed perceives as risks or benefits in the specific context (Trost & Jeremiassen, 2010, p. 130). 2) *Confidentiality* is the second ethical consideration to be made, which deals with providing the participants information about the usage of and later access to the gathered interview data, and if the interviewed requests anonymity (Kvale & Brinkmann, 2015, p. 118). Most importantly is it to respect the integrity of the individual, when reporting the results (Trost & Jeremiassen, 2010, p. 133). In relation to this, 3) the *consequences* of participating in the interview must be as limited as possible and must be evaluated before, during and after the interviews. The openness and integrity in the interview situation might seduce the participants to reveal information that they regret later. The difficulty about the consequences is that they are not always predicable (Kvale & Brinkmann, 2015, p. 119). The last ethical subject is: 4) the *role of the researcher*. The integrity of the researcher is essential in relation to the ethical decisions made during the research, and thereby also to the quality of the scientific knowledge received. It is therefore an ethical requirement for the researcher that the published results are as *"accurate and representative towards the field of research as possible*" (Kvale & Brinkmann, 2015, p. 120). The four ethical considerations are useful both in the planning of the interview and during the interview. The latter exemplified by the importance of informing the interviewed before starting the interview about the purpose and usage of the interview and (if relevant) permission to record the interview. Though, it must be determined how much information about the interview subject is given and needed beforehand, as this unintentionally might direct the answers of the interviewed in a certain direction (Trost & Jeremiassen, 2010, p. 129).

9.2.5 The Interviewed and Gate-keepers

The number of interviewees needed depends mainly on the purpose of the qualitative study. If the aim is, as it is with the research of this thesis, to achieve an into depth understanding of the lifeworld of the interviewed, then often only a few cases are necessary. If the number of interviews gets too large, then there is a risk of not having enough time for in-depth analysis of the interviews (Kvale & Brinkmann, 2015, p. 166-167). One point of orientation might be to find variations within the investigated group of people (Trost & Jeremiassen, 2010, p. 147). The selection criteria of the farmers interviewed for this thesis will be described later in '*Data collection'*.

One aspect, that has been essential for establishing contact to the interviewed farmers, are *Gate-keepers.* The term *gate-keeper,* when used within social research, refers to persons who can make access to persons within the research field (Social Research Glossary, 2017). The positive side to the use of gate-keepers is that it enables getting into contact with a group of people that were not necessarily easily reachable. There are different risks though, e.g. that the gate-keeper controls the selection and thereby might define what are 'interesting' or 'relevant' persons to interview; and there is a risk of limited variation or that the persons selected do not meet the criteria hoped for, which the researcher must just accept. Also, it may take long time for the gate-keepers to return with information about interview persons to contract, e.g. because they forget, have a lot of other work, prefers other tasks, or that they are off work or gets sick (Trost & Jeremiassen, 2010, p. 147).

The influence of the use of gate-keepers in relation to the research of this thesis is elaborated more specifically later in '*Data collection'*.

9.2.6 The 7 Steps of The Qualitative interview

The 7 steps of guidance to the qualitative interview, as formulated by Kvale & Brinkmann (2015), serve as methodological frame of this thesis, and is therefore described in the following. The 7 steps are referred to and slightly modified by Trost & Jeremiassen (2010), to fit their theoretical perspective of symbolic pragmatism. In contrast to Kvale & Brinkmann (2015), Trost & Jeremiassen (2010) sees the interview not as '*an exchanging of opinions'*, but instead as a situation, where the interviewer avoids the risk of affecting the interviewed inappropriately by only listening and not sharing personal views (Trost & Jeremiassen, 2010, p. 56). This perspective supports the approach of which the interviews have been carried out with the converting farmers, which is the reason behind including the 7 steps by Trost & Jeremiassen (2010) as well. Still, the believe that the interviewer and the interviewed '*creates something share'* during their interaction, as described by Kvale & Brinkmann (2015), is supported.

The usage in relation to the subject of converting farmers will be included in this review. The 7 steps must be understood as a guide rather than a set of rules, which simultaneously enables moving back and forth between the different steps. The main idea of the 7 steps is for the researcher to make well informed choices (Kvale & Brinkmann, 2015, p. 151).

Step 1: *Thematising*: the formulation of the aim of the research as well as research question. Also, this includes an investigation of background knowledge and theory regarding the subject. This is relevant to be able to ask the right questions (Kvale & Brinkmann, 2015, p. 154+159). In the thesis, knowledge about the development of organic farming, organic legislation and previously done research on farmers' motivations and barriers to organic conversion and production was gathered in this first step.

Step 2: *Design*: is a planning of the research in relation to methodology and design of the interview guide (Trost & Jeremiassen, 2010, p.54). A working paper and considerations about time and resources and number of interviewees needed are done at this step as well (Kvale & Brinkmann, 2015, p. 166). In praxis, as each interview with the farmers and counsellors were carried out, the interview guide was refined due to reflection and revisiting of research data. This process is described comprehensively later with basis in the hermeneutic circle. As a part of step 2, was also the process of establishing contact to the participants – which happened continuously with step 3.

Step 3: *Interview*: is doing the interviews with basis in the interview guide. It is essential to establish a good contact at the beginning of the interview, to motivate the interviewed to "*speak freely and expose their experiences and feelings to a stranger*" (Kvale & Brinkmann, 2015, p. 183). Therefore, a briefing about the purpose and usage of the interview, an introduction of the researcher's background and permission to record the interview (as relevant within present research) is important. Also, the first questions are essential to how the interview proceeds, and must be taken into consideration, when designing the interview guide (Kvale & Brinkmann, 2015, p. 183; Trost & Jeremiassen, 2010, p. 86+88+93). A more thorough elaboration of the design and development of the interview guide and considerations, before doing the interviews with the converting farmers, are presented in relation to the methodological description.
During the interview, it is important to not interrupt and to have patience when the interviewed is doing silent reflections, as well as to be unprejudiced and rather ask about a deepening than think that you, as researcher, knows everything. The interview must be finished with a debriefing (Trost & Jeremiassen, 2010, p. 89+102-104).

Step 4: *Transcription:* this is a transferring of the gathered interview data to workable written material, which enables analysis. There are not an established set of rules of how to transcribe the interview – it depends fully on the researcher, but the transcription procedure must be described in the report. A complete transcription takes a lot of time and is extremely time consuming, but is simultaneously containing all spoken details. In comparison, is it easier to gain a complete overview of interview summaries, but several nuances will be lost in choosing this method. Nevertheless, when spoken language is transformed into text, factors such as tone of voice, irony, etc. are automatically lost, which makes it essential to reflect on validity, reliability and ethics regarding the transcription. (Kvale & Brinkmann, 2015, p. 236+238-239+243; Trost & Jeremiassen, 2010, p. 55+153-154).
In this thesis, a complete transcription of the interviews is chosen – a choice that is explained later in the methodology together with the rules of transcription used.

Step 5: *Analysis*: just like transcription, there is not a definite set of rules on how to do the analysis, besides options of choosing different types of analysis e.g. with focus on meaning or on language. Already, before carrying out the interviews, it must be considered how to do the analysis. Though, this might not make the analysis easier, et enables a more stable foundation of the analysis (Kvale & Brinkmann, 2015, p. 250+258). The most common method used is *coding*; a method inspired by Grounded Theory, which is also the method inspiring the processing of the gathered data from the converting farmers. The goal of coding is to *"develop categories that offers a complete description of the experiences and actions investigated"* (Kvale & Brinkmann, 2015, p. 262), and thereby links keywords to specific sections of the transcribed interviews. Hereafter, when interpreting the coded interviews – and following the hermeneutic philosophy, – a continuously reflectional moving back and forth between the coded parts, the whole text, and its contexts is carried out (Kvale & Brinkmann, 2015, p. 275).

Step 6: *Verification:* this is a description of the results from the interviews as well as considerations about the validity, reliability and generalizability hereof. Trost & Jeremiassen (2010) has changed the latter to 'trustworthiness'. Traditionally, the terms validity and reliability are used within quantitative studies, founded in an idea of objective, static and reproducible results, and therefore seems misplaced within qualitative studies (Trost & Jeremiassen, 2010, p. 138-140). Nevertheless, the three terms have been conceptualized to be usable within qualitative studies *Validity* is about to what extend a chosen method investigates the purpose of the research, and must be considered throughout all 7 steps of the interview, which to a great extend are parallel to the ethical considerations described above (Kvale & Brinkmann, 2015, p. 318+320). *Reliability* is about the consistency, trustworthiness and reproducibility of the study results. Due to its close reference to quantitative studies, a valuation of reliability has been downsized in the thesis. In contrast to quantitative research, *generalizability* or trustworthiness of qualitative studies is not focusing on a universal validity of results. In relation to qualitative case-studies, it is immediately more interesting if the produced knowledge from the interviews can be translated into other relevant situations (Kvale & Brinkmann, 2015, p. 332-333). The *analytical generalizability* is an assessment of to what extend the results can be indicative of what might happen in another situation (Kvale & Brinkmann, 2015, p. 334). In this thesis, the generalizability of the results from the case-studies with the converting farmers are discussed later against the findings of previous studies.

Step 7: *Reporting:* the reporting is the presentation, analysis and discussion of the of methodology and interview results in relation to other literature, the chosen theory and ethical considerations. When writing the report, existing scientific and authoritative criteria must be meet (Trost & Jeremiassen, 2010, p. 55; Kvale & Brinkmann, 2015, p. 339-340). In this thesis, the MSEM is used as tool for the reporting in part 3.

PART 2

The second part of the thesis contains, firstly, an elaboration of the organic development in Demark from 1970-2017, including an insight to relevant strategies within the Governments Organic Action Plans from 2011 and 2015. Secondly, the findings from a literature review of existing research on the topic of 'motivations and barriers behind organic conversion' are presented thoroughly under the headline: *'Farmers' Perspective on and Experiences with Organic Conversion'*. These findings serve as basis for the analytical comparison with the findings from the research done in relation to the thesis, which are presented in part 3.

10.0 Frame of Organic Production in Denmark

In the following, an insight to the development of organic production in Denmark from 1970-2017 will be elaborated, but with particular focus on the period 2007-2017. The reason for emphasizing this limited time-frame is based on the main purpose of The Danish Government's Organic Action Plan 2020 (Økologisk handlingsplan 2020) of doubling the Danish organic area before 2020 compared to the area in 2007. Focus will be on the development in organic area and on numbers of organic farmers, which will be based particularly on statistical data and described with background in research, press releases and newspaper articles. The purpose of this elaboration is to not only give an insight to the development of organic production in Denmark, but simultaneously emphasize some of the external factors and financial funding that might influence the farmers' decision-making of and experience with organic conversion.

Firstly, the background of *The Organic Action Plan 2020* is introduced. The parts of Focus Area 1 and 2, that are most related to organic conversion, are described briefly. This is followed by a more detailed description of Area 3, chosen because it holds the most direct relevance to the subject of this thesis. In 2014, a mid-term evaluation of *The Organic Action Plan 2020* was performed, resulting in *The Organic Action Plan for Denmark – Working together for more organics* from 2015, which contains 7 redefined strategies of the organic expansion in Denmark. Compared to *The Organic Plan of Action 2020,* this plan aims even more visions towards the support of farmers, production and marketing possibilities, which will be elaborated subsequently.

Secondly, the history of the organic development in Denmark before 2007 is covered to a lesser degree, by describing some main historically highlights. Hereafter, as a frame for understanding, the organic development of area and farmers from 2007 to 2017 is outlined.

10.1 The Organic Action Plan 2020

In 2012, The Danish Ministry of Food, Agriculture and Fisheries[2] launched The Organic Action Plan 2020, containing 6 focus areas and several sub-areas, that will receive extra attention and financial support, to meet the main goal of increasing the organic area by 50 percent before 2020 compared to the area of 150.000 in 2007. As part of the Danish Finance Law 2012, an extra 138 million DKK was subsidized to reinforce and promote organic in 2012 and 2013, which was supplementing the area subsidies already provided by the EU. 10 million DKK was provided in both 2013 and 2014 as part of the Rural Development Program to support development of products and technologies that enhances sustainability and organic in the Danish food sector (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 6).

In the Organic Action Plan 2020, The Government's interest in supporting the development of organic production in Denmark is introduced. The interest is based both on wishes of protecting our nature and drinking water, and of increasing animal welfare and biodiversity, which is much in line with the vision of a green transition of Denmark. And, the interest is also reflected in more consumers choosing organic products, which is why The Government finds that organic production has good economically and growth potentials in the future – particularly in relation to export, that is expected to increase by approx. 10 percent per year towards 2020 (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 3).

In Focus Area 1, it is described how The Public Sector must take the lead both by: supporting organic conversion of public kitchens, which should help increase the demand of more organic produced food, and by making the 42.000 Ha publicly owned conventional areas available for new potential organic farmers (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 13+14). In Focus Area 2, a vision of differentiating the subsidies is presented, with the aim of targeting subsidies more specifically at productions with most converting difficulties e.g. fruit and vegetables and poultry- and pig-production (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 17).

Focus Area 3 *'The Farmers and the Conversion'* contains five sub-areas. In the first area, a vision of making the environmental impact assessments more flexible, is described. New notification systems and a smoother application process should help enhance the development possibilities of the organic farmers and make the conversion or expansion of organic production easier (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 18). Area 3.2 describes how investment aids should be targeted more towards organic productions with the most untapped growth and development potentials – and thereby supporting areas that will contribute most to the goal of doubling the organic area by 2020. Particularly poultry and fruit- and vegetables are mentioned as productions holding most challenges. An investment aid of 40 million DKK was earmarked this

[2] Today: Ministry of Environment and Food of Denmark. The Danish Agrifish Agency.

area in 2011 and 2012 (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 19). The third area concentrates its focus on how to maintain the converted organic areas by more optimal land consolidation, because one central barrier to organic conversion or expansion is scattering of farmland (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 20). Area 3.5 focuses on facilitating the use of organic biogas and recycling of nutrients. Organic production is challenged by difficulties of not having access to enough manure, as the fertility of organic produced soil is primarily maintained by crop rotation and (green) manure (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 21). The fifth sub-area of '*The Farmers and the Conversion*' is a vision of making the EU organic legislation and the controls within the different Member States more synchronized. The rules are often differently interpreted and there is a disagreement of the development of the organic set of rules, which leads to uneven marketing competition and might confuse consumers (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 22).

10.2 The Organic Plan for Denmark 2015

In the introduction of *The Organic Action Plan for Denmark - Working together for more organics* it is described that with this plan, The Government wishes to strengthen and bring together the effort of increasing organic in Denmark (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 5). Out of the 7 strategies, particularly strategy 5, *'More and greener organic producers'*, and strategy 6, '*A more resilient organic production'*, are applicable to the subject of this thesis, and will be described more into depth. Immediately it is relevant to also briefly include a few other areas. Strategy 1 and 2 aims at increasing the demand and marketing possibilities of the organic produced products, both by strengthening the export of organic food towards 2018, with a support of 34 million DKK, and by increasing the demand of organic food products in Denmark, e.g. by more consumer information, with a funding of 25 million DKK (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 7+9). In continuance to *The Organic Action Plan 2020*, the support of organic conversion in public kitchens is proceeded towards 2018 with an extra financial support of 58 million DKK (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 10).

In strategy 5, it is described that if the goal of increasing the organic area in Denmark before 2020 is to be reached, the amount of new farmland, that is converted to organic, must increase rapidly. Therefore, in 2015 The Government instituted financial support for conversion-, maintenance-, and sustainability checks, which is described in sub-area 5.1 '*Organic development'*. The conversion check is aimed at the conventional farmer considering conversion, which is a counselling about the organic set of rules, subsidies, economy, and organic marketing channels, offering the farmer a qualified foundation for decision making. Statistical analyses show that grants for conversion checks offered in 2012 have had a good effect on farmers choosing to convert to

organic production afterwards (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 23). Maintenance checks are targeted organic farmers considering to convert back to conventional farming, and the sustainable check offers the organic farmer an assessment of how to make the produce more sustainable in relation to both environmental, economic, and social aspects. The checks are financed by 27 million DKK in the period of 2015-2018 (ibid).

The Government is aware that production costs are often higher when converting to organic production, which is why *The Organic Action Plan for Denmark* is not changing the possibility of receiving subsidies for conversion and maintenance of organic areas. Though, sub-area 5.2 *'Organic area and conversion subsidies'* presents that, from 2015 the subsidies should be targeted only organic area (Organic Area-Grants) and thereby used more efficiently. The Organic Area-Grants consist of a basic of 870 DKK per year per Ha, to which the farmer signs up for a 5-year commitment. The supplementing funding of 1.200 DKK per year per Ha within the first two conversion-years is maintained as previously (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 24). The last sub-area 5.3 focusses on how to make the establishment and maintenance easier for more organic farmers by *'alternative owning and operation modes'*. The suggestion is e.g. shared ownership and better cooperation with for instance cooperatives and funds (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 25).

In continuance to sub-area 3.2 and 3.5 of *The Organic Action Plan 2020*, as described above, strategy 6 *'Strengthening of the organic production'* have focus on a more targeted support, both on the production of plants, fruit and berries (area 6.1) and on better access and recirculation of nutrients (area 6.2). In relation to area 6.1; from 2015 extra grants for reduced use of fertilizer of 500 DKK per Ha per year is assigned plant productions, and an increased Organic Area-Grant of 4.000 DKK per Ha per year is targeted fruit- and berry productions, both with the aim to enhance the economic foundation of larger organic productions (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 27). Area 6.2 describes how The Government wishes to investigate how organic farmers get better access to nutrients and disclose the possibility of returning nutrients to the organic productions, by setting up a working group. One suggestion is to recirculate and reuse nutrients derived from city waste water (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 28). In Strategy 6 also pig-production is covered, as pig-production is expensive and an optimization of feed and new or improved production systems are needed to increase the production of organic pigs in Denmark. For this, The Government have targeted 4 million DKK for development of organic pig-production (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 29).

The elaboration above has given an insight to the visions and initiatives of the Danish Government regarding organic production in Denmark from 2007 to 2020 that were most relevant to the subject of farmers converting to organic production. In the end of the following section, the development of organic area and farmers in the same period will be outlined.

10.3 The Development of Organic Area and Farmers

As introduced above, in the following, the development of the number of organic farmers and of organic area in Denmark will be enclosed. In reference to *The Organic Action Plan 2020*, focus will be mainly on the development from 2007 and forth. Though, to better understand the background of organic expansion in Denmark, at first, the most important milestones of the historically development from 1970's is introduced. This starting point has been chosen with basis in the argumentations made in the historically review of the evolutions of organic agriculture in Denmark by Ingemann (2006) enclosing, that the 1970s was the decade "*where organic agriculture began its existence in Denmark as a real pioneering movement*" (Ingemann, 2006, p. 1).

10.3.1 History of Organic Farming in Denmark

1970-2007

In the 1970s the production, sales and distribution of organic food was very limited and only available in health stores, at markets, and in the stable door. The number of organic farms accounted for no more than a couple of handfuls, consisting of primarily part-time or hoppy farms. But, due to an increase in different environmental issues and concerns, energy crisis and restrictions on growth, the first reflections on alternative farming practices apart from conventional farming was evolving (Ingemann, 2006, p. 9; Noe, 2008, p. 275). A result to this was that, as well as a reaction to the *"post-war industrial society and its foundation on material values"* (Ingemann, 2006, p. 9), a few hippies moved from the bigger cities to rural areas to experiment with alternative and more sustainable farming. Knowledge about how to farm organically was limited, but the need of information was met by an organic farmer in 1973 introducing a magazine that provided practical knowhow in brief articles (Ingemann, 2006, p. 9+11).

From the 1980s, the evolvement in Danish organic agriculture really began and gained more and more popularity. This can be explained partly as a reaction against the increasing industrialization, but also that conventional farming during the 1980s ran into troubles because several reports revealed problems in aquatic environments regarding deoxygenation, fish killed and unacceptable values for nitrate in drinking water. At first, they were met by The Government with a non-decision strategy, but an increasing public

interest and awareness of organic production, as the answer to the environmental issues, made it difficult to maintain this decision (Ingemann, 2006, p. 13-15; Tress, 2001, p. 131). LØJ (Landsforeningen Økologisk Jordbrug[3]) was founded in 1981 with the main purposes of: enhancing organic production in Denmark, to establish the first Danish organic rules, standards and values, as well as introduce an inspection system and an attached label. Also, LØJ was the main actor in developing the first organic legislation on breeding in 1987 (ecoweb.dk; Noe, 2008, p. 275; Ingemann, 2006, p. 13). Simultaneously, the establishment of The Organic Agricultural School in 1982 became the foundation of a development of organic knowledge and practical experiences about organic production during the 80s, which met the increasing demand for education and know-how, and resulted in more farmers becoming interested in organic farming (Noe, 2008, p. 275; Ingemann, 2006, p. 14).

In 1986, two reports were published from respectively The Ministry of Agriculture and The Ministry of Environment, putting organic on the political agenda; the first saying that the importance of organic farming will increase as a niche production in the following years, and the second encouraging to compensate conversion costs (Ingemann, 2006, p. 15). In 1987, The Danish Parliament passed the first organic law with a budget of 10 million DKK the first year, and hereafter the conversion to organic production started to evolve (Ingemann, 2006, p. 22; Noe, 2008, p. 275). From 1987, also the governmental certifying scheme was established, leading to the introduction of the red Ø-label, representing an insurance towards the consumers that the foods were produced and processed according to the organic set of rules (Ingemann, 2006, p. 23). Towards 1992, the number of organic farms increased steadily. But due to limited demand of the produced organic foods, several farmers had to give up organic production in 1993 and 1994. In 1993, FDB[4] launched an "Organic discount" campaign reducing the prices on organic food products to support sales of organic foods in the FDB supermarkets. This simultaneously made organic a part of the FDB brand. The president argued, that though there is "*no scientific proofs that organic foods are better to human health"* they are *"better to nature"* (Ingeman, 2006, p. 24). As a part of the negotiations of the Budget for 1996, a wish of doubling the subsidies for a three-year period was proposed by LØJ, and finally decided in 1998, amounting 11.5 million DKK (Ingemann, 2006, p. 29+30). In 1997, as a contradiction to new organic EU-rules allowing more additives in organic foods, The Minister of Agriculture expressed that the Danish rules, represented by the Ø-label, should not be following this development (Ingemann, 2006, p. 32).

The growing demand of and the public and political interest in and support of organic food products, resulted in a rapid increase in organic farmers and area from 1995 until 2000. But again, to be slowly decreasing

[3] Økologisk Landsforening (Organic Denmark) since 2002
[4] Coop since 2013: Danish cooperation consisting of four supermarket chains and two subsidiaries.

towards 2007, though with a relative stabilization of 2.600 farms since 2006 (NaturErhvervstyrelsen, 2016, p. 8; Ingemann, 2006, p. 18+22). Ingemann (2006) reveals in his historically review, that it was mainly small and middle size farms having the most positive attitudes towards organic farming, but Noe (2008) finds that more and more professional (full-time) farmers converted to organic produce based on an economical perspective (Ingemann, 2006, p. 38; Noe, 2008, p. 285).

2007- 2017

The following elaboration is a continuation of the above description of the two organic plans from the Danish Government, as their focus on and financial support of organic production in Denmark are important to have in mind, when elaborating on the development of organic production in the period of 2007-2017.

In the period between 2007 till 2015, the number of organic farms, when compared to the total number of farms in Denmark, increased in general. From 2009 to 2011 large scale productions above 120 Ha and farms with cows and specialty crops experienced the largest annual gain, compared to other types of organic productions. A growth of organic animal production of 30 percent from 2014 to 2015 was registered, mainly due to a large expansion of egg production and a doubling in production of organic piglets. In contrary, the cattle production decreased in the same period, e.g. with a 12 percent reduce of dairy cows. In the same period, the total organic agricultural area – also including converting farms – increased from 150.207 Ha in 2007 to 179.808 Ha in 2015, accounting 6,8 percent of the total Danish farm area (NaturErhvervstyrelsen, 2016, p. 6+9+11; Ørum, 2011, p. 4). The agricultural area of *fully converted* farms was 153.218 Ha in 2015. In continuance, since 2007 until 2012, the total area of fully converted organic area in Denmark increased every year until it reached a level of 160.982 Ha in 2012. Hereafter, the area has been reducing slightly. One explanation to this sudden decrease is several milk producers leaving organic production due to cessation of milk quotas (ecoweb.dk, 2016). The opposite development is noticed when studying statistics on the number of organic farms, showing a slowly decrease from 2.835 farms in 2007 to 2.564 farms in 2014 before rising to 2.636 converted organic farms in 2015 (Danmarks Statistik, 2017). The organic area in Region Hovedstaden (The Capital Region of Denmark) accounted for 10.110 Ha in 2015, which is 30 percent more than in 2014 (NaturErhvervstyrelsen, 2016, p. 28).

Based on analyses from 2011, it was estimated that to meet the goal of The Organic Action Plan 2020, an 8 percent growth per year of organic converted agricultural area is necessary. In perspective, numbers from 2011 revealed that the annual growth of converted organic area was only 1,9 percent in the period 2007-2011 (Ørum, 2011, p. 1). An interesting fact is that, despite an expansion of 13.400 organic hectares in 2009, the net extension of the organic agricultural area was only 4.400 Ha (Ørum, Jensen, Andersen & Tvedegaard, 2011, p. 1). A larger research on the reasons behind defection found that approximately 6 percent of already

converted organic areas were lost each year between 2007-2011. Factors such as cessation and leasing of farm land were explanations behind these numbers. Particular leases were investigated, revealing that in 2010 and 2011, 60 and 65 percent respectively of the converted organic areas were leased farm land. Apparently, when the growth of organic farms is dependent on conventional leases, the result is a loss of large proportions of converted organic area, when the leases expired after 5 to 7 years (Ørum, 2011, p. 1+2; Nimgaard, 2012, p. 1). Another explanation behind a frequent defection after 5 to 10 years might be explained by the fact that the farmers receive conversion subsidies the first five years and thereby, *"the new organic farmers are tied to the organic operation mode and it might take a few more years to build up serious weed-problems and nitrogen losses*" (Ørum, Jensen, Andersen & Tvedegaard, 2011, p. 12) – therefore it might be the easiest solution to convert back to conventional farming (Jensen, 2011, p. 4).

As mentioned above, the organic agricultural area has not been increasing much during the last 15 years and even been decreasing during 2014 and 2015. Besides this development, the consumer demand and thereby sales of organic food products have been increasing more and more in the same period (ecoweb.dk, 2016). The Danish Statistics published in 2016 numbers showing that in 2015, sales of organic products from the Danish supermarkets set a record of 7 billion DKK, which was a 12 percent increase compared to the sales in 2014. This is an increase of the organic market share from 8 percent in 2014 to 10 percent in 2015. Particularly sales of fruit and vegetables increased significantly. And simultaneously, the public food sector bought organic raw materials for approximately 1,3 billion DKK in 2014. (Skouboe, 2016; Landbrug og Fødevarer, 2016 b; Danmarks Statistik, 2016). The increase in demand of organic foods have resulted in more conventional farmers becoming interested in organic production within the last two years. The Danish Agrifish Agency and Organic Denmark reported in 2016, that they had experienced a large increase in applications of conversion subsidies in 2015, resulting in an extraordinary application possibility introduced to farmers not applying before deadline in the first round. 641 new possible organic farmers had in the end of 2015 applied for organic authorization compared to only 154 applicants in 2014 (ecoweb.dk, 2016). This is also reflected in a growing request for free organic conversion checks. Numbers published from SEGES, showed that the conversion checks increased from 287 in 2015 to 450 checks in 2016, and they expect the same degree of requests in 2017 (Landbrug og Fødevarer, 2017 a). Also, a continued growth in retail sales of 10-15 percent is expected in 2017, as well as The Danish Agriculture and Food Council expects applications of organic Area-Grants for 22.000 new organic hectares in 2017 (Landbrug og Fødevarer, 2017 b; Landbrug og Fødevarer, 2017 c). In April 2017, as a result of the recent massive conversion to organic production, the Organic Business Team delivered 25 suggestions regarding organic production to the Danish Minister for Environment and Food, Esben Lunde Larsen, with the purpose of enhancing a continuous *"development of organic and thereby also the trustworthiness of the red Ø-label"* (Landbrug og Fødevarer, 2017 d). May 3rd,

2017 a new certification agreement was signed, making the administrations of export of organic food products easier. The expected outcome is a doubling of the yearly export to china within 2020, making it a lot easier for the Danish organic food producers to sell their products (Landbrug og Fødevarer, 2017 e). At the beginning of 2017, there were about 2.600 organic farms in Denmark (Landbrug og Fødevarer, 2017 b).

11.0 Farmers' Perspective on and Experiences with Organic Conversion

The following offers an insight to factors influencing farmers' choice of converting to or reversing from (defecting) organic production based on a review through existing literature. It includes both research from Denmark as well as from other countries. The aim is to present previously found motivations behind and experiences with organic conversion as a frame for analysing the findings of the research done for this thesis, which is presented in part 3.

First, an insight to the motivations behind the choice of converting to organic production is given, which will be supplemented by the barriers reasoning a deselection of organic farming explained by conventional farmers. Secondly, experiences from converting farmers is elaborated and will be accompanied by evidence from surveys investigating the reasons behind farmers reversing or giving up organic farming (defectors). The last two topics are understood as rather closely connected, as the challenges the converting farmers experience, might be echoed in the motives behind why the defectors are giving up organic production.

11.1 Motivations and Barriers Behind the Choice of Conversion

When searching through literature, multiple reasons arises to the question of the motivations behind converting to organic farming; but most frequently are *economic reasons*, *environmental concerns* and that organic production is found *an interesting professional challenge* mentioned as the most influential factors (NaturErhvervstyrelsen, 2012; Tress, 2001; Noe, 2008; Midmore et al, 2001; Padel, 2001). What differentiates these findings are how the interviewed farmers are raking the importance of the three, which is found depending on e.g. the background of the farmer, whether it is a full time or spare-time farmer, a beginner[5] or a converter and size of the farm, to mention a few. This is underlined by Darnhofer, Schneeberger and Freyer (2005) describing, in their research on farmers' choice between organic and conventional farm management based on interviews with 21 farmers, that farmers and potential converters are not one

[5] With no previous farming experience

homogeneous group and that especially personal values is an important factor of the decision-making process (Darnhofer, Schneeberger and Freyer, 2005, p 49).

11.1.1 Economy, Environment or Professional Challenge

In relation to organic as an *exciting professional challenge*, this factor was particularly found important to full-time farmers converting in the 1995-1996, where 41 percent selected this as one out of two most important reasons for converting to organic production (Noe, 2008, p. 277). In 1997, this number decreased to 28 percent, which is explained by several farmers experiencing nearby farmers having success with organic farming and therefore developed a greater belief in its possibilities (Noe, 2008, p. 277+278). This 'neighbour effect' is also found influential in a Danish study by Risgaard, Kaltoft & Frederiksen from 2005, comparing the organic development in two different regions of Denmark, Thy and Mors. These findings are elaborated further in '*Social accept of organic*'.

For part-time farmers, the motivation of *the professional challenge* accounted for 18 percent, to whom *environmental care* and that organic is the seen as *the future of Danish farming* was rated more important (Noe, 2008, p. 278). In another Danish research from 2000, based on interviews with 19 converting farmers, it is mentioned by several farmers that they were getting tired of monotonic conventional farming and that they saw organic as a way for them to prove themselves as good farmers (Vaarst, 2000, p. 48).

A Danish survey from 2001 comparing beginners with converters, *consideration for the environment* was the most frequently mentioned motive for entering organic farming within both groups of interviewed farmers. But, whereas the next most important incitement for the beginners was a *disagreement with developments in conventional agriculture*, factors such as a belief in that organic agriculture is *the future of Danish agriculture*, *improved animal welfare*, *higher quality of organic products*, and the *prospect of a better income* appeared far more important to the converters. Particularly the latter revealed a clear difference compared to the beginners, who rated this the least important reason behind conversion (Tress, 2001 p. 139-140). These findings are possibly explained either by the fact that the main part of the beginners are spare-time farmers, to whom economy might be of less importance or that beginners could be consisting mainly of "*idealistic urbanites with an academic background"* (Tress, 2001 p. 140). This hypothesis is backed up by another Danish research by Noe (2008), based on a literature review comparing part-time and full-time farmers' motivations for converting to organic agriculture, finding that the *prospect of higher income* is the main argument for 54 percent of the participating full-time farmers converting in 1997. Whereas this was only the case for 17 percent of the part-time farmers. Simultaneously, 66 percent of the part-time farmers converting in 1997 found *environmental caring* as one of the two most important reasons for organic conversion compared to only 41 percent of the full-time farmers (Noe, 2008, p. 278).

Results of studies from the UK and from a larger Finnish study from 1998 show similar patterns, the latter identifying environmental concerns and economic reasons as the first and second most important motivations behind conversion, respectively (Midmore et al, 2001, p. 6). And simultaneously, this is emphasizing, that it seems like there have been a shift from e.g. religious or philosophical ideals, or problems with husbandry towards more financially related reasons behind converting to organic production – which is a statement also mentioned in other literature (e.g. Padel, 2001, p. 46+47 and Tress, 2001, p. 140) – and is explained by the fact that economic motives behind conversion appears to have become more socially acceptable (Midmore et al, 2001, p. 6). Still, the study by Noe (2008) mentions, that though the organic mindset or philosophy as a driving factor for many have become secondary, the organic values is still an aspect incorporated into the decision of converting to organic production (Noe, 2008, p.278).

In continuance to the above mentioned financial motivation of organic conversion, an English study from 2001 describes that the financial aspects vary between wishes of long-term securing of the farm, attempts to solve existing problems and getting good production prices (Midmore et al, 2001, p. 5), but especially subsidies and premiums are repeated as a central motivational impact in several other studies. To mention a few: in a study on USA-farmers' possible willingness to convert, it was assumed that financial assistance would speed up the conversion process in areas where other organic farmers and strong networks were already established (Lohr & Salomonsson, 2000, p. 143), Finnish farmers has reported that *"conversion support was crucial in the decision to convert"* (Midmore et al, 2001, p. 6), Austrian farmers that *"compensatory payments within the agri-environment program are an especially important incentive for conversion"* (Darnhofer, Schneeberger & Freyer, 2005, p. 48), and in an interview with Danish farmers, one organic farmer directly mentioned that his interest in organic farming was founded in the possibilities of economic subsidies (Vaarst, 2000, p. 48). Also, the farmers interviewed by Noe (2008) agrees that, though their choice of converting is not solely based on an economic explanation, economy is the foundation of the organic production and therefore, they had chosen to convert at a time with profitable grant schemes (Noe, 2008, p 32).

11.1.2 Perspectives of Different Types of Farmers

If referring again to the study by Darnhofer, Schneeberger & Freyer (2005), which has identified two types of organic farmers, it must be noted that the driving factors will vary from farmer to farmer. They describe the '*pragmatic organic*' farmers as driven mainly by the prospect for securing income and compensatory payments and to whom health, ethical, or sustainability considerations appear more periphery. Whereas, to the *'committed organic'* farmer reflections about economy is more secondary as they are *"deeply rooted in the founding philosophy of organic farming"* (Darnhofer, Schneeberger & Freyer, 2005, p. 48). And particularly the circumstance of not believing in or advocating organic production has been mentioned by

conventional farmers as a central barrier towards not being interested in conversion (Noe, 2008, p. 284). In continuance to the elaboration above of the financial influences on the choice of organic conversion, a New Zealand study has found that the *pragmatic organic* farmer would *"switch to conventional production if premiums were to decrease in the future"* (Fairweather, 1998, p. 59).

Differences in motives are also to be found when comparing spare-time with full-time farmers. The Danish study by Tress (2001), comparing possible converting farmers in Western Zealand with farmers in Ribe in Jutland, finds that in general more spare-time farmers within both regions had a positive attitude towards conversion. Interestingly, none of the full-time farmers in Western Zealand had a positive attitude towards conversion compared to 8 percent in Ribe, who would possibly convert within the next five years (Tress, 2001, p. 137). These findings are reflected in other literature as well e.g. in a study on Catalonia vineyard production, concluding that "*farmers who have a second economic activity, apart from agriculture, are more likely to convert"* (Kallas, Serra & Gil, 2010, p. 17), and that organic farms tend to be smaller than conventional farms (ibid). Tress (2001) points to the fact that there is a high percentage of farmers with non-agricultural educations among spare-time farmers as one central reason why they are more interested in and willing to take the risk of organic farming (Tress, 2001, p. 137). In relation to full-time farmers, the most frequently mentioned barriers of converting to organic farming are that they: are not to put their economy at stake, that they fear not being able to produce enough, a concern about even more administrative troubles and higher workload, lack of knowledge and that they simply do not know what they 'jump into' by converting, which for many makes the comprehensive specialization and reorganization into organic production unmanageable (Landbrug og Fødevarer, 2011, p. 3-8; Noe, 2008, p. 284; Tress, 2001, p. 135-6). In continuance to this, particularly concerns about lack of organic marketing channels has been found very influential in several studies (e.g. Uematsu & Mishra, 2012, p. 56-57; Lohr & Salomonsson, 2000, p. 143). But also, limited access to organic manure was reported a central reason behind a deselection of organic conversion by Danish conventional farmers – particularly amongst farmers on the Danish Islands (NaturErhvervstyrelsen, 2012, p. 6).

11.1.3 Social Accept of Organic

The development of more and more farmers converting to organic is found connected to the fact that several farmers has been waiting for more technical and economic security of organic production. At the same time, there has been a growing acceptability of organic farming caused both by more and more farmers converting and because organic and conventional farming is becoming more alike due to for instance structural developments (Noe, 2008, p.279). But also, because there has been a development of organic farming from being mainly a critical, extra environmental friendly and partly livestock ethical niche productive alternative to conventional farming towards organic production being perceived as a natural part of the existing food

regime – enhanced by a growing demand for organic products, qualified local counselling and participation from the dairies, – this has changed the view upon organic farming to be more socially acceptable (Noe, 2008, p. 280). The converting farmers interviewed in this study by Noe (2008) describes, that a large barrier against a possible conversion was a fear of opinions from their conventional colleagues, and some converted farmers reported that they actually had had the experience of virtually being excluded from their existing social and local professional networks after converting (Noe, 2008, p. 280+282+285). Nevertheless, the increased social accept of organic had "*lowered the bar enough for them to dare to take the jump"* into organic production (Noe, 2008, p. 280). But also, a strong professional network and dialog, shared cooperation and marketing initiatives, and respected local organic counsellors legitimizing organic produce were highly important circumstances mentioned (Noe, 2008, p. 282). This is supported by the 'neighbour effect', found in the Thy-Mors research by Risgaard & Kaltoft (2005), describing that conversion to organic farming seems to happen faster in areas with residence of other organic farmers, and by a milk producer saying that, *"the presence of "passionate" counsellors also had great influence to the decision of converting to organic farming"* (Risgaard, Kaltoft & Frederiksen, 2005, p. 4). The survey discovered that in Thy, several farmers converted to organic at the same time, which helped increasing not only the social accept of organic farming, but also the possibilities of exchanging experiences. In comparison, on Mors, the extend of organic conversion was limited due to a dominating pig-production and high prices on farmland, which shows that, besides the 'neighbour effect', development of organic production in different areas is affected by multiple other factors, such as historical and structural conditions, presence of different kinds of pioneers and the local counsellors' access to farming in the area (Risgaard, Kaltoft & Frederiksen, 2005, p. 4-5). Noe (2008) supports the fact that the decision of converting to organic production depends on a range of local and social factors, based on data showing that organic conversion in Denmark was found to be geographically very unevenly distributed (Noe, 2008, p. 281). But also, and in perpetuation of the elaboration above about economic as one of three main motivations behind conversion, the study by Risgaard, Kaltoft & Frederiksen (2005) demonstrates, that economy is not solely the driving force explaining conversion, because of *"sociocultural processes behind the visible economic phenomena"* (Risgaard, Kaltoft & Frederiksen, 2005, p. 3-4).

The access to required information and participation in professional organic networks are reported in several studies as important factors effecting the choice of conversion, as the norms, values and visualizations of the future is build up by local professional networks, and are therefore very important in relation to the decision of conversion (Kallas, Serra & Gil, 2010, p. 16; Noe, 2008, p. 282; Padel, 2001, p. 50+51). In contrary to this, Risgaard, Kaltoft & Frederiksen (2005) found that to farmers with limited sales channels, professional sharing of ideas and experiences was seen more as a threat rather than beneficial due to marketing competition.

11.2 Experiences from Converting and Defected Farmers

The social network and access to information are also themes arising in surveys investigating experiences from converting and defected farmers. In a short interview from 2014 with a part-time organic farmer, *community* is mentioned as one of three most important new possibilities organic offers him (Landbrug og Fødevarer, 2014, p. 2), which is supported by a farmer interviewed by Hansen (2003), feeling that his professional network has changed after conversion from being competition based to more collegial (Hansen, 2003, p. 35). In a Danish survey, interviewing defectors, it is concluded that network and consultants generally had limited influence on the choice of giving up organic farming, indicating that there seems to be access to good consultants in general. Thought differences were found, when comparing size of farms as well as location, the impression was that there was a shortage of professional networks in Jutland compared to "The Islands", and that particularly smaller farms below 100 Ha were in demand of professional networks (NaturErhvervstyrelsen, 2012, p. 16-17). A literature study by Padel (2001), investigating the diffusion process of organic farming into the farming community, is unfolding that the professional social organic networks appear very closed and difficult to enter for newcomers, and even though the organic farmers are found to prefer information from other organic farmers, one issue is that, thought is have been arranged, "*converting farmers appear hesitant to visit or contact other organic producers"* (Padel, 2001, p. 52+54). On the other hand, and in reference to organic being more social accepted, as described above, converting farmers interviewed in a Danish study by Vaarst (2000) all agreed that their conversion did not cause the same degree of social exclusion in their local community as it would have done earlier. Besides this, several had been met with *"envy, outrage or irritation about "the money in organic""* and comments about them taking "*the money from others"* by conventional farmers (Vaarst, 2000, p. 53). These findings are supported by Risgaard, Kaltoft & Frederiksen (2005), describing that organic farmers on Mors felt that, because of the low quantity of organic farmers on Mors, choosing organic farming was the same as choosing to isolate yourself and stand out from a conventional society, where organic production was disdained (Risgaard, Kaltoft & Frederiksen, 2005, p. 4). Another interesting observation was that the main part of the defectors interviewed were not organic consumers because they "*did not feel good about standing out in the local society if buying organic food products"* (Risgaard, Kaltoft & Frederiksen, 2005, p. 7-8).

In the survey by Vaarst (2000), discrepancies with for instance feed companies or the veterinarian expressing annoyance were mentioned as responses to the farmers' choice of converting to organic production (Vaarst, 2000, p. 53+54).

11.2.1 Rules and Legislation

The comprehensive set of new organic rules and understanding hereof is another central and continuously occurring issue. In a study by NaturErhvervstyrelsen (2012), interviewing 47 former organic farmers about their reasons behind defecting, shows that the complexity of the environmental and organic rules had had essential influence 'in a great extend' to 32 percent and 'to some extend' to 21 percent of the farmers interviewed. Particularly farmers in Jutland and producers of beef and milk had experienced the organic set of rules as being too complicated (NaturErhvervstyrelsen, 2012, p. 6 + 14). In perspective to this, the converting farmers interviewed in the survey by Vaarst (2000) actually perceived a general understanding of the logic behind and aim of the rules, but during the focus group discussions they mentioned different issues such as: that the legislation process at times seemed rushed and ungrounded, that the rules seemed inflexible and ambiguous, and that some rules offered too much space for free interpretation. And particularly in relation to the rules about calves being outdoor, the farmers experienced the process of case management too slowly, and felt a clear distance between the authorities and the 'people making the decisions' when visiting the farm (Vaarst, 2000, p. 50+51+52). In continuation, also the large number of inspections and them being unpleasant and too time consuming were mentioned as essential causes behind not continuing organic farming, to one out of three interviewed defecting farmers (NaturErhvervstyrelsen, 2012, p. 14).

In contrary to these findings, the organic rules were looked upon with greater acceptance both by a part-time organic farmer and a full-time organic milk producer, more recently interviewed individually in relation to conversion of Lejre Municipality, expressing that if procedures and paperwork is well organized, then time spend on administrative work and inspections is limited. One of the farmers mentioned difficulties regarding cross checks (krydsoverensstemmelseskontrol) and "*other administrative stiffness"*, but did not find the organic inspections too difficult. The other farmer points out the importance of the farmers' responsibility toward the consumer of documenting that the products are produced in accordance to the rules (Landbrug og Fødevarer, 2014a, p. 2; Landbrug og Fødevarer, 2014b, p. 2). By the converting farmers interviewed in the survey by Vaarst (2000), it is recommended to not get annoyed by the rules, to have a positive attitude towards the inspectors from the beginning, and to see them as people helping the organic farmers. Otherwise *"you may just avoid being an organic farmer"* (Vaarst, 2000, p. 59).

Still, administrative difficulties is a main issue mentioned in relation to organic produce in larger surveys both by converting farmers – e.g. one farmer replying that, *"the paperwork alone was enough for him to advise against conversion"* (Vaarst, 2000, p. 52) – and by defectors. The research on organic defectors by NaturErhvervstyrelsen (2012) found that '*administrative difficulties'* is one of four main arguments for giving up organic farming, together with the areas: '*economy and uncertainty about prices'*, '*problems with field operations',* particularly weeds and lower yield, and '*problems with animal husbandry'* here including

particularly feeding requirements – but, primarily poor economy and the organic rules were main arguments for defecting (Fødevareministeriet, 2011, p. 1+10) These finding are backed up by a Norwegian study finding that *"regulations regarding organic farming and economic reasons were the primary reasons for discontinuing organic production"* (Uematsu & Mishra, 2012, p. 56).

The fact that economy is mentioned as a central reason for defecting is interesting taken into perspective of the fact that this also appeared as main motivational factor behind converting to organic production, as described above in '*Motivations and barriers behind the choice of conversion*'. That "*the economy was not enough*" and *"not as fantastic as promised"* is an experience emphasized by converting farmers (Vaarst, 2000, p. 60). In perspective to the latter, it was found in a study from the UK that particularly farmers, who entered organic production with basis in economic reasons, were more likely to also give it up at a later date (Rigby, Young & Burton, 2001, p. 608). On the other hand, the converting farmers stress that though economy is not as good as expected, the professional challenge, discussions of new values, and to face the world as organic farmers are for them more valuable (Vaarst, 2000, p. 60).

The organic values are mentioned as motivation to conversion to organic in other literature as well, both in relation to environmental concerns e.g. fertilizing and animal ethics, and in relation to how they want to be perceived by their surroundings, e.g. that organic production enabled an opportunity of getting a new and more valued identity (Landbrug og fødevarer, 2011, p. 7). Though, having abandoned organic farming, the main part of the defected farmers interviewed in the research by Risgaard, Kaltoft & Frederiksen (2005) reported, that they felt sad about resigning because organic farming had offered them a positive professional challenge not experienced within conventional farming, and because of an aversion against the use of pesticides. On the other hand, they found it difficult to maintain a professional pride when the products were mixed with or sold as conventional products (Risgaard, Kaltoft & Frederiksen, 2005, p. 8).

11.2.2 Economy and Marketing

To have a passion and believe in organic as well as and an interest in the products and in marketing are recommended as essential by the converting farmers interviewed by Vaarst (2000, p. 59). One of the farmers points out that, *"the action is grounded in your own motivations instead of external rules"* (Vaarst, 2000, p. 61). In the two previously mentioned short interviews with a part-time and a full-time Danish organic farmer in Lejre Municipality, their visions of a sustainable agriculture with less climatic impact and where the craftsmanship is in focus, are mentioned as the most essential backgrounds for the choice of converting to organic. The conclusion made by one of the farmers is that conversion really was the right choice and that he *"is never going to fertilize again"* (Landbrug og Fødevarer, 2014 b, p. 2). But in contrary to the above, both farmers actually mention good economy and business as one of three good reasons for conversion (Landbrug

og Fødevarer, 2014 a+b, p. 2), which correspond with other literature reviewed above. Besides this, it is worth noting, that lack of or uncertainty about marketing outlets, a less stable income resulting in a low economic security, little demand and low sales prices *are* significant influences mentioned by farmers who have converted back to conventional farming. Risgaard, Kaltoft & Frederiksen (2005) found that problems selling the organic produce at reasonable prices was the direct reason behind the choice of returning to conventional production (Risgaard, Kaltoft & Frederiksen, 2005, p. 7). And 62 percent of the former organic farmers interviewed by NaturErhvervstyrelsen (2012) answered that sales prices should increase in general if organic produce should be profitable – 47 percent mentioning an increase of 11 percent or more (NaturErhvervstyrelsen, 2012, p. 5+13). The farmers also replied that the organic production expenses were too high and not cancelled out by the size of subsidies, as a central reason behind their choice of converting back to conventional production. A possible explanation to the latter, within this survey, is that the conventional farmers might be overestimating the size of subsidies and thereby "*become negatively surprised by the difficult economic conditions as organic farmers"* (NaturErhvervstyrelsen, 2012, p. 5+6). Particularly farms with more than 100 Ha reported that less stable income and too large organic production expenses were reasons behinds converting back to conventional farming, and were also mainly the ones feeling a need of an increase in sales prices. It was simultaneously primarily farmers from the larger farms reporting challenges of selling their organic products. Whereas, it to a greater extend, was farms below 100 Ha feeling that subsidies were not big enough (NaturErhvervstyrelsen, 2012, p. 5+11+19).

In relation to the unavailability of 'market outlets', this was identified in a study from the UK as the most common reason for ceasing or even deselect entering organic production, followed by *cost issues*, *agronomic problems* (including technical information) and the fact that the farmer must *change personal circumstances* as other reasons (Rigby, Young & Burton, 2001, p. 607; Uematsu & Mishra, 2012, p. 56-57). In continuance to the latter, the comprehensive change of the farm has been described earlier also as a main barrier of converting to organic production, and is simultaneously mentioned in an interview with a British cattle-farmer as reason behind giving up organic production: *"It's not just the land you've got to convert, it's yourself (…) You've got to totally change the way you farm*" (Rustin, 2015). One converting farmer in the survey by Vaarst (2000) is concluding on his experiences that, *"for the individual organic farmer conversion is about understanding the goals of the organic operating mode, and to make these goals simple and concrete in relation to one's own farm, practice and everyday"* (Vaarst, 2000, p. 56). Another highlights the importance of the physical environment being thought through carefully, and a third farmer expressing that all individual elements on the farm should be connected as one unit when converting to organic production (Vaarst, 2000, p.59+62).

11.2.3 Structural Conditions and Farmer Values

A problem of having an "*almost naïve understanding of what organic production was going to be like"* (Rigby, Young & Burton, 2001 p. 607) is described in a study from the UK, with basis in the findings that some organic producers were experiencing severe problems regarding control of weeds and pests and maintenance of soil quality, which is emphasizing the importance of organic producers having informational networks (Rigby, Young & Burton, 2001 p. 607). These structural conditions of soil deterioration and low crop yield due to insects, fungal diseases and weeds are generally found as essential factors influencing the choice of giving up organic production in other studies as well (NaturErhvervstyrelsen, 2012 p. 5+6). In reference, the Danish full-time milk-producer from Lejre declared, that the only solution to his concerns about weeds, yields and charges was good craftsmanship and to have good knowledge about his soil (Landbrug og Fødevarer, 2014 b, p. 1). This concern of weed control amongst farmers considering conversion is reflected in a study by Hansen (2003), who has investigated how the choice of converting to organic is connected to the farmers' understanding of technology and nature, and their self-understanding (Hansen, 2003, p. 5+56). The organic farmers interviewed in the study discuss whether presence of weeds really is influencing the yield. They are convicted that much weed control in conventional crop production is more about aesthetics than a matter of yield considerations (Hansen, 2003, p. 60). In continuance, they mentioned that they previously, as conventional farmers, did the same, but that they in the conversion process experienced that *"the crops are not necessarily damaged by the weeds occurring"* (Hansen 2003, p. 60). This changed their tolerance toward the extend of weeds in the fields (Hansen 2003, p. 60). Practical experiences with organic production, soil treatment, new workflows, and new tools taught them, during the conversion period, how to think ahead to prevent rather than treat problems (Hansen, 2003, p. 57-58). One of the central findings in this research is that, though motivated by economics and being busy following the rules and avoid using fertilizer, an 'inner' conversion followed soon thereafter (Noe, 2008, p. 279; Hansen, 2003). Counsellors interviewed about this matter said, that they experienced, that within a couple of years, the farmers got more engaged in and caught-up by the organic mindset (Hansen, 2003, p. 76). But also, they mentioned how the farmers had to change mindset and *"throw away the mental luggage with which they have been educated within conventional farming"* (Hansen, 2003, p. 57), for instance to perceive soil, crop and weeds as *"active team players in the production"* (Ibid, p. 62). Several of the farmers mentioned that they, before converting to organic farming, had funny notions about organic farmers; for instance, that they were waring Icelandic sweaters and John Lennon glasses – which they had been proven wrong (Hansen, 2003, p. 93).

Another side of organic farming – or farming in general – is the social exposure and political interference, which has not only been a driving factor behind considering conversion, because organic production has been a way for the farmers to escape a negative social exposure, but has also changed their social status externally,

not having to defend their production towards people outside agriculture (Hansen, 2003, p. 83+84). In continuation – and a bit in contrary – to the 'inner' change in mindset mentioned above, Noe (2008) finds that because conventional and organic farming seem like becoming more alike, a differentiation as organic farmer decreases, which makes is less likely that converting to organic production simultaneously reflects a significant change in mind and behaviour (Noe, 2008, p. 281).

11.3 Sum-up State-of-art

Summing up, 'The Farmers' Perspective on and Experiences with Organic Conversion', both the motivations and barriers to consider conversion as well as experiences from converting and defecting organic farmers has been elaborated. Economy, subsidies, administrative troubles and controls, yield reduction, marketing, the professional challenge, and the social acceptance of organic are all factors found influential within both perspectives. Differences were found when comparing full-time and part-time farmers; finding that spare-time farmers were less bound by economic concerns and more driven by environmental caring – and therefore more willing to take the risk of converting compared to full-time farmers. Whereas, to the full-time farmers, *the professional challenge* and *prospect of a better economy* were main motivations. A concern about a higher workload was found amongst conventional farmers, making them choose to not convert to organic production. In contrary to this, the interviewed farmers in Vaarst (2000) had positive thoughts about organic production, as they actually had experienced a reduction of work load after converting, because of cows in yards and that they were not to spend time fertilizing (Vaarst, 2000, p. 52-53). In relation to farmers giving up organic farming, particularly the complexity of the environmental and organic rules, as well as administrative difficulties, and unstable economy were issues found very essential. Besides this, the converted farmers expressed that producing organically and environmental friendly contained greater value – even though the conversion period to organic often is costly and might not lead to improved profits afterwards (Padel, 2001, p. 50).

In part 3 of the thesis, which follows hereafter, the new research of farmers' motivations behind and experiences with organic conversion done in relation to this thesis is presented, analysed and discussed against the findings from the literature review elaborated just above.

PART 3

The third part of the thesis presents the study of converting farmers' motivations and experiences carried out in relation to the thesis. Firstly, the data collection, development of interview guide, and ethical considerations are presented. This is followed by a description of the method used for processing of the data material collected during the interviews, and an insight to the development of the methodology with basis in the hermeneutic spiral is given. Secondly, the results of the study are presented followed by an analysis using the MSEM mapping and comparing influences on organic conversion found in previous studies and the recent study. A discussion of a few selected topics is done together with a discussion of the methodology used. Part 3 is finished with conclusions and further perspectives.

12.0 Methodology

In the following the method used for data collection and processing hereof is described. Firstly, the data collection is described, including how contact to the informants were established, the criteria behind selection of farmers and the different interviews performed. Secondly, the processing of the collected data is elaborated, offering an insight to the transcription and coding processes.
All data collection and processing hereof have been carried out only by the author of this thesis.

12.1 Data Collection

12.1.1 Contact to Informants

Do to very limited knowledge on the field of organic counselling, the original idea was to only base the study of this thesis on information through Nordsjællands Landboforening, Agrovi, interviewing their two organic counsellors and several converting farmers, who they ideally could help get into contact with.
A meeting with Søren Hansen, chairman of Nordsjællands Landboforening in January 2017, was set up within a few days after e-mailing him, who at the same time provided contact information to a larger converting pig-farmer. During the meeting, Andreas Höll was introduced, one of the two organic counsellors in Agrovi, with whom an interview was set up about a month later. Reflections on the interview with Andreas Höll made it clear, that the chosen field of informants immediately would offer only limited differences in perspectives on the farmers' conversion experiences, as Agrovi covers only a small percentage of organic converting farmers on North Zealand. Subsequent study-counselling recommended to include also VKST and Organic Denmark, if possible. After some mail-correspondences and telephone-calls, an interview with Lisbeth Frank Hansen from VKST, was set-up.

Organic Denmark are more represented in other areas of Denmark than Zealand, and was not able to refer to any converting farmers on North Zealand. Fortunately, two conversion checks were arranged with Søren Lykke-Jensen on March 17th, 2017 on North Zealand, in which participating was allowed.

Contact to the organic counsellors was received by contacting them directly based on information gathered from the different companies' web-pages, informing shortly about the background and the aim of the research and which farmers preferably to include in the study.
After the interview with Lisbeth Frank Hansen, a long list of farmers, who had received a conversion check in 2015 and 2016, was handed over. The selected farmers were contacted by telephone at first. E-mails were send to those not replying. Unfortunately, several of the preferred farmers were not reachable, as the contact information available was incorrect, and therefore many farmers were contacted to get appointments with the few informants needed for the research. After a couple of phone calls with Agrovi, a list of six converting farmers was e-mailed – unfortunately without information on type and size of the farms.

The usage of the organic counsellors as gate-keepers to get into contact with the converting farmers was necessary, as information on the farms' status as converting farm is not available elsewhere. The positive side to this was an insight to the variety of farmers on North Zealand and an idea of research possibilities within this area. The downsides was immediately that it, on the one hand was extremely time-consuming getting the needed contact information to the farmers. This process required a lot of patience and several considerations of how often to contact the gate-keepers requesting a response. And, on the other hand – particularly in the case of the farmers from Agrovi – that they chose who would be interesting to include in the study. Because a lot of time was spend making contact to and setting up interviews with the preferred number and variety of farmers, middle of April was set as final date of new data collection, to have time for the following transcription and analysis of the data collected.
Interviews with five farmers was arranged and carried out. Four on North Zealand and one in Mid-West Zealand. The latter was chosen due to a reconsideration of the limited research area of North Zealand, as the information that farmers in this area are mainly small part-time or spare-time farmers was received from a telephone call with a counsellor from Organic Denmark and from the two counsellor-interviews. Therefore, to get insight to experiences from a broader variety of farmers, also Mid Zealand was included, were a few larger converting farmers are resident. Five interviews were arranged with converting farmers; four smaller spare-time farmers and one large full-time farmer. In supplement to this, a short telephone conversation was made with a large full-time farmer, who had chosen not to convert to organic production. His reasons will be included in the end of the analysis.

12.1.2 Selection Criteria

The choice of focusing on farmers resident on North and Mid Zealand was made because it was preferred to locate the interview *on* the farms, and therefore distances were important, as also time available for data collection was limiting. Different types and sizes of productions were preferred; hoping to include two-three larger full time farmers and two-three part-time or spare-time farmers, as well as selecting different types of productions. These criteria were made to get an insight to perspectives on and motivations behind conversion to organic production viewed from farmers with different backgrounds. As described above, unfortunately problems with access to the preferred farmers and limited information hereof resulted in a lesser control of the selection process than initially hoped for. Therefore, a distinction between different productions have been omitted.

The choice of selecting 5-6 famers was based on mainly two criteria: 1) to get information from a variety of farmers, but still being able to process the data properly afterward within the 2) limited time frame available.

12.1.3 Counsellor Interviews and Conversion Checks

The interviews with the organic counsellors and the conversion checks were carried out throughout February and March 2017. The conversion checks consisted mainly of observations of the procedures and taking notes on the farmers' questions regarding organic conversion, – but also supplementing questions, relevant to the subject of this thesis, became possible. The two counsellor-interviews and the conversion checks has been used as inspirational source to design the interview guide for the farmer interviews, as the focus of research is aimed at the perspectives from farmers already started converting. This is elaborated thoroughly later. Also, they have worked as an important contribution of valuable information in the research start-up phase about organic farming in general, as an insight to the procedures of a conversion check, as well as the farmers' considerations before making the decision of organic conversion. This new knowledge was also useful during the interviews with the farmers.

12.1.4 Interviews with Converting Farmers

The five interviews with the converting farmers were carried out in the period between March 22nd and April 4th, 2017. The interviews all took place on the farms. Though risking a range of interruptions by choosing this location (Trost & Jeremiassen, 2010, p. 68), this was chosen because: it could offer interesting observations, because the personal contact was found valuable, and because it was imagined that the farmers would relax more during the interview if the location was familiar. Right after finishing every interview, notes on observations and reflections were written down.

12.2 The Interview Guide

The interviews were carried out with basis in a semi-structured interview guide, designed beforehand, inspired by the literature review and the interviews with the organic counsellors. The development of the interview guide is elaborated below in 'Development of Methodology'. In connection to this, a range of considerations were made. The interview guide was in two parts; the first part asking questions about conversion experiences and motivations, the second part about the organic counselling. As described earlier, in the explanation of '*The semi-structured interview'*, the first question can be essential to how the rest of the interview develops. Therefore, the interview was initiated with a question about the farmer's historically background, with the idea of making it easier for the farmer to start a conversation and 'open up' for viewpoints essential to the farmer (Kvale & Brinkmann, 2015, p. 190). Hereafter, followed questions about the farmer's production today and the reasons behind this choice, before going more into depth with more personal questions about motivations, experiences, expectations, downsides, and so forth. The questions in the interview guide were not followed strictly, but were asked whenever fitting into the subjects mentioned by the farmer. Simultaneously, questions in the interview guide that seemed irrelevant to ask were omitted. The types of questions asked were also considered beforehand and found important to be short, concrete, simple and open, as this would give the most complete answers (Kvale & Brinkmann, 2015, p. 189). During the interview, when following the subjects touched upon by the farmer, follow-up questions were asked if they were not moving too far away from the initial research topic. This, at times offered exciting new knowledge and perspectives, which is the advantage of choosing semi-structured interview as research method, but also important to allow when studying phenomena and the social and cultural structures in the life-world of the farmers.

By following the hermeneutic philosophy, the research field was entered with a preunderstanding, in this case knowledge received from other studies of organic conversion, the interviews with the organic counsellors and the conversion checks. In reference to Trost & Jeremiassen (2010), as described earlier in the elaboration of *'The 7 Steps of The Qualitative Interview'*, it was sought to not contribute with personal opinions and knowledge during the interviews. Also, it was attempted not to interrupt when talking or interfere longer thinking breaks, as this might be controlling the farmer's answers. Still, interruptions and shift back to the research topic was made whenever the conversation moved too far away from the aim of the interview.

12.3 Ethical Considerations

Before starting the interview, a briefing was made, informing shortly about the subject, the aim of the research, and usage of the interview data. Aware, that too much information could result in steering the

farmer's mindset into a certain direction, only the most necessary information was given during the briefing. Also, permission to record was requested beforehand. The interview was finished with a debriefing, where after more in depth information on the subject was given and discussed, if the farmer was interested. Ethical considerations were also made during the transcription, which will be described in the following. Though, the farmers did not find anonymity important, it has been chosen to name them "Farmer 1-5" anyway, in the presentation of the data material, to protect their privacy (Kvale & Brinkmann, 2015, p. 345).

12.4 Processing of Data

12.4.1 Transcription

The interviews with the farmers were transcribed fully, but translated from spoken language into written language. Therefore, unclear sentences have been refined and several of the same words repeated and 'thinking-sounds' are only included, when they are relevant to the meaning of the sentence. Parts of the interview without direct relevance to the subject of the study have been omitted in the transcription, as well as swearword have been left out, if frequently used and not relevant to the meaning of the answers. During the transcription, timeslots have been noted making it easier to find again, if needed. Though, a full transcription takes a lot of time this was preferred, both due to ethical considerations and because of relevance to the further processing of the data, the coding of the themes, and discovering of eventual new perspectives. The ethical considerations consisted primarily of an awareness of being as precise and true to the meaning of the answers given by the farmers as possible, when rewriting the answers into written language, which also reflects the philosophy of phenomenology.

All transcriptions were done during one week, simultaneously writing down themes occurring along the way, which resulted in a very good insight to the data collected. Due to the comprehensive data material, the transcriptions are chosen to not be attached as appendixes. However, all transcriptions and recorded interviews are available and can be handed over if necessary. On appendix 1, an example of the transcription is presented.

12.4.2 Coding

With inspiration in Grounded Theory, coding is used in the categorisation of the themes occurring in the transcribed material. Coding or categorization is the most commonly used method for structuring and getting an overview of the comprehensive semi-structured interview data (Kvale & Brinkmann, 2015, p. 261-262). The aim is to, *"develop categories that gives a total description of the experiences and actions investigated"* (Kvale & Brinkmann, 2015, p. 262). The detected themes in the five interviews were marked with the same colours throughout the interviews, which serves not only as method for an analytical comparison of the

motivations and experiences between the farmers interviewed, but simultaneously, helps to analyse and discuss these in relation to findings in previous studies. For the analysis, the MSEM is used.

Ten main themes, that were repeated within all or the main part of the interviews, occurred, and have been marked with ten different colours throughout the transcribed interviews for the later result description, analysis, and discussion. Appendix 1 shows an example of the colour coding in one of the interviews.

12.5 Development of Methodology

Before presenting the results from the interviews with the five farmers, in the following, an insight to the methodological reflections done throughout the research is presented. As mentioned earlier, the Hermeneutic spiral is used to picturize and describe the method used and the development hereof.

Figure 3 shows the hermeneutic spiral with the constant change between *(pre)understanding* and *interpretation/reflection* on the left and some of the phases of the methodological development on the right.

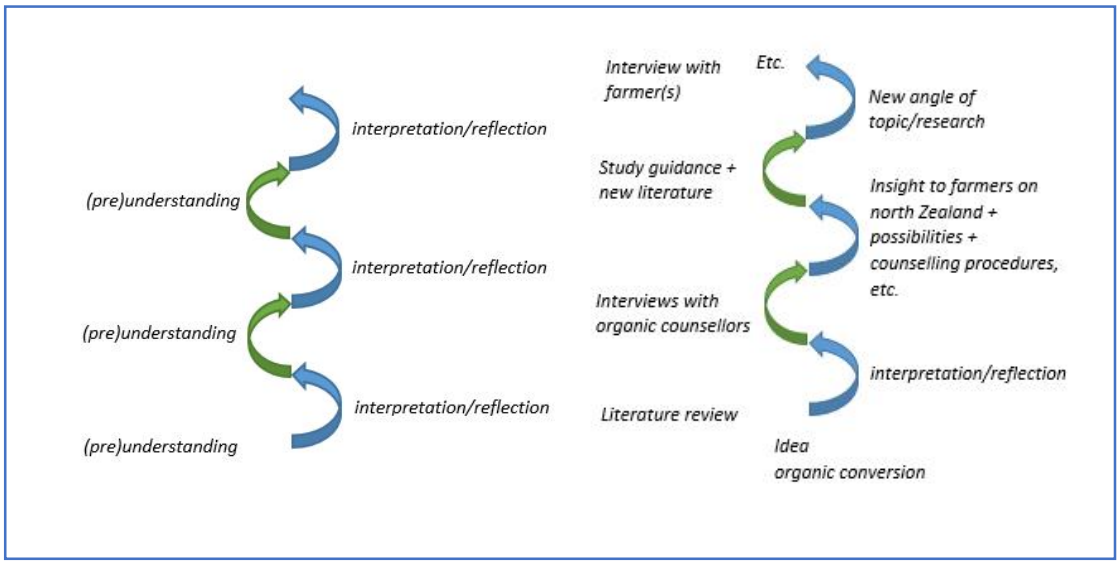

Figure 3: Left: The hermeneutic spiral. Right: the development of the methodology of present research

As described in the introduction, the interest in the subject had its origin in the large increase and interest in organic conversion amongst farmers during the last couple of years. Therefore, an interest in investigating what suddenly motivates more farmers to convert to organic production emerged. Originally, the idea was to interview a large number of converting farmers as well as a range of organic counsellors to make overall comparisons between different kinds of agriculture and farms on the drivers and barriers behind conversion, as well as including the counsellors perspective hereof.

In reference to figure 3, the first step was a **literature review** of existing literature on farmers' motivations behind converting to organic production as well as barriers behind not wanting to convert to or giving up organic production. This review, though continued concurrently with the subsequent interviews, gave an insight to existing findings, and thereby served as the *preunderstanding* with which the research field was entered. The interview guide used at the two **interviews with the organic counsellors** was designed with basis in this knowledge. These two interviews offered information on the types of farmers on North Zealand, insight to new perspectives, and a general understanding of the counselling and conversion process. This information offered as new *preunderstanding* of the subject of organic conversion, which, together with *reflections* on existing research, intermediate study counselling, and participation in two conversion checks, became the foundation of the semi-structured questionnaire for the interviews with the converting farmers. With basis in these reflections and new knowledge, the subject of research became specified to be focusing on a more into depth investigation of motivations, experiences and considerations from a few cases of converting farmers. Most importantly is to emphasize, that the interview guide is developed mainly with basis in knowledge and structures from previous research, with the hope of being able to make a comparative analysis with the new findings within this thesis. As described above, five **interviews with converting farmers** was carried out. Each interview offered a new understanding and the following interpretation hereof changed and refined the interview guide for the next interview.

It is important to underline that, though only elaborated in relation to the methodological development, the interaction between *reflections* and new *understandings* is a continues process also incorporated naturally into the subsequent analysis and discussion.

13.0 Results

The ten main themes found in the transcribed interviews with the farmers, as introduced above in '*Processing of data*', will be comprehensively described in the following. Simultaneously, it must be emphasized that, because focus within this thesis is solely on the farmers' perspectives, the interviews with the organic counsellors are not included in the results. As described above, received information from these interviews have been used to develop the interview guide and define the final topic and demographic area.

The ten main themes, found during the colour coding, consist of a collection of a range of sub-themes, which will be elaborated more within the presentation of each of the ten main themes. Some relevant perspectives were mentioned by only one farmer and are thereby not included in the main themes.

With basis in the Phenomenological philosophy, aiming to explore and describe experiences from the perspective of the subject, the results will be presented in relation to the different farmers' perspectives on and rated importance of the ten themes' influence on their choice of conversion to and experiences with organic procedures under the headline: '*Motivations and Experiences*'.

Table 1 below shows the ten main themes found and the different colours assigned.

The ten main themes and their coded colours
Economy
The farmer's organic mindset
Farming culture and values
Surrounding perspectives on organic production
Organic rules, administration and paperwork
The inspections
Organic counselling and conversion checks
The network
Jumping into organic farming
The farmer's background

Table 1: The ten main themes and the coded colours

Before going into depth with the motivations and expectations behind conversion found in the interviews, first, each of the five famers interviewed are presented.

13.1 The Farmers' Background

As mentioned earlier, four farmers were resident on North Zealand and one in Mid-West Zealand. Only one farmer was a large full-time farmer, whereas the rest were spare-time farmers (see definition above). The presentation is based on information received during the interviews, which have been marked with purple, as visualized above in Table 1.

Farmer 1 is a spare-time farmer resident in Sorø on Mid-West Zealand with an educational background as plumber, but have been farming since 1974. He owns 48 Ha farmlands with a small-scale production of beef cattle, and of rye and grass for feeding the animals. He is 80 years old, living alone on the farms and has a main income from his retirement pension. He started conversion in August 2016, but have been producing organically before.

Farmer 2 is a 66-year-old spare-time farmer resident in Helsingør. He owns 24 Ha farmlands, producing beef cattle and sheep at a small scale as well as grain and grass, mainly for animal feed. He does not have an education as farmer, but have taken one agricultural course and been working on a farm for a year when he was young. He started farming as 18-year-old. He is retired, and therefore has an income from his retirement pension. He has been producing organically before and in the meantime, the farm has been driven in accordance to the rules of nature protection (naturpleje).

Farmer 3 is a retired school teacher and manager, with which he has worked full time his whole life. The farm was bought a few years ago with the aim of living three generations under the same roof. The farmland is 5 Ha, where he and his wife produces very few beef cattle (four cattle and one calf when visited), and during the summer also a few pigs. Besides this, a variety of crops are produced for feeding the animals.

Farmer 4 is a large full time professional pig-producer. He has a traditional agricultural education and have been working on farms for some years before getting his own. He has been farming for 26 years, and producing pigs since 1998. The production consists of 850 convectional welfare-pigs, 230 Ha conventional grain production as well as 250 Ha organic grain production. The organic pig-production was started in 2016 and is now holding 200 sows. The organic production is an expansion of the present conventional production located at a new establishment on another farm and therefore, the existing conventional production will not be converted. Al area, that are organically driven, are leased for 5 year periods.

Farmer 5 runs a 9 Ha apple orchard with her husband on spare-time basis, as both are still working full-time jobs. They had no experiences with apple production beforehand. They live together with their two children and her husband's parents on the farm. They bought the orchard three years earlier, and will be authorized

organic producers in December 2017. Before, the trees had been sprayed. They are selling the apples and their own production of apple juice from the farm shop.

With basis in the introduction of the five interviewed farmers, the remaining nine themes detected will, in the following, serve as foundation for describing the interviewed farmers' motivations behind and experiences with organic conversion.

13.2 Motivations and Experiences

13.2.1 Economy

In relation to economy, it will be elaborated to what extend the five farmers perceive the importance hereof in relation to making the choice of conversion. Sub-themes such as subsidies, sales prices and marketing possibilities, and the prospects of changes in future expenses and earnings, will be touched upon.

Farmer 1 is driven mainly by the financials. He converted the first time in the 1990s because good subsidy schemes became available as organic farmer, with which he continued for 5-6 years until he felt he got "*strangled in bureaucracy"* (interview farmer 1, p. 2). After converting to organic production, farmer 1 have experienced a noticeably reduction in yield of his production of rye. Approximately by half. But, in continuation mentions, that this is compensated by the subsidies. Actually, he is rather satisfied with his income and financial living conditions, which is obtained without too much hard work. In connection to this, he returned to the importance of the subsidies.

> *"But in that perspective, it is not at all uninteresting that you receive conversion subsidies. I did not hesitate to buy a new tractor immediately (laughs). (…)…if you did not receive conversion subsidies, then it would be rather difficult, because it is required that you, at least within the first year, sow with organic seeds and that you buy organic feed".* (interview farmer 1, p. 10).

He points out that if he did not receive the subsidies, he would not have chosen to convert to organic production. Then he would have had to deselect other things, which he was not interested in. On the other hand, the conversion subsidies, which he will receive during his second year of conversion, are perceived as a bonus, because he at that time have no other expenses different to before conversion.
Farmer 1 did not have great thoughts about marketing of his cattle and rye, which are just sold to the local slaughterhouse and Danish Agro (company purchasing and selling seeds).

Just as farmer 1, Farmer 2 had been farming organically previously, but defected because of too much paperwork as well as more inspections without a simultaneous additional price for his organic products. As described above, his farm was managed in accordance to the rules of nature protection, which he found

attractive, because he received the same subsidy schemes. Mainly two reasons for converting to organic again was mentioned: the first, that The Government stopped giving subsidies to farms performing nature protection, secondly, that he this time expects to receive a higher price for his produce. He has always been able to sell the meat from the cattle and sheep from the stable-door, and his plan is to open a farm shop, when he gets certified organic. He mentions an opportunity of using Peter Beier Chocolate, located across the street, as a possible marketing strategy, by opening the shop whenever they are having events.

> "*Then I can just put out sales signs when he is doing all his Easter-fun…(…) Customers buying expensive chocolate are probably also willing to buy expensive meat".* (Interview, farmer 2, p. 5)

In continuation to the talk about subsidies, Farmer 2 elaborated further that the conversion subsidies, which he also receives within this second conversion period, definitely have an influence on the choice of conversion. Otherwise, he would not have the possibility of doing investment if necessary and like Farmer 1, he mentions the additional expenses on new seed and the reduction in grain yield within the first year.

To Farmer 3, economy and the subsidies have been a very periphery motivational factor behind the choice of converting to organic farming. Still, he finds it attractive that he might receive a higher price on his meat products, and that the subsidies cover the additional expenses connected to conversion and counsellor payments. He is selling the meat without problems to family, friends and by references in the local community.
A positive side effect of conversion mentioned, is that does not have to spend money buying fertiliser.

Farmer 4 started his conventional pig-production because changes in the aid scheme in the 1990's resulted in a rapid reduction in earnings of crop farming. And, it is also purely based on a financial perspective that he has chosen the organic pig-production. His interest arose after a meeting with some other conventional pig-famers talking about organic pigs.

> *"It is not a secret that the economy is one of the main factors behind doing this. Because it is extremely interesting to produce these pigs.*
> *Then we took a napkin and made small calculations. And the number occurring at the bottom of that napkin was so big that I had to follow this idea and work on it". (Interview, farmer 4, p. 4)*

Farmer 4 talked a lot about that the effectivity of organic pig-production is much lower than for conventional pigs, and that the expenses are also the double. Besides this, producing organic pigs is still a relatively good business due the higher prices on organic pig meat. And he experiences a good demand for these products.

He mentioned several times that what matters is to produce, what the consumers request, otherwise he would need to produce something else.
In contrary to farmer 1, farmer 4 believes that organic production is the future of Danish farming due to both the increase in demand in- and outside of Denmark, and because Denmark is possessing the status of producing high quality foods. One future challenge for him could be if too many pig-farmers convert to organic production resulting in an overproduction and thereby a reduction in sales prices. *"And then, it will not be an attractive production anymore"* (Interview, farmer 4, p. 9).

To Farmer 5 economy had no influence on the choice of producing organically. They found out, after starting the production, that subsidies are provided to converting organic producers, which of cause was a bonus that have made it economically easier. Still, she was not aware how much she would receive.

> *That, I don't know. No, they just say some numbers and then we just reply 'yes yes' (she laughed)"* (Interview, farmer 5, p. 6)

In difference to the other four farmers, farmer 5 was a 'beginner', choosing organic production right from the start. They sell the apples at low prices from the farm shop and by visitors picking themselves. The plan is to raise the prises a little bit when they get certified, because they spend more time finding the saleable apples. They hope that the income from the apple production will increase a little in the future.

13.2.2 The Farmer's Organic Mindset

In reference to the elaboration of the importance of economy above, it is here presented how much influence the organic philosophy have had on the decision of converting to organic production – and whether it have changed during the conversion period. In relation to this, the farmers' view on usage of artificial fertilizers and weeds are described, as well as an insight to if the farmer is an organic consumer.

To Farmer 1 who, as above described, was very motivated mainly by advantageous subsidies and higher prices on his organic products, still describes how he already, when he started farming, chose not to spray against weeds.

> *"The birds died on the fields and…well it also killed the weeds(…)but we found out it was just a little too much". (Interview, farmer 1, p. 2)*

In continuation, he told that he is not *organic by heart* and have been spraying a couple of times within his 23 years of farmer, but that he basically is reluctant towards it. On the other hand, he has nothing against fertilizing. That, he have found necessary in order to be able to grow anything.

Farmer 1 expressed that because of the lower yield, he believed that organic production will be gone in 15 years.

During the interview with Farmer 2, very limited conversation was about the organic philosophy. The choice of a nature protective management of the farm was chosen due to a philosophy of animal welfare; though he remarks in a parenthesis that he is resistance towards spraying and have been avoiding it for several years. Still, he sees himself as an organic consumer, thought it was observed during the interview that the milk on the table was conventional.

> *"And I actually prefer to buy something, that is organic. Then you sort of know that it has been made properly. That is nice. I buy organic as much as possible. I always buy organic milk, because then I know that there has not been put a lot of crap into it".* (interview, farmer 2, p. 13).

In contrary to farmer 1 and 2, farmer 3 mentioned that it is definitely the organic mindset motivating his choice of converting to organic production. He finds it very important to live without additives and that animal welfare is closely connected to the quality of the food you eat. Therefore, going organic was a natural decision to make. Also, a concern about the environment was included in the decision.

> *Well, the thought of putting these large bags of fertiliser into the ground. That becomes a part of the animals' daily food (…) and poison penetrating into the groundwater, etc. (…) When we are so interested in the animals feeling good, then we must also choose to give them the best possible to eat, and simultaneously we get a product we find exciting to eat. So, that was probably the reason behind.* (Interview, farmer 3, p. 3).

In continuation, farmer 3 mentioned that he found it very important to use as many of the natural forces of nature as possible.

Like to farmer 2 and 3, farmer 4 found animal welfare very important and have chosen to produce his conventional pigs with high standards on space and bedding, and that they are untethered. Besides this, there is no indication of an organic attitude occurring as motivational factor during the interview, besides that he thinks that to succeed, the organic crop famers must be a much better farmer than the conventional farmer.

Farmer 5 and her husband chose to convert the apple orchard, when they bought it, because living organically is a natural thing to them. Therefore, they were in no doubt about producing organically.

> "*Well, we both agree that people eat too much crap today. You can just look at the animal wildlife over there. It has already increased. We were not at all in doubt that it should go in that direction."* (Interview, farmer 5, p. 2).

13.2.3 Farming Culture and Values

Besides describing some of the values and the culture of farming viewed from the interviewed farmers' perspective, the sub-themes found under this headline is describing the professional proudness and the farmers' view upon on the importance of the professional challenge by converting to organic production.

To farmer 1, farming was a childhood dream, which arose by watching farmers as a boy. He followed his dream buying a farm, experimenting, trying to get it working. He is convinced that, if a farmer can do it, then he is also able to figure it out.

> "*I Think it is easy to be a farmer. I don't know at shit about it. I am not educated. (…) I own a terrible piece of land and I am rather lazy. And it is still profitable."* (Interview, farmer 1, p. 9)

He loves living in the country, and told that he is rather lazy and manages the farmland and cattle from the perspective that is should also be possible to go out and on holidays.
Two clear statement in relation to farming is mentioned though: Firstly, that he thinks the farmers should have more political influence, because they manage large parts of the area of Denmark. Secondly, that the structural development of more and bigger farms with a lot of employees, is a *"culture, that has been lost".* (interview, farmer 1, p. 12).

Also to farmer 2, farming was something he dreamt about as a boy. He has always had animals and helped on a farm as a boy. Before producing organically, he experienced very little profit, which he felt was a waste of time. Therefore, he hopes that that the organic production will be more profitable and thereby also more enjoyable and meaningful. Simultaneously, he finds the professional challenge of organic production very exciting, particularly if he gets a better price for his products.
An aspect in relation to the values of farming mentioned by farmer 2 was that he likes the thought of being almost self-sufficient, and finds it pleasant to make some proper food products.

It is purely for the sake of pleasure that farmer 3 has chosen to begin farming after he retired. Like farmer 2, he mentions the pleasure of being almost self-sufficient, because he likes knowing from where the food comes and that it is good food products.

> "*And you know, where it comes from and (…) that the animals have had a good life. That is really essential to us. (…) ..there is something special about the fact that it is your own produce"* (Interview, farmer 3, p. 7)

Simultaneously, he finds it a fun and interesting new challenge to convert to organic production, and to follow how the conversion changes the composition and growth of his crops. On the other hand, it is of minor concern if weeds are taking over as it is grown only for the sake of feeding the cows.

Farmer 4 is a the only of the five interviewed farmers with an agricultural education. And to him it has always been a goal to become a full-time farmer. To farmer 4 it is the professional proudness motivating him, proving that you can succeed as big-scale professional farmer, also when producing welfare- and organic pigs. As mentioned above, one main driver behind his decision of organic production is economy, the second is that he is constantly challenged professionally, which also explains the fact that he jumped into organic production.

> *"It was a challenge to make. I had no experience with it at all, but found it be really exiting to get some experience with this.* (Interview, farmer 4, p. 2).

If he does not find his work challenging, then it is not fun. Also, he likes the fact that he is the first in Denmark to produce organic pigs professionally and to proof that it is possible to also make a success out of it.

Farmer 5 did not consider farming before they were given the opportunity of buying the apple orchard. Therefore, it is just something they have thrown themselves into with the perspective that: *"well, then we will see where it leads us"* (Interview, farmer 5, p. 2). They have been discouraged by several not to let people pick their own apples, because they are probably damaging the trees. But, because it is old trees and they have no business plans regarding the orchard, she did not worry much about it. One driving factor is that she loves spending time in the orchard, but that it at the same time must be fun and to some extend profitable, which is why they would probably resign if the workload became too high.

13.2.4 Surrounding Perspectives on Organic Production

This theme concentrates on the reactions and influences from the closer network on the farmers' choice of converting to organic production. But also, on influences from the periphery environment. Simultaneously, it is framed how the conversion have had an influence on the way the farmers are being perceived – now and before.

Though it was tried to ask questions circulating around the topic of the view from the surroundings on Farmer 1's choice of converting to organic production, nothing was said about this subject. In general, in the

everyday, he has very little connection to the surrounding network of farmers, and told that he chose to live on the country because did not want to be surrounded by other people.

The first time Farmer 2 converted to organic, he remember that farmers on the surrounding farms were laughing at him, perceiving him a bit nuts, choosing to convert. This, he has not experience at all this time. Rather, he experiences that the social accept of organic production have become much better.

> *"Before, they looked much down on it. (…) Now, it is like an asset to be organic farmer and that is was certainly not back then."* (Interview, Farmer 2, p. 7+10).

He believes that particularly the rapid growth in interest in organic from *The State* have had a lot of influence. Now, internally, the farmers talk more about that the conventional farmers are not earning money – particularly crop producers.

Farmer 3 have not experienced any contemptuous comments about converting. In the end of the interview, he talked about a general positive perception of organic production in his closer social network – a fact that will be revisited below in 'The Network'. Also, he referred to the increase of organic food products in the Danish supermarkets as having good influence on the positive view upon organic production.

Farmer 4 have received a lot of positive feedback on his production of organic pigs from people outside agriculture. Even experiencing that it has removed all focus from his conventional production. A lot of people have been visiting the new production since he started it, interested in knowing about his thoughts behind it. And he likes experiencing to produce something that the consumers appreciate rather than pointing their fingers at.
However, at the beginning, he actually experienced conventional colleagues laughing at him, finding his organic production a bit strange. Maybe because it is a bit unusual to also maintain his conventional production. But after proving that it is a good business and story, he finds them being jealous instead.

> *"But, they are not laughing so much anymore. (…) and actually I think that they would find it rather nice to get these pats on the back from the consumers."* (Interview, farmer 4, p 8).

Farmer 5 have experienced only positive comments on and excitement about converting the orchard to organic.

13.2.5 Organic Rules, Administration and Paperwork & Organic Counselling and Conversion Checks

The theme of 'Organic rules, administration and paperwork' touches upon subjects such as the farmers' perspective on the amount of and difficulties with administration and legislation after converting to organic production. The issues arising within the interviews regarding this topic have been found in very close

connection to the use of organic counselling. Therefore, the themes of 'Organic rules, administration and paperwork' and 'Organic counselling and conversion checks' have been put together. Besides this, the latter also focusses on to what extend the access to qualified organic counselling and the conversion check have had an influence on the choice of converting, and for what they are used during the conversion process.

Besides economy, as a central motivation behind converting to organic production, to Farmer 1, the bureaucracy in relation to the paperwork has also had a significant influence on the decision. He mentions, that because rules were changed so that conventional farmers should do almost the same comprehensive registrations as the organic farmer, he might as well produce organically. Therefore, he did not find that converting to organic production has increased his amount of administrative work. Whenever having troubles filling out the applications, he has received good and qualified help by calling The Danish Veterinary and Food Administration. The first time converting, he had very bad experiences with the organic counselling, not feeling that they understood him and his produce, and he found them too expensive and unprofessional. Therefore, he has not received either conversion check or organic counselling this time converting. Actually, he could not think of for what purpose. In continuation, he had a general respect of following the organic rules, but was rather calm about them. He read the 40 pages the first time he converted, but did not read the applicable legislations this time. He mentioned, that he will find out if anything is wrong, when the inspections have been there.

> *"When I became organic farmer, the first time, they were forty pages, and I read them. However, in my opinion that it is possibly the same forty pages, which also applies today, and the rest are comma corrections. I do not know, I have not read them."* (Interview, farmer 1, p. 5).

In relation to the organic counselling, farmer 1 told about knowing a couple of large scale farmers that were very satisfied, because the counsellors solved some practical tasks.

In relation to this, Farmer 2 finds it relevant to use the organic counsellors to keep track on the organic rules for him, because they change constantly. And he feels that they manage that task very well. Simultaneously, he gets advices by telephone whenever questions occur, and finds it advantageous that they (VKST) have a broad variety of counselling expertise. Though, being familiar with organic conversion from previously, he received a conversion check, which gave him a needed insight to the extent of the conversion this time. He said, that the conversion check had had great influence on his choice of converting again. Also, the counsellors help preparing the administrative paperwork prior to the inspections. Actually, to farmer 2, one main reason for defecting the first time was the large amount of paperwork, which he does not think will change much this time. The paperwork and the at times complicated organic rules he still sees as a downside.

In the same way as Farmer 2, both Farmer 3 and Farmer 5 have outsourced the administrative tasks to their organic counselling companies. On the one hand, it is just easier to let them handle paperwork, subsidy applications, etc. And on the other hand, they do not have to get familiar with all the rules, worry about deadlines, and so forth.

> "*There is so much paper work and (…) I am not interested in getting familiar with all that. (…) Some things you might as well just pay others to do, because I do not know much about it."* (Interview, farmer 3, p. 4).

> *"But yes, I feel that we are in good hands. I do not think that you could figure it out without getting help from someone who has a good knowledge about it. That, I do not think you should manage on your own."* (Interview, farmer 5, p. 7)

Both got a conversion check before converting. It was not essential to the choice of converting to organic as they, as described above, already found the organic approach important. But it helped them to get an insight to how comprehensive the organic production would become.
To farmer 3, the downsides of organic production considered before conversion was: too much inspection and if he should do a lot more paperwork. However, the conversion check ensured that, in relation to his production, it would be manageable.

Farmer 4 found the organic rules rather complicated and said, that he more often must call the counsellors asking questions regarding the organic production compared to the conventional production. Because he manages economics very well himself, it was particularly within the organic rules, he needed counselling – e.g. area requirements, stable arrangement, etc. – before starting the organic pig-production. Luckily, he finds his counsellors very qualified. Farmer 4 uses a wide range of counsellors and counselling companies with different expertise, due to his variety of productions. In relation to the paper work of organic production, he mentioned that it *is* more extensive, but that because he is already producing conventional animal-welfare pigs, the current registrations and inspections were almost similar anyway. One matter, that Farmer 4 was very annoyed about, is the bank requiring a formal accountancy from the Agricultural Association, feeling that there is a lack of confidence in his business skills.

> *"Because, the numbers presented in that budget are taken directly from my computer (…). I can be a bit 'pissed off' about the fact that they are not having confidence in the work that I have done, that someone else must be included as well. Cause, I actually think that I am doing some serious work.* (Interview, farmer 4, p. 8)."

13.2.6 The Inspections

It is elaborated how the farmers look upon and experiences the inspections. An interesting matter occurring throughout several of the interviews is a change in how the controls is carried out today compared to 10-15 years ago – and in relation to this, also a shift in how the farmers experiences the inspections.

One common theme in the interviews, with the farmers having experienced inspections earlier, is that there has been a shift in the way, the inspections are carried out.
Farmer 1 had not yet had inspection this time, but told that when he converted the first time, he experienced that they could and would not answer his questions about the organic farm procedures. He stated, that it would be an advantage, and a much better service, if the inspections were more like a dialog.

Farmer 2 and 4 told about similar experiences with the organic inspections from earlier times; experiencing that it was just as if the only purpose of the inspections was to find legal violations. In contrary to this, both farmer 2 and 4 mentioned that today, the inspectors have become more human and that the inspections include some degree of counselling and dialog.

> *"And I think that it is nice that we can talk about things and that they can help me to do things the right way. Where at the beginning (…) they would rather find some kind of violation out there."* (Interview, farmer 4, p. 6).

Farmer 2 refers to the increased social accept and interest from The State in organic production as one main reason behind this shift.

Farmer 5, who had no earlier experiences with inspections, had only good things to say about it. The inspector was kind, helpful and gave her feedback and good advices on how to run the orchard organically.

Farmer 3 had not had inspection yet but was quite calm about it, though the increase in inspections had been a central part of the considerations before making the choice of converting.

Farmer 1 mentioned, that he did not have anything against being inspected if only the inspectors are professionally qualified.

13.2.7 Jumping into Organic Farming

This theme is a collection of a variety of different sub-themes, all helping to describe how 'big a jump' the organic conversion was for the different farmers. This theme is found important, as it gives an understanding of how comprehensive a change the choice of organic production was. Changes in workload and procedures, challenges and benefits, and which considerations that were made before taking the decision, are outlined.

Farmer 1 did not have to make much changes to convert to organic production, because he principally (according to himself) has been farming organically all the time – at least in relation to avoid spraying. Therefore, he has practically just continued farming the way he did before conversion. The only change is a decrease in work load, because he is not allowed to fertilize. He mentioned though, that if a lot of changes of his stables had been necessary, conversion had not been considered at all.

> *"Well, if I should have invested a hell lot of money in order to convert to organic production, then I would not have done it. Because, it is not that profitable".* (Interview, farmer 1, p. 6)

Also, farmer 2 found it easy to convert to organic production because: much of his production is grass, that he had been authorized organic famer before and, that he in the meantime had been running the farm environmental friendly. Therefore, minor changes had to be done to convert again – whereas he might had been more hesitant if not already al animals were kept outdoor. The only change and obstacle is that he cannot fertilize the grass a little at the beginning of the season.

Farmer 3 could not mention any challenges nor changes in work load in relation to conversion. He referred to the fact that he was still in an early stage of the conversion phase and therefore, he found it difficult to predict. His presumption was that, within a few years, the procedures will be like they have always been. And based on the conversion check, he believed that conversion would not provide much additional work, which he found rather essential.

Farmer 4 had a totally other perspective on the amount of work required in the organic production, when compared to the conventional production. In the organic pig-production, the workload is almost double the size, because the sows are moving on a much larger area. It was important to the choice of conversion that he already had an employee interested in organic productions, as it requires somebody willing to be outdoor everyday all year around.
The changes Farmer 4 had to make to start the organic pig-production was rather comprehensive and expensive, but not perceived inconceivable. He mentioned, that there of cause are different kinds of challenges, because it is another way of taking care of pigs, but his perception was that it is just different kinds of challenges and problems compared to the once also occurring in the conventional production. Still, due to his production of welfare-pigs, being used to yearly inspections and more administrative work, the difference to organic production was not that noticeable.

Because Farmer 5 and her husband just jumped into buying the orchard, without much consideration time, and that they before starting the production were organically oriented, the only considerations on disadvantages was the extend of work, which immediately have nothing to do with producing organically.

The only possible challenge she could think of was that if it, at some point, becomes necessary to spray the trees with something legal within the organic production. Until now, they just see what happens.

13.2.8 The Network

In reference to the Socio Ecological Model, as described earlier, the network is including all layers of the surrounding network of the farmer. It is described both how the farmers use their personal and professional networks in relation to help and knowledge sharing, as well as the networks' influence on the farmers' choice of converting to organic production. The organic counselling, described above, must be seen also as an essential actor within the farmers' network.

Farmer 1 did not have much professional network – or social circle in general – and this have not had any influence on the choice of converting to organic production. He has a friend who, before retirement, worked as livestock consultant and a couple of friends on smaller farms around the corner, with whom he also has professional conversations – but not about organic production. Actually, he answered, that he did not really know what he should talk to an organic farmer about.

Though, Farmer 2 has a couple of organic farmers in his nearby professional network, they have not had influence on the choice of converting. Neither have family and friends. He uses the other organic farmers for knowledge sharing and help with spreading manure, borrowing machines, buying seeds, etc. And, as mentioned briefly above, Peter Beier Chokolade as a marketing opportunity.

Like farmer 1, Farmer 3 have no organic farmers in his professional network. In contrary, he mentions that among his friend and closer network there is a general interest in eating quality food without additives and in protecting the nature.

Farmer 4 has an enormous network and is the only one of the five farmers interviewed participating in ERFA-networks. Actually, he is participating in several, where the newest is an organic ERFA-network. He uses the networks to get new information as well as sharing his perspectives on pig-production.
Though, the choice of starting organic production was certainly based on an economic perspective, there were two reason behind why the idea occurred in the first place. Firstly, it was mentioned during an ERFA-meeting with conventional pig-colleagues. Secondly, in 1999, when he started organic grain production, he was offered to take over the neighbour farm under the condition that it was produced organically, which he found exiting.

> *"And the reason why we actually started it was that (…) I had a neighbour, who bought the property, he is living at now, and in that context, he was very interested in it being farmed organically. Then, he asked if I was interested, which sounded very interesting".* (Interview, farmer 4, p. 4)

In extension to this, organic pig-production became obvious when he was offered to take over a former organic pig farm 4 kilometres away. But also, it is essential to him to produce food products that are requested by the consumers.

Like farmer 4, Farmer 5 entered the production because her and her husband were given an opportunity from an external person, but this had no influence on the choice of producing organically. Until now, Farmer 5 have gathered knowledge from nearby farmers with expertise in organic production and others with expertise in apple production in general. The idea is, in the future, to establish a cooperation between the other organic farms in the neighbourhood.

Family and friend are very keen to help on the orchard, which is essential to make the workload during the summer manageable. In geranial, she experiences that people are very helpful, for instance by sharing information about the farm on the social media.

13.3 Other Results

During the process of getting into contact to the farmers relevant to the study, information from a few other farmers was received. The most relevant are briefly elaborated here.

A telephone call was made in March 2017 with a large full-time farmer on Mid Zealand, who had received a conversion check, but decided not to convert. The choice rested both on the fact there was too much at stake, and on the organic counsellor having advised him against it due to limited opportunities of getting enough nitrogen. His interest in organic production was founded in recommendations from good colleagues, and because he felt a certain pressure from the society to go organic.

As mentioned earlier, two conversion check was observed. Besides offering an insight to the procedure of the conversion check, an insight to the questions relevant to the farmers before making the choice were acquired, e.g. the organic rules in relation to leased farm area, EU-subsidies, sales prices on meat, crop rotation and access to manure. To both farmers, the requirement was that the conversion should not be too inconceivable. The farmer visited at the last conversion check had 34 Ha farmlands, 6 sheep and crop production. He told that his interest in organic production was due to the professional challenge and because he wanted to produce more like in "the old days". Whereas the at first check, a municipality, the driver was mainly branding.

In the above, the results from the interviews with the five farmers have been elaborated. Ten main themes were found occurring in several or all interviews, and were described in connection to all five farmers separately. In the following, the finding will be analysed in relation to results from the previous studies reviewed and presented earlier.
An evaluation of the strengths and weaknesses of the results, the data collection and method is made later in the 'Discussion'. This also includes a discussion of the analysis.

14.0 Analysis

To analyse the findings in the interviews with the five farmers against previous studies, the most frequently occurring experiences with and motivations affecting organic conversion are put into two separate MSEMs. The purpose is to be able to: on the one hand, map influential factors in different societal layers as well as, on the other hand, be a tool to hold previous findings up against the findings within the five interviews done in relation to this thesis.

The different categorizations used in previous literature will be applied in the analysis, to understand the perspectives from where the five farmers interviewed have made the choice of converting. That is both the classifications of 'beginners', 'converters', 'full-time', and 'spare-time' defined in the glossary above, and a utilization of the two types of farmers defined by Darnhofer, Schneeberger & Freyer (2005): 1) *the "pragmatic organic"* farmer, mainly driven by the prospect for securing income and compensatory payments and to whom health, ethical, or sustainability considerations appear more periphery, and 2*) the "committed organic"* farmer, to whom the organic philosophy is more important and reflections about economy is more secondary (Darnhofer, Schneeberger & Freyer, 2005, p. 48).

The categorizations are:

- Farmer 1: pragmatic organic converter. Spare-time. retired
- Farmer 2: pragmatic organic converter. Spare-time. retired
- Farmer 3: committed organic converter – but with limited farming experience. Spare-time. Retired
- Farmer 4: pragmatic organic farmer. Neither converter nor beginner – parallel production. Full-time. The only farmer with agricultural education.
- Farmer 5: Committed organic beginner. Spare-time. Still working full time besides farming.

Importantly is it to underline, that there will be differences in how much influence the different factors have had on the individual farmers interviewed. The categorizations of farmers presented above is a useful tool to

understand the perspective, from where the farmers have entered organic production. And further, how important they perceive the individual and societal factors presented in the MSEMs.

Below, Figure 4 presents the MSEM with influences found in previous studies. On page 69, Figure 5 shows the MSEM with influences found in the interviews with the five farmers. They are all key-words collected from the elaborations presented earlier.

Subsequently, the results in the two models are compared and elaborated throughout under the headlines: Economy, Inspections, Social Accept of Organic Production, Rules, Administration, Network and Organic Counsellors, Farming Culture and Values, and The Jump into Organic Production.

RESULTS IN THE MODIFIED SOCIO ECOLOGICAL MODEL FROM THE LITERATURE REVIEW

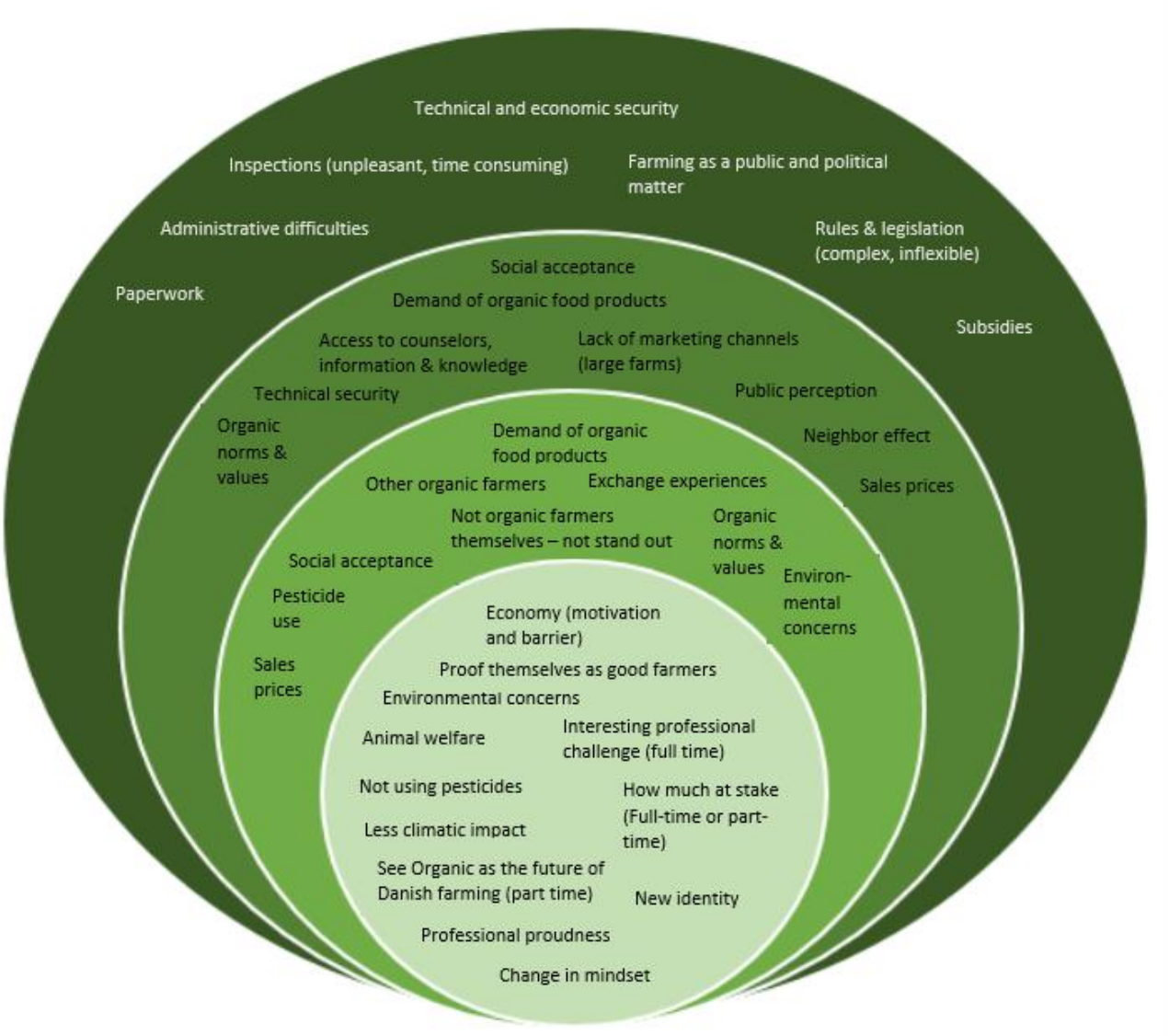

Figure 4: MSEM with influences found in previous studies

RESULTS IN THE MODIFIED SOCIO ECOLOGICAL MODEL FROM THE FIVE INTERVIEWS

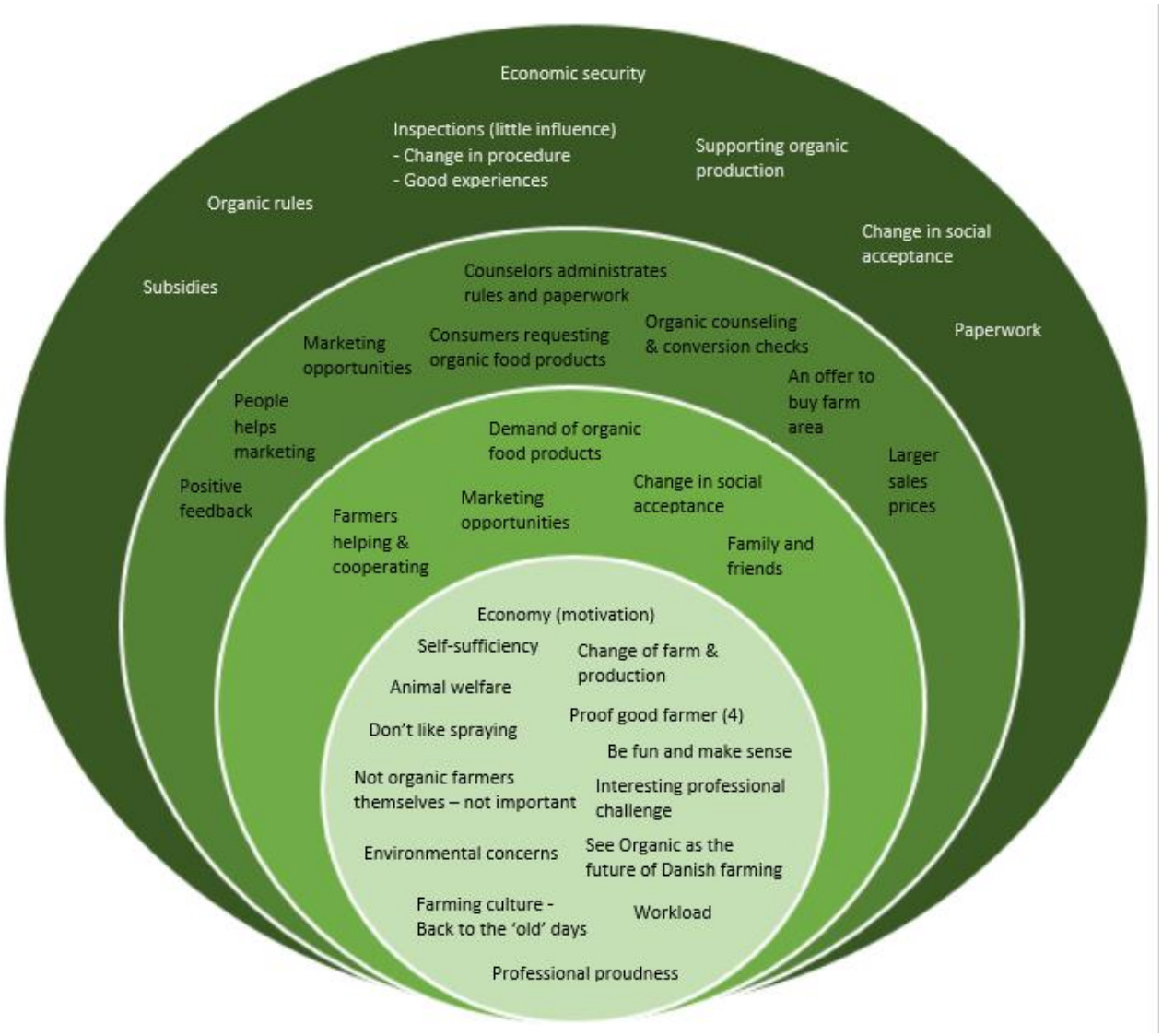

Figure 5: MSEM with influences found in the interviews with the five farmers

14.1 Economy

Economy is occurring at the individual level in both models, and has been found to be a topic mentioned by more or less all farmers in previous studies as well as in the recent study with the five farmers. To the p*ragmatic farmers,* this was found to be one of the most influential factors behind choosing to convert to organic production, compared to the *committed farmers*, mainly driven by factors such as *animal welfare*, *environmental concerns* and avoid using *pesticides*. Still, in both previous studies and the recent study, the committed organic farmers had made economic considerations during the conversion process, and the pragmatic farmers had an aversion against spraying. In previous studies, economy was both a motivational factor behind conversion, a reason for defecting and a barrier to even consider conversion. This was primarily due to a variety of factors placed in all three societal layers. The farmers either experienced or predicted limited *demand of organic food products* in the closer network and by supermarkets, public institutions, etc. at a broader level. Particularly full-time farmers reported a lack of *marketing channels*. In comparison, economy was mentioned only as a motivational factor in the five recent interviews. All five farmers experienced no problems selling their products, because of requests both within their closer social network as well as at a broader consumer level. Particularly to farmer 4, the increase in consumer request of organic products was highly influential on carrying on his organic production. Simultaneously, it was mentioned that they prospected better earnings by producing organically compared to the conventional production, which made the organic production make sense and be more fun. A difference is that in previous studies, this was mainly a matter to full-time farmers, whereas in the recent study with the five farmers, also several of the spare-time farmers interviewed found this essential. In relation to this, the influence of *subsidies* provided from the EU, and therefore placed in the outer societal layer, was very frequently mentioned both in previous studies and within the recent study, particularly motivating the pragmatic farmer to convert or maintain organic production. Therefore, the influence of receiving subsidies does not seem to have changed during the years, besides that, in the previous studies, some farmers experienced that the subsidies did not cover the expenses, whereas this was not an experience mentioned by the farmers in the recent interview – for some, subsidies were even an extra bonus.

If referring to the elaboration earlier about the development of organic farming in Denmark, the interest and support from The Government, at the outer societal level, and the increase in organic consumption, indicates that economics have become more a driver than a limitation, when considering organic production. Also, it has become more social acceptable to convert to organic production solely based on economic reasons.

14.2 Inspections

The inspections are an *institutional* (see figure 2) factor that *will* have some influence on the experience with conversion, as they increase to occur at least once a year. During the literature review, it became clear that the inspections were perceived too frequent and time consuming, but also unpleasant to a main part of interviewed defected farmers. In relation to the experience of the inspections being unpleasant, three of the five farmers interviewed in the recent study had experienced organic inspections previously, approximately at the same time as the previous studies were carried out. Interestingly, they support that the inspections previously have been a rather unpleasant experience, but states that there has been a clear shift in the way the inspections are carried out today. All five farmers had very good recent experiences with the inspections being more advisory instead of solely with the purpose of finding legal violations.

In comparison to previous studies, where the inspections had been partly influential on farmers ceasing organic production, the inspections were only positively referred to in the recent study by the four farmers, who had received inspections within the last year. Farmer 2 directly refers to the growth in interest and support from *'*The State*',* as one main reason for this change, which indicates very well how periphery societal interests in organic conversion influence the individual within the inner circle, in this case the converting farmer. This leads perfectly to the next topic of the social accept of organic production.

14.3 Social Accept of Organic Production

The results from the interviews with the five farmers indicates an experience that there is a general high social accept of organic production form all the surrounding layers of the converting farmer. Only farmer 4 had experienced being met with uncomprehending responses from conventional colleagues – which had later shifted to envy about his success with organic farming. Apart from this, both within the farmers' closer social network of friends and family, at the 'Interpersonal level', and by consumers and people outside agriculture, at the '*Community* and *institution'* level, the feedback on the choice of converting was only positive. In previous studies, the influence of the neighbours was found important to the choice of converting. Immediately, none of the five farmers in the recent study found that their interest in conversion was due to impact from other converting farmers in the area and therefore, the same tendency was not found within this study. Still, it can be argued that the general societal accept of organic production might have some influence in why the farmers even start considering conversion. Simultaneously, the fact that two of the farmers started the production because they were offered to buy the farm land – one under the condition that it was produced organically – contains some degree of influence from a *neighbour effect.*

In the study by Vaarst (2000) of farmers converting between 1995-1999, it was reported that several had experienced being looked down at and met with outrage and irritation, when converting. Simultaneously,

converting farmers chose not to consume organically, because they did not want to stand out when grocery shopping. A later research by Noe (2008) found similar tendencies; but because organic production began to develop into becoming a natural part of agriculture, a social accept hereof was evolving. The fear of comments from conventional colleagues was for some farmers still a large barrier to conversion, but the converting farmers experienced to a lesser degree that they were socially excluded. If referring to the recent interviews with the five farmers; the farmers having converted before, some years ago, mentioned the same previous experiences, but mentioned a development towards organic production being almost an asset today. And for some of them, it was even a release not having to defend using pesticides to people outside agriculture. This emphasizes a shift throughout the years in the perception of organic production, which is possibly highly influential on the increased interest in conversion within the last couple of years, as described earlier about the development of organic farmers in Denmark.

Like in the study by Vaarst (2000), it was also found in the recent study with the five farmers that only some of the them were organic consumers themselves. In contrary, this was not because of a societal pressure, but solely due to that they were just not 'organic by heard'. This again frames that today, it seems to be accepted to be motivated by for instance economic reasons, when producing organically.

14.4 Rules, Administration, Network and Organic Counsellors

In the main part of the reviewed previous studies, access to qualified organic counsellors and professional networks was found highly influential on choosing to convert to organic production. Simultaneously, defected farmers reported that this had had little influence on giving up organic farming, concluding that the contact to qualified counsellors was generally good. Particularly smaller farms sought knowledge sharing in professional networks. Almost the opposite impact was found in the interviews with the five farmers: Only the full-time farmer found it highly important to participate in organic and professional networks in order to share knowledge. The other farmers' networks were mostly neighbours, family and friends, who were helping on the farms and spreading information about the food products. Therefore, instead, to four out of the five farmers, the organic counsellors were found very important in relation to getting advices during the conversion, whenever questions occurred. And for some, the conversion checks were contributing to making the final decision of converting to organic production. Therefore, it seems like the easy access to counsellors and the opportunity to receive a free evaluation of the extend of change an organic conversion requires, initially makes it easier for the farmer to make the choice.

An interesting finding is the role the organic counsellors has in relation to the organic rules and paperwork, when converting to and producing organically. In previous studies, the organic rules, paper- and administrative work were generally experienced very difficult, complex and inflexible, and mentioned among

defected farmers as main reasons for ceasing organic production. These findings are not reflected in the interviews with the five farmers. To none of them the paperwork or rules were perceived incomprehensible, mainly because they had outsourced it to their organic counselling companies. Several mentioned that they did not have to get familiar with the rules and worry about applications or the paperwork in relation to the organic inspections, because the counsellors were taking care of it. In that perspective, it looks like it has become a lot easier to be an organic farmer today, if talking about rules and paperwork, than it has been earlier. A fact that was also mentioned directly by one of the farmers interviewed.

If this development is general to all converting farmers in Denmark, is not possible to conclude from these results – particularly due to this study mainly representing small spare-time farmers. Anyhow, it could be an interesting theme for further research.

14.5 Farming Culture and Values

In previous studies, the *professional challenge* is one of three most frequently mentioned motivations behind choosing to convert to organic production. Particularly full-time farmers found this an essential influence. This is very much in line with what has been found in the new interviews with the five farmers. Four of the farmers mentioned, that the *professional challenge* of organic production was motivating, but to farmer 4 – the only full-time farmer – this was one main driver behind making the choice of starting organic production. Whereas the spare-time farmers saw this as a positive side-effect of conversion. Also, to the farmer at the second conversion check, the professional challenge was mentioned as a central motivation behind his interest in organic production. Another similarity found was that, in reviewed literature, converting to organic production was also a way for them to *proof themselves as good farmers*, which was a motivation to farmers 4 as well, mentioning that the organic farmer must be a much better farmer than the conventional farmer because, within organic farming, "*there are not many emergency brakes"* (Interview, farmer 4, p. 5). Simultaneously, he finds it fun to proof that professional large scale organic production can be a profitable success. However, to the four spare-time farmers, proofing themselves as good farmers was less important. Still, the fact that farming had to be *fun ad make sense* was a general perception by all five farmers.

If referring to Figure 4 and 5, the *professional proudness* is presented in the inner circle in both MSEMs. In previous studies, defecting farmers had experienced that their organic products were mixed with or sold as conventional products at low prices, which reduced their professional proudness. The same explanations were not found in the recent study. In contrary, a maintenance of the professional proudness was to farmer 2 one reason for him to choose organic production, influenced by factors in the two outer social layers, such as better prices, consumer demand and subsidies. Whereas to farmer 4, the professional proudness was directly connected to the success of his produce and the *positive feedback* on his organic pig-production. The

latter also represented in previous studies, explaining that it had high influence that conversion resulted in a more valued identity.

One interesting sub-theme, running through the interviews with the five farmers, is the culture of farming. One matter is the perception of what 'real' farming is. To farmer 1, the large scale professional agriculture, with a lot of employees, was perceived as 'a loss of our farming culture'. In contrary, farmer 4 sees this type of production as the only right way of being a farmer today. Possibly, these perceptions could be due to either their large age differences, referring to which farming culture they grew up with, or to their different educational backgrounds.

Though, not mentioned directly, there seems to be a tendency among the spare-time farmers interviewed, that they are almost striving against living and producing like *in 'the old days'*. Two of the farmers are living three generations on the same farm, helping each other with the daily work, the children, etc. In supplement, the idea of farming like in 'the old days' was actually mentioned directly by the farmer at the second conversion check, as driver towards the choice of organic production.

In relation to this, *self-sufficiency*, visualized in the inner circle of Figure 5, was another rather important aspect mentioned in two of the interviews. In the material reviewed at the beginning of the thesis, this is not a theme encountered, and it is therefore interesting, if it is a developing tendency to return to the 'original' farming culture and values. At least, if you are a *committed organic* farmer, which was the case of these two farmers.

14.6 The Jump into Organic Farming

This last theme, chosen to analyse, is focusing on the perspective from where the farmer made the choice of organic conversion.

If referring to results from more recent studies reviewed, is seem like it has become easier to convert both due to the increased social acceptability of organic production, as elaborated above, but also, as Noe (2008) has found, that organic and conventional farming is becoming more and more alike, and therefore the change both in mindset and of the production is often limited (Noe, 2008, p.279). This fact is reflected in the interview with farmer 1, who chose organic production because he felt he had to do the same amount of registrations within conventional production. In previous research, clear differences were found, when comparing spare-time with full-time farmers, in relation to their attitude towards conversion. Spare-time farmers generally had a positive attitude towards organic conversion, described by the fact that they had another income apart from farming, and therefore risking less compared to full-time farmers. This is also reflected in the interviews with the four spare-time farmers interviewed in the recent study.

In other studies, a large barrier mentioned by conventional full-time farmers was the large economic risk of not producing or selling enough, and the uncertainty about what they 'jump into' if converting to organic production. Though, only one full-time farmer is represented in the study of this thesis, he seemed to not have the same degree of concerns regarding e.g. product demand and sales prices. This underlines, how the growth in organic consumption and export, as described earlier in *'The Development of Organic Farmers and Area'*, influences the farmers' interest in and willingness to 'make the jump' of converting to organic production. And particularly, in relation to farmer 4, the increased focus on supporting pig-production from The Government, described in The Organic Plan for Denmark Strategy 6.4 (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 29), might also be influential on his and other pig-producers' organic production possibilities and experiences.

The free conversion check is important to mention as well. The four farmers having received a conversion check explained, that this insight helped them to better manage the decision of conversion. For instance, an insight to the change in *workload* and *paperwork* was important, as several found it essential that this did not increase much after conversion. Which was also rather essential to the farmers at the two conversion checks. As outlined above, e.g. paperwork, placed in the outer circle of both MSEMs, was found in previous studies to be a large barrier in relation to organic production. That the conversion checks *are* efficient to make the amount of change needed more transparent, if converting to organic production, is described both in the introduction of this thesis and by The Government in the Organic Plan for Denmark Strategy 5.1 (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 23); outlining, how external actions on a *societal* level can influence the farmer's choice of conversion.

Problems with weeds and yield has been described in other studies as another essential cause behind the decision of ceasing organic production. The same issues did not seem to be a general concern in the recent study – which must be explained by the fact that four of them are small scale producing spare-time farmers, mostly producing crops for animal feed, and therefore weeds are of less importance. An aspect worth mentioning though, when comparing the interviews with the five farmers to findings in previous studies, is that the production of the four spare-time farmers before conversion was not far from an organic production. Therefore, to them, the 'jump' into organic production was not that unmanageable. Therefore, it is difficult to say if the pragmatic converters interviewed would have converted if the changes had been more comprehensive. In previous studies, the comprehensive change of the farm and the procedures was found highly influential on making the choice of not converting. Only farmer 4 had to make larger changes, but found it fun due to the interesting professional challenge, which highlights the fact that also differences in perceptions of the individual farmer have an impact on how the 'jump' into organic conversion is being considered, also framed by earlier by Darnhofer, Schneeberger and Freyer (2005).

As a finishing addition to the analysis, the farmer spoken on the telephone with, who had chosen not to convert, should be included. His organic counsellors had advised him against conversion, primarily because of limited access to manure. One option was to start converting only a small part of the farm, but this was perceived both unmanageable and too much of a financial risk. The problem of limited access to manure, for farmers solely producing crops without animal production, is an issue also supported by findings in previous studies. Though, The Government is aware of this barrier to organic conversion (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2015, p. 28), it seems like the 'jump' to organic production for this type of production is still rather comprehensive or even impossible.

Summing up; the analysis was structured around the MSEM, showing in two models the results from the literature review and from the interviews with the five converting farmers. Under the headlines 'Economy', 'Inspections', 'Social Accept of Organic Production', 'Rules, Administration, Network and Organic Counsellors', 'Farming Culture and Values', and 'The Jump into Organic Farming', differences, similarities and developments between the two models have been elaborated, with the purpose of exploring farmers' motivations behind and experiences when converting to organic production.

15.0 Discussion

The subjects chosen for discussion have occurred during the process of constant reflections of the new *understandings* acquired during the description of the results from the five interviews and the following *reflections* hereof. The subjects found most interesting and relevant for further discussion in the following are: conversion subsidies, the social accept of organic production, and the development of the inspections. Aware, that by selecting these, some of the other themes, touched upon in the results and analysis, are discarded.

Before returning to the subjects mentioned, a discussion of the used methodology will be made. This will be both in relation to the method used for data collection and for the analysis. The purpose is to present the reflections done, and discuss its strengths and weaknesses, how they manage to produce the knowledge acquired to answer the research question, as well as if the collected data is representative enough to make the comparisons carried out in the analysis.

15.1 Methodological Considerations

The data collection consisted of two separate rounds of interviews; where the first was focusing on the organic counsellors' perspective on organic conversion and the second on the farmers' perspective. Initially, as described earlier in '*Development of Methodology*', this was due to an original aim of the study to investigate the network between different counsellors and converting farmers in relation to their experiences with organic conversion. Immediately, this was changed to be only focussing on the farmers' perspective, because the aim of research had to be narrowed down and more specified. The idea of basing the interviews with the farmers on the preunderstandings gathered trough the interviews with organic counsellors and on literature review of previous studies, was maintained. It has become clear, after reflecting on this method, that a possible weakness might be that the interviews are based partly on perspectives from the counsellors, but the aim of the research is to get the farmers' perspectives. On the other hand, questions about the farmers' motivations are retrospective, where the risk is that they could be forgetting relevant information or experiences (Trost & Jeremiassen, 2010, p. 110). Therefore, the interviews with the counsellors, who more recently have been discussing the drivers behind organic conversion with farmers, could also be beneficial to get valuable second hand insights before entering the field of research.

Another methodological choice relevant for discussion, is the hermeneutic perspective of entering the study with a preunderstanding. This will have influence on the study result, as already the direction of the semi-structured interviews has been decided before carrying them out; but has also served as tool for reflections on the research prerequisites and possibly delimited a theoretical one-sided study (Kvale & Brinkmann, 2015, p. 309). This was found necessary due to very limited knowledge about organic conversion before starting the research, and was chosen to enable asking the questions most appropriate for answering the research question. However, it could have been an interesting approach to enter the field without much knowledge, doing observational studies to discover interesting research themes within the main topic of organic conversion, and basing the semi-structured interviews on these. Also, this would possibly have offered an even more into depth insight to the farmers' motivations and experiences with organic conversion. The downside, if choosing this method, could be that it would have been very time consuming, which most likely would not have been possible within the limited time frame of this thesis. In that perspective, the chosen method is considered appropriate as, still, a deeper insight to the five cases interviewed was made possible by choosing the semi-structured interview as research method.

The MSEM have been used as visualizing tool to map and compare the results from the interviews with the five farmers against the findings in previous studies. As elaborated earlier about the Socio Ecological Model, it enables us to "*understand the multiple levels of a social system*" and the "*interactive effects of personal and environmental factors that determine behaviours"* (www.unicef.org, 2014). The use of the model has

been very valuable to not only make the extensive amount of data more manageable, but also to get an integrated understanding of societal influences on the choices made by the organic producers at an individual micro-level of the complex food system (Greene, 2010). Still, it must be stressed that, by choosing this analysing method, all results of the motivations and experiences with organic conversion, gathered from both the literature review and the five interviews, are reduced to key-words. This means, that all varieties in perspectives from the different types of farmers are wiped out, risking misinterpretations if inspecting the MSEMs only. Nevertheless, nuances in types of farmers related to their perspectives on organic conversion have been tried outlined in the analytical comparison of the two models. Therefore, the use of the MSEM as analytical tool is assed reliable.

When making the comparisons between the different studies, it is immediately relevant to also consider if the study of this thesis, which is based on a limited number of farmers, in a limited geographic area and, almost only representing spare-time farmers, is relevant, valid and trustworthy. It is obvious, that the five case studies are describing these few farmers' individual perspectives on organic conversion, which on the one hand, makes these results unique and interesting, but maybe also incommensurable to studies not carried out under the same criteria. On the other hand, because the interview guide has been designed with basis in the topics and findings from previous studies, to which the results of the five interviews have been analysed, it seems possible to frame valid similarities and developments, when comparing the data. Immediately, it must be kept in mind that the previous studies are representing a broader variety of farm types and productions, as well as several geographical areas of Denmark and other countries. And therefore, it is only possible to make cautious conclusions on the analytical statements presented. Still, the result from the five interviews are assed valid and trustworthy, because of: the ethical and methodological considerations made before doing the interviews, due to that the farmers had agreed to participate in the interviews before carrying them out, and because they seemed relaxed doing the interviews in their familiar surroundings.

After these methodological reflections follows a discussion of the three chosen themes introduced above.

15.2 Subsidies

The reason behind making a discussion on the subsidies is resting on the impact they have been found to have on the decision of organic conversion, both in previous researches and the recent interviews. Of cause, it is important to have in mind, that subsidies are not a main motivational factor to all converting farmers. However, all still found them relevant and for several, even an extra bonus – the latter actually provoking the interest of discussing the subsidies further. The interviews carried out in relation to this thesis more or less represents only spare-time farmers' perspectives hereof. Therefore, the same perspectives on subsidies

might be different to full-time farmers, but the study offers an interesting insight to the small spare-time productions' need of financial support. In previous studies, spare-time and part-time farmers answered, that they found the subsidies too small – a picture not repeated in the recent study. Some were drawn to organic conversion almost only by the subsidies and in the second year of production, the subsidies were just a nice addition. Therefore, is seems relevant to firstly debate, if the subsidies should actually be differentiated even more than described in The Organic Action Plan 2020, targeting subsidies to productions with most difficulties (Ministeriet for Fødevarer, Landbrug og Fiskeri, 2012, p. 7). And secondly, if it is acceptable that some small-scale farmers become organic producers only with basis in the financials provided? For some, the subsidies are even unnecessary after the first year of conversion. Simultaneously, as described in the literature review, previous studies have concluded that farmers, who have entered organic production on an economic basis, were more likely to defect when the 5-year period, receiving subsidies, had passed. The argument behind putting focus on this issue is to create an awareness of that the subsidies might be more necessary within some types of productions, e.g. productions having to make larger changes for them to be suitable for organic production. Whereas, in relation to productions similar to the four spare-time farmers interviewed, the extra conversion subsidies received within the first two year of conversion might only be relevant during the first year. Well aware, that this type of differentiation might be too administrative difficult at political level.

In continuance to this, secondly it can be debated if the organic expansion really is operated on market terms, which The Government thinks that it should be (Brandt, 2016), when several farmers are converting to organic production because of the subsidies, rather than on for instance due to consumer demand or the organic philosophy. And, with a simultaneous risk of converting back after the period of financial grants expires. However, The Minister for the Environment and Food of Denmark, Esben Lunde Larsen, finds that the increase in organic production is taking place on marked terms due to the growth in organic consumption and thereby request of more organic products in the supermarkets (Brandt, 2016).

It is, however, not the aim of this discussion to determine whether subsidies for organic conversion is a good idea or not. It seems like the subsidies are having an influence on many farmers' willingness to convert to organic production, which is preferable in relation to both an environmental perspective, if the organic marked is to continue its recent positive development, and if the aim is to expand the organic agricultural area – as in accordance to the Organic Action Plan 2020. Still, it is arguable if the organic production is kept artificially alive due to the financial support available, or if it just a supporting aspect to a self-developing marked.

One thing is for sure though, both previous research and the recent study proved that subsidies is a motivational factor behind converting to organic production.

15.3 The Social Accept of Organic Production

The second topic found relevant for further discussion is the social accept of organic production. This is chosen because it, in the analytical comparison of the two MSEMs, was found that organic production seems to have reached a general social accept today, compared to earlier. Meaning, that opinions from others are no longer a barrier to the farmer's choice of converting to organic production. The findings actually suggest that, today, it is more an asset and socially accepted to convert to organic production. However, it is important to reflect on the fact that the five farmers interviewed are almost only representing North Zealand, which might influence this finding. Frederiksen & Langer (2004) describes how the organic conversion is rather unevenly developed in Denmark, presenting that particularly in Southern Jutland and the Metropolitan area of Copenhagen, the organic conversion is above the average. The reasons behind this are that these are areas with smaller farms, closer to the city (Frederiksen & Langer, 2004), which correspond with the types of farmers represented in present study with the five farmers. If referring to the study by Risgaard, Kaltoft & Frederiksen (2005), comparing the differences in organic development in Thy and on Mors, it was found that in areas, where the frequency of converting farmers was high, also the social accept was larger, compared to areas dominated mainly by conventional productions. Therefore, it could be assumed that the increased social accept found in the recent study might only be applicable to the area of Mid and North Zealand, and other areas with the same composition of farm types, and not generalizable to areas with only few organic farms. Statistics from 2016 show that there in the southern part of Zealand and on the Sothern Islands are less than 4 percent organic farmers compared to the total agricultural area in each Municipality (Landbrugs- og Fiskeristyrelsen, 2017 c, p. 35). Therefore, it is conceivable that there, within these areas of Denmark, still is a lower social accept of organic production, not differing much from the findings in previous studies. In the interview, also Farmer 4 mentions that the sales channels of his organic pigs are mainly centred around the bigger cities of Denmark, such as Copenhagen and Århus, which in a way confirms that, in the more periphery areas of Denmark, the social accept of organic production have not increased to the same level as reflected in the findings of the recent study, presented in this thesis.

Though, one should be cautious generalizing the results from the five interviews to all areas of Denmark, they are considered valuable in relation to make possible similar conclusions on the social accept in other areas with the same demographic distribution of farmers. Additionally, it must be argued that the increase in interest and accept from actors in the outer societal layers (e.g. the Government and the consumers) might have some influence on farmers in all areas of Denmark. Simultaneously, the statistics referred to covers only organic farmers authorized before Maj 31st 2016. Therefore, there might be possible organic converters in the areas mentioned, but who are not included in the statistical data material. The lists of converting farmers, received from Lisbeth Frank Hansen in VKST, showed that four farmers on Lolland (a southern Island of

Denmark), with more than 100 Ha farmlands, had chosen to convert to organic production (own research). Also, Organic Denmark confirmed in a telephone conversation, while arranging participation in the conversion checks, that particularly larger beet farmers on Lolland were interested in organic conversion (ibid). Therefore, assumable, the organic production is to be expanding within the next couple of years to areas of Denmark with only few organic farmers.

15.4 The Inspections

The last topic, found interesting to revisit, is the development of the organic inspections. Apart from the discussion above, about the possible differences of the social accept of organic farming in different geographical areas, it could be assumed that the organic inspections, carried out by The Danish Agrifish Agency, are done under the same conditions in all parts of Denmark. Therefore, the positive experiences and the development of the inspections having become more an equal and advising conversation, might be a finding applicable to all converting farmers. However, there seems to not be any resent studies done on the organic farmers' experiences with the yearly inspections, which makes this an interesting subject for further investigation. But simultaneously, only an assumption that it is a general development of the organic inspection procedure. Another reason why the topic is found relevant for further discussion is that, in previous studies, the inspections were found to be unpleasant and looked forward to with a little fear. This was also reflected in three of the interviews with the five farmers having experienced organic inspections some years ago – one mentioning, that it could be pleasant if they were more advising than regulatory. In previous studies, the inspections were a reason behind why several farmers were having bad experiences with organic production or even a barrier to conversion. Therefore, in relation to the aim of this thesis, investigating the farmers' experiences with organic conversion, it is an interesting discovery, because this will have influence on how the farmers experiences the regulatory additions, when converting to organic production.

Having discussed the above topics, others have of cause been left out. The topics discussed were chosen because they were found relevant to how the farmers' experiences organic conversion, but also due to that changes seems to have occurred since the previous studies reviewed were carried out. A subject, that was found relevant, though deselected, is the farmer's view upon the future of organic farming. Differences in perspectives between farmers were found both in previous studies as well as in the recent interviews with farmer 1 and 4. The relevance of the subject rests on the fact that farmers might not choose to convert if they do not believe that organic production continues in the future. The reason behind not discussing this subject further, is that the future of organic farming is difficult to predict, and that the development has gone up and down since it started emerging in the 1970s. However, signing the new certification agreement, making export of organic food products easier, as mentioned earlier, it is possible that more Danish farmers

will become interested in organic production or expanding their organic production in the future. Still, referring to the statement by Noe in 2008, prospecting that a new wave of organic conversion does not seem to happen in the near future under the current circumstances, as mentioned in the introduction; the circumstances *must* have changed, when more farmers during the last couple of years have converted to or showed interest in organic production. These circumstances were investigated in this thesis.

16.0 Conclusions

The purpose of this Master's thesis was to investigate farmers' motivations behind and experiences with organic conversion. The interest in the subject was founded in the increase of farmers converting to organic production or showing interest in conversion during recent years. Though, some research has been done on the subject previously, a reinvestigation was found relevant because there is no recent research on this subject. Simultaneously, Noe (2008) concluded in his review of farmers converting to and defecting organic production since the 1990s, that a rapid growth in organic conversion was unlikely under the, at that time, current circumstances.

Therefore, interviews with five converting farmers on North and Mid Zealand were carried out during March and April 2017 with four small spare-time farmers and one large full-time farmer. The findings within these of factors motivating and influencing the experience of organic conversion, have been analytically compared to findings in previous studies. For that, a modified Socio Ecological Model (MSEM) have been used as mapping and comparison tool. Simultaneously, the terms used in the study by Vaarst (2000) of the '*pragmatic organic*' and the '*committed organic'* farmer have been projected, to define the five interviewed farmers. This was done to make suitable comparisons as well as to understand perspectives motivating the farmers to organic conversion.

16.1 The Findings

Ten main themes were found in the coding of the five interviews, that were motivating and influencing the converting farmers' decision. For the analysis, they were compressed into six headlines, to enable comparison with previous research.

Two subjects with particular relevance is 'economy' and 'the farmer's organic mindset', as they are dividing the converting farmers in two motivational foundations. In usage of the definitions by Vaarst (2000), it was found that three of the interviewed farmers were *pragmatic organic* farmers, who were motivated to convert mainly by economic reasons. This included both a prospect of better sales prices, but also particularly conversion subsidies were mentioned as a central motivational factor. The latter also mentioned frequently

as main driver by farmers in previous studies. In contrary, two of the five farmers interviewed were defined *committed organic* farmers, driven primarily by the organic visions of nature protection, avoiding fertilizers and additives, and so forth. However, they still had some economic considerations during the conversion process. Though, economy was the main incentive behind the *pragmatic organic* farmers' choice of converting to organic production, they all showed a general concern about animal welfare and resistance toward spraying. This is a finding also reflected in the previous studies reviewed. Therefore, it might be concluded that, though the farmers were mainly motivated either by economy or the organic vision, both types of farmers had similar considerations and incentives, when choosing to convert to organic production. If referring to previous studies, economy was found to be both a motivation as well as a reason behind farmers ceasing organic production, due to limited sales channels and low prices. This was not reflected in the recent study; instead economy was mainly motivational, finding the consumer demand of and prices on their organic products only promising. Though, only one of the five farmers interviewed were a large-scale producer, and one must be cautious making final conclusions based on spare-time farmers, only selling their produce to family and people in their closer network, it seems like there today are not the same issues with lack of request of the organic products as previously. Instead, the increase in demand of organic food products must be argued to positively influence the farmers' willingness to convert to organic production.

A third subject with particular relevance, occurring both within the recent and previous studies, is the *professional challenge*. In contrary to the division between farmers either motivated by economy or the organic mind-set, the professional challenge was an important factor to more or less all farmers interviewed. Even defected farmers in previous studies were unhappy about dismissing this advantage of organic production. In relation to this, also a *professional proudness* of proving themselves as good farmers, when succeeding with organic production, was an essential aspect found to be motivating the farmers.
The incentives, presented in the above, indicates that not only personal circumstances matter, when the famer considers organic conversion; external aspects, such as financial support, demand, and the respond from others, seems to have an equally important impact on the choice.

In continuation to the respond from others, the 'social accept of organic production' was another central subject occurring, both in the recent study and in previous research. With reference in the interviews with the five farmers, an interestingly development appears to have happened. Farmers interviewed in previous studies had received condescending comments or experienced a social exclusion, when choosing to convert to organic production. And for some, this had been a reason behind not choosing to convert. In contrary, none of the five farmers interviewed had had similar recent experiences, but instead, conversion was found to be looked upon with more respect than if maintaining the conventional production. Actually, the

interviews indicated an increased social accept at all levels of the society – e.g. by consumers, farmer colleagues and The Government, – which seems to have great influence on why so many farmers have become interested in organic conversion during the last couple of years. Though, the farmers in the recent study did not find themselves affected directly by other organic farmers in their closer social network, it is assessed acceptable to cautiously conclude, that they somehow are driven by this general societal interest in and support of organic production. But also, that it has become a lot easier for the farmer to make the choice of converting to organic production, not risking a social exclusion. However, it could be argued that this finding, from the interviews with the five farmers, represents only areas with the same demographic features, and therefore might not be applicable to areas more periphery to the larger cities and with only few organic farmers. The social accept of organic production in these areas could therefore be a subject for further research.

Also, the 'jump into organic production' was analysed, to understand the productional position from where the farmers had made the choice of conversion. It was found, that four of the five farmers interviewed had to make only minor changes to convert to organic production, which clearly influenced their choice. Therefore, it might be concluded, that - at least the *pragmatic organic* farmers - would probably not have chosen to convert if the changes had been more comprehensive and expensive. Also, the future workload and amount of administrative tasks were considered before conversion, being essential that it would not increase too much. In previous studies, paperwork and administrative difficulties were found to be one main reason behind giving up or not choosing conversion. Different to this, in the recent study, the farmers mentioned that the administration of paperwork, applications, and the organic rules were outsourced to the organic counselling companies, and therefore, they did not report the same difficulties. In that perspective, it is assumed that, because the farmers today have the opportunity of being exempted from these administrative worries, it has become easier to convert to and maintain an organic production, – which most likely will result in better experiences with organic conversion than previously.

In continuance, also a positive development was found in relation to the experiences with the yearly organic inspections. Previously, the inspections were reported unpleasant and too time consuming, whereas four of the five farmers in the recent study, having received inspection, all reported only good experiences, mentioning that they had received advices from the inspectors rather than regulatory reprimands. This indicates a shift in procedures that must be argued to have essential influence on how the converting farmers experience organic production. And, could also be an indication of how the organic production have become a natural and accepted part of the agricultural production in all layers of the society today.

16.2 Evaluation of Purpose and Method

The purpose of this thesis was to make a new research investigating farmers' motivations behind and experiences with organic conversion, and compare the findings against previous studies. The results from the five cases examined have been found valid and reliable, and are therefore concluded to offer accurate answers to this question regarding these five farmers. However, it is important to have in mind, when reading the above elaborated conclusions, that the previous studies, against which comparisons have been done, are representing farmers in other geographical areas as well as a broader variety of production types, than the once included in the recent study. The risk is that the comparisons made could be misleading. A solution could have been to choose literature representing only studies with more similar environments, but this would have limited the comparison opportunities to only a few other studies, delimiting a broader insight to the subject.

The choice of making a semi-structured research is concluded to fulfil the purpose of the study within the limited time frame of this Master's thesis, though it could have been an interesting perspective to follow the farmers more closely for a longer period. Before doing the interviews, the hope was to get a deeper insight to the farmers' values and culture, but unfortunately, this subject was only covered perfunctorily. Becoming aware, that a disclosure of these information, might have required a longer lasting acquaintanceship with the farmers.

In conclusion, the results from the new research with the five farmers have offered an insight to individual and societal factors motivating and influencing these farmers' choice of and experiences with organic conversion today. Findings, that indicate positive developments of the social perception of organic production, marketing opportunities, and the inspection procedure as well as an easing of the administrative work and organic rules. Findings, that seems to make it more attractive to convert to organic production, but also provides a foundation of subsequent research in other geographical areas.

16.3 Further Perspectives

Therefore, if the research of this thesis should be continued, it is perceived interesting and rather relevant to focus a new research on the social accept of organic production in areas, where organic farmers are less represented, e.g. on Lolland, the southern Island of Denmark, as referred to previously. It could be exciting to investigate, how organic production is looked upon in this area compared to the findings of this thesis, and to follow the future development hereof, if the larger farmers with interest in organic conversion converts to and continues an organic production. And finally, if this would lead to even more farmers becoming interested in organic farming in this area.

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Appendix 1 – Example of transcription and coded colours

BK: Nej, kun Agrovi, har jeg haft sparring med. (Han spørge ind til om jeg på min liste af omlæggende landmænd er nogle i nærheden. Lyder lidt som om der kunne være interesse i at snakke med dem, hvis der var nogle tæt på).

(20:20)

C: Hvad med arbejdet på gården, hvordan her det ændret sig? Mængden efter du har valgt at lægge om? Har det ændret sig?

BK: Nej. Og jeg tror heller ikke, det vil gøre det. Men jeg håber på at få høstet nogle flere baller, nok til mine dyr, ik. Og det tror jeg på. Om et år ved jeg jo, hvor meget mere. For så har det jo kørt et år, kan man så sige, ik. Men lige nu ved jeg jo ikke meget andet end det der jord, du ser også derude.

C: Så det er meget opstarts..

BK: Det er opstartsfase. Ja, så det er jo spændende for os at følge det. Overvejelserne er jo færdige, kan man sige. Og nu skal vi så se resultatet af de overvejelser.

C: Da I overvejede, hvilke ulemper overvejede I så, I kunne støde på? Var der nogle?

BK: Ikke ud over at der var for meget papirarbejde forbundet med og for meget tjek på det fra myndighederne, ik. Fordi argh, det orkede jeg ikke. Men der skulle ikke være så meget andet end det der årlige tjek, når vi holdt os til jordbrug.

C: Så det vil sige at det omlægningstjek I fik inden, gav det dig sådan en et meget godt billede på, hvordan det ville være at lægge om?

BK: Det tror jeg ja. Det gav ikke yderligere arbejde, så at sige. Det er jo også væsentligt, ik. Jeg vil næsten tro at det passer sig selv langt hen ad vejen. Det vil jeg tro (eftertænksom).

C: Det tror jeg også. Og når I selv har det til køerne, og..

BK: Jeg vil ikke tro jeg kan mærke nogen ændring i det, den dag at det kører. Når jeg står her om et år så vil jeg ganske simpelt tro at det er som det plejer at være. Andet end at måske afgrøderne ser anderledes ud derude og det vokser anderledes og der ikke er så meget ukrudt i det, på en eller anden måde.

C. Ja det er jo lidt spændende hvordan jorden den opfører sig.

BK: Ja, det er lidt spændende. Ja, det synes jeg. Det er lidt spændende at se når det vokser op lucernen og kløveren. Det glæder jeg mig til at se. For ellers har det jo været en blanding af, kan vi kalde det, ukrudt og græs og forskellige græsser derude, ik. Meget varieret og afvekslende. Men det vil jeg tro, det bliver mere ensartet. Og forhåbentlig bedre føde til dyrene.

C: Det må man da håbe på i hvert fald, at de går den vej.

(23:28)

BK: Ellers så lader vi det GRO. (griner)

C: Hvis også det foder til køer, så gør det jo ikke så meget