

## Organic food initiatives and their transformative power on the conventional food system

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### Introduction

Food production and consumption created tight bonds between people and nature, as well as among people, in Western Europe and USA well into the 20<sup>th</sup> century. The consumption of food depended largely on what was produced in diversified local ecosystems (Harris 1969). Social and ecological closeness, and the dominating role of agriculture were key characteristics of the food system, which includes production, processing, distribution, use, recycling and waste management (Dahlberg 1993). Local and regional solutions for production and consumption of food have now largely been replaced by a globalised structure where space has been disconnected from place (Kloppenborg et al. 1996). This is related to what has been called the first agricultural revolution (Bawden 1991), which took place when agriculture was industrialized with the advent and widespread adoption of chemical fertilizer and mechanisation, supported by science and technology. The process was characterized by a focus on optimization of biological and physical components on the farm, on productivity growth. However, the success of production has been overshadowed by its inadequacies from a broader perspective. One side effect was the loss of connections in food systems at the community level and the emergence of global corporations that dominate the food and agriculture systems, where time and space are disconnected. These systems are guided by an instrumental logic, dominating the life world. The gradual transformation of the life-world by the same systems logic that governs economical and political transactions is the significant transformation of Western society in the late 20th century (Hendrickson et al. 2001). Therefore the critical issue we are facing is resisting the commodification of our personal, private lives, and the search for alternatives where personalised food systems can emerge.

Organic farming and marketing at the local level represents a new course for agriculture described by Østergaard and Lieblein (1994) as a potential second substantial transition in agriculture and the wider food system

We were interested in understanding whether organic farming and its holistic foundation has *transformative powers* that extends into the whole food system. Studies have shown that organic farming tends to mimic the conventional food system, through commodification and consolidation (Hendrickson et al. 2001). But are there still spaces within organic farming that have resistance and potentials for developing new alternatives – where power is distributed and where respect is paid to the life world, where food origin becomes important?

### *Research questions*

In order to investigate the transformative power of organic farming we draw on different theoretical bodies within social science such as the concept of social embeddedness (Granovetter 1985, Giddens 1991, Hinrichs 2000,) and the theory of conventions as it is discussed, developed and applied by Storper and Salais (1997), Murdoch et. al (2000) and Wilkinson (1997). As will be discussed further in the

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methodology section, studying changes in the food system means to explore the complex context of daily life, as seen from the different social actors. Social changes require joint actions, which imply that the actors involved share some common knowledge, motivations and values. According to the convention theory there are certain dominant conventions within a social system, that the actors involved must relate to. Following Wilkinson (1997) rules, norms and conventions determine the content and the form of the production and circulation of commodities. ‘They are therefore dynamic representations of negotiation and as such depend on the existence of prior commonalities among the actors involved’ (Wilkinson 1997,318). In our project we have asked the following research questions:

- To what extent do the actors involved in handling of organic food share some common conventions about food products and the food system?
- Under what circumstances do sustainable conventions about food ‘rub off’ and have significant influence on the ‘conventional’ food system?
- On the other hand, under what circumstances are sustainable conventions overlooked and subdued in their meeting with the ‘conventional’ food system?

## Methodology – research frame work

### *Overall methodology*

In order to grasp the manifold of the changes in food systems, we have chosen a case study design. According to Yin (1989) the essence of a case study is that it illuminates real life situations without being controlled by the researcher. In relation to both complexity and change in nature and complexity and change in society, it is important to grasp the diversity and richness of variation. Understanding the food system thus essentially implies understanding the people of this system as acting humans. This research perspective provides a shift of focus from merely describing the food system from the outside, to understanding the world in terms of people’s *acting* in relation to the world (Østergaard 2003).

Following Flyvebjerg (1991) cases may be randomly or more strategically selected. In this project we have made a strategic choice of cases to get as much relevant information as possible. This implies that we have chosen case regions where we beforehand knew that there were ongoing organic food initiatives. The cases are selected from three different Norwegian regions (Hedmark, Østfold and Røros) and one region in Denmark (Sjælland). The regions differ in many important respects, such as the level of urbanisation, population size and density, the importance of agriculture, agricultural diversity and the presence of organic farming in the region (Table 1):

**Table 1: Characteristics of the case regions**

	<b>Røros</b>	<b>Hedmarken</b>	<b>Østfold</b>	<b>Sjælland</b>
Urbanisation / population	Low	Medium	Medium/high	High
Importance of agriculture	High	High	Low	High
Agricultural diversity	Low	High	Low	High
Organic farming	Low	Medium	Low	High

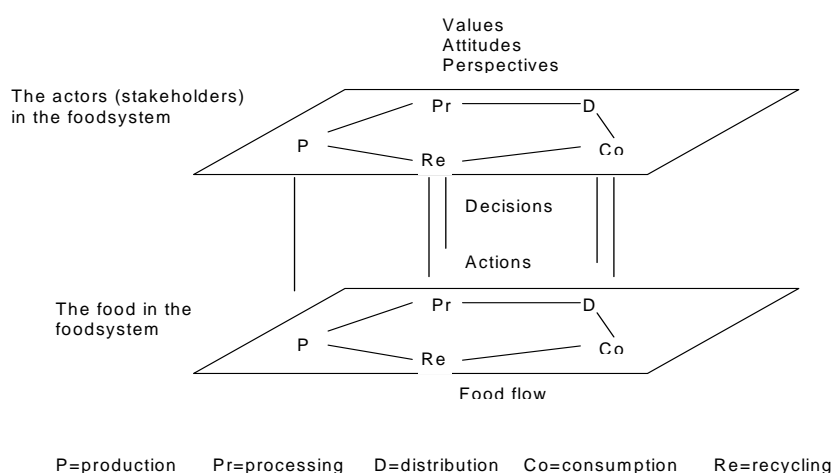
The three Norwegian regions are all situated in the South-eastern parts of Norway. While Røros is a mountain region, the other two are closer to the capital, Oslo. Sjælland is the island were the Danish capital Copenhagen is situated, thus it is a densely populated area as well as an important agricultural area. Within all regions we have identified special organic food initiative. However, in this paper we will focus specially on three initiatives that in different respects have been successful.

### Selection of units within regions

A key element of the methodology is that we started with a food flow analysis, where we traced the products from the organic farms in the region and all the way throughout the food system, up to the retailers. We then both identified the units that dealt with the organic food and quantified the amount of organic food that was handled through different units. This approach was used to find the relevant actors in the regions of Hedmarken and Østfold. At Røros and Sjælland we identified units or actors that was involved in special regional organic food initiatives.

### The double layer model

To every subsystem - from production to consumption – is connected people in real situations. In the subsystem production you will find producers with their knowledge, motivations, learning processes etc, and so you will find also in the other subsystems. Between the subsystems there are not only flow of food, goods or services, - we will find all sort of interacting and interrelating which are connected to innovation, knowledge and learning processes. Acting together implies sharing some common knowledge and values. In order to conceptually grasp the totality of the food systems, we describe the food system In terms of a double layer model (figure 1). The lower food flow system is continually pervaded by the values and knowledge of the people dealing with the food. And vice versa; the motivations and knowledge of the persons Involved In the food system is Influenced by and developed in relation to their actual handling and dealing with the food in the food chain.



**Figure 1: The food system as a double layer consisting of the food flow (lower layer) and a actors layer concerning values, knowledge, information flow etc.**

The investigation starts by describing the actual food flow and the role of each actor. There are two reasons for this: Firstly, the food in the food chain is common for all of the participants. They participate in the same system through coordinating the flow of goods. Secondly, this approach provides us a point of departure in the persons` actual dealing with food, not their *thinking* about the food. This is in accordance with research strategies in anthropology and phenomenology where the perspective of people`s participating and acting in the world is stressed. As expressed by to the French phenomenologist Merleau-Ponty, our relation to the world is primary a doing, not a knowing relation. Our consciousness and our ability to think are based on our already being and acting in the world: “Consciousness is in the first place not a matter of ‘I think’ but of ‘I can’” (Merleau-Ponty 1945/1962: 137).

### Methods for data collection

We selected interviewees among key actors from different sectors of the food system, such as farmers, processors, distributors and retailers. The interviewees represented either a local, regional or national level of the system. All together we made 27 interviews including 29 people (at some interviews there were two people present). The interviews took place in the period June 2000 – March 2002 (Table 2):

**Table 2: Number of persons and interviews within each region**

Region	Persons	Interviews
Rørøs	10	9
Hedmarken	9	9
Østfold	6	4
Sjælland	1	2
National actors	3	3

By following the product from the farm and by interviewing representatives for actors within all steps of the local food chain, we have been able to make an analysis of relations both between the different actors and their relations to the organic and local products. This has given us a picture of the different actors role in the food system and the possibilities to develop local distribution systems for organic food.

### Methods for data analysis

All interviews were taped and transcribed verbatim. The interview texts were then analysed with the help of the soft ware programme ATLAS.ti 4.1. In the analysis of the interviews we used the central concepts of the convention theory, as it is formulated by Murdoch et. al (2000) and Wilkinson (1997). The concepts of the convention theory have functioned as a tool to explore the interviewees' practices within the food system and their perceptions of the food products and the food system. Each interview was coded according to concepts of the convention theory as presented in the table below (Table 3):

**Table 3: Coding of the interview texts**

Conventions	Emphasised qualities
<b>Sustainable</b>	
- domestic	- inter-personality - transparency - traditions - craft & craftsmanship - taste
- civic	- local employment - local environment / activity
- ecological	- organic farming - short transport distances - resource efficiency - health
<b>Conventional</b>	
- commercial	- price - visual appearance / colour, freshness - date stamping
- industrial	- industrial standards - logistics
- public	- branding - trademarks

Murdoch et. al (2000) have identified six conventions that applies with different ‘worlds’ or systems of production. In our case these conventions may apply with our two ideal types of food systems. In the table we identify two sets of conventions, which we have labelled ‘sustainable’ and ‘conventional’. The sustainable set of conventions contain the domestic, civic and ecological convention. We anticipate that actors within a ‘sustainable food system’ would emphasise qualities such as: environmentally sound farming- and distribution practices (ecological conventions), general societal benefits from production and distribution of food (civic conventions) and local food, traditions and inter-personality between the different actors (domestic conventions). On the other hand actors or players within the ‘conventional’ food system would emphasise qualities such as effective logistics and industrial standards (industrial convention), price, freshness and colour of products (commercial conventions) and the development of socially disembedded information systems such as branding and trademarks (public conventions).

## Case descriptions

Below we will present three cases where we found that sustainable conventions had a significant impact in the local food system. These cases include distribution of local, organic dairy products in the Røros region in Norway, a small-scale organic milk initiative at Sjælland in Denmark and finally an initiative for local processing and distribution of organic meat at Hedmark, Norway.

### *Røros*

Røros is an old mining Town in a mountain region of the eastern parts of southern Norway. The agricultural food products stem mainly from animal husbandry, such as dairy products, eggs and a range of meat products from cattle, sheep, reindeer and game. We find local processing of milk at Røros Dairy and local slaughtering and processing of reindeers at Stensaas Reinsdyrsslakteri (Stensaas Reindeer Slaughterhouse), as well as other meat products at Røros Slakteri (Røros Slaughterhouse). Some egg producers are also distributing their eggs locally. In addition, we have several other small scale producers of local and traditional food products in the region. The local organic producers are organised in a regional branch of the national organic association (OIKOS). These farmers played a key role in the establishment of distribution of local and organic food in the region. An especial important task has been the establishment of local processing of organic milk at the Røros Dairy.

It was the organic farmers that back in the early 1990ties launched the idea of processing a local organic dairy product at the Røros Dairy. They wanted this to be a local product that could be distinguished from the organic milk, “Dalsgården”, that was launched on a national basis in 1995 by the Norwegian milk farmers co-operative (TINE). The organic producers at Røros wanted to produce ‘Tjukkmjølkk’ (“Thick milk”), which is a traditional, local curdled milk/yoghurt variety. This is a typical product traditionally consumed in the summertime at the mountain farms.

After the conversion and launching of ‘Tjukkmjølkk’ in the local market, TINE was still not very enthusiastic, and felt this organic drive more as a duty than as an interesting marketing project. And when the economic subsidies went to an end, a new crisis emerged at the dairy. Some in the TINE system saw this as an opportunity to close down the dairy, however the organic milk farmers, well supported by other local key players and local interests (as well as a local consumer demand), started to lobby for continues production of organic milk at Røros. The local retailers protested against a closing down of the local dairy. They feared loss in sales and poorer service to their customers (Flø et. al 2000). Even the Minister of Agriculture was contacted by the local stakeholders, and eventually there was

found a solution which resulted in that Røros Dairy could continue to produce the 'Tjukkmjøl' as well as organic light skimmed milk "on license" for TINE. In addition they were free to produce other old and new local dairy varieties. Today the dairy has five different local and traditional dairy products.

### *Sjælland*

The dairy at Øllingegaard was established in 1995 on the grounds of a common agreement with the retail chain; 'ISO Supermarked'. The dairy is situated on a former organic milk farm on Sjælland (not far from Copenhagen). Initially the idea was to process and market organic milk from the Øllingegaard farm and other organic farmers in the region. Today the milk production on the farm is closed down, however, the dairy production has expanded and is now based on deliveries from nine local organic producers. The dairy takes care of all the steps from transportation and processing of the milk to the distribution of products to the customers. Besides the distribution through 'ISO Supermarket' and other retail stores, Øllingegaard delivers dairy products to catering businesses such as kindergartens, schools, cafés and restaurants. There are about 30 different dairy products in the assortment including milk, cream, yoghurt, butter, crème fraîche and chocolate milk.

### *Hedmarken*

At Hedmarken there have been different initiatives to organise local distribution of organic food, including vegetables (mainly through farm outlets), milk (a local dairy which however now is closed down) and meat. In this paper we will focus on the meat initiative. At Hedmarken there exists a local butcher, complete with a small scale slaughterhouse. In 1999 almost as much of the organic meat produced within the region (the municipalities of Stange, Hamar and Løten) was distributed through this local butcher as through the regional, conventional meat distributor, HedOpp. HedOpp belongs to the national meat producer cooperative, Norsk Kjøtt (Norwegian Meat). Local organic farmers work closely together with the butcher to strengthen this initiative. Local slaughtering opens up different opportunities regarding sales channels for organic meat. Most of the meat is sold through the butchers' own outlet, but farmers also have experiences with selling meat directly to restaurants, mainly in the Oslo region.

## **Results and discussion**

In the following we like to discuss three important preliminary findings from our field research that can tell us more about the transformative powers of organic food initiatives:

- a) Organic food initiatives are important for the *local distribution of organic food*
- b) However, organic food initiatives are still small on a regional and national scale, and play a minor part regarding *the volume* of the overall food distribution
- c) On the other hand organic food initiatives *challenge* the dominant food distribution systems, regarding *future conventions* about how food are being distributed and what qualities that are emphasised among the actors involved

### *Organic food initiatives' importance for local distribution of organic food*

By tracing the organic food flow from the farm gate to the food outlet we have been able to measure the importance of local distribution of organic food. In the Hedemarken region we found that in 1999 just 6

% of the organic milk and 18 % of the organic vegetables were distributed locally. However, almost 60% of the local organic meat production was distributed locally, mainly due to the special local meat initiative (Rålm 2000). Although not measured, we believe that the initiatives at Røros and Sjælland are of similar importance for the local distribution of organic food. Seen in this light, it is interesting to investigate further the conditions for local food initiatives and what are important constituencies of these initiatives compared to the conventional food system.

### *The volume of organic food distribution*

Organic food production is small compared to the overall agricultural production both in Norway and Denmark. However, the production is considerably higher in Denmark than in Norway (Hamm et. al. 2002) (Table 4):

**Table 4: Organic production as a % of total production 2000**

	Area	Milk	Beef	Potatoes	Vegs.
Norway	6,2	0,8	0,2	0,6	1,0
Denmark	1,9	9,4	2,9	2,2	15,9

Source: Hamm et. al. 2002

There are also considerable regional differences concerning the importance of organic farming (see table 1). Both in Denmark and Norway the processing-, distribution- and retail system are dominated by a few big actors, which make regional food initiatives difficult. Previous studies have shown that small, unknown and in some contexts' 'controversial' products, like organic food, meet special hindrances when introduced in the conventional food market (Brendehaug & Groven 2000, Michelsen et al 1999, Vittersø 2001). In our research this problem is specially emphasised in the meat case from Hedmarken and the milk case of Sjælland.

We will use Øllingegaard as an example. The local organic dairy initiative at Øllingegaard stands as a clear alternative for consumers that want a special quality or want to support other producers than the national 'monopolist' Arla. However, the dominant position of Arla makes it difficult for Øllingegaard to enter the retail market. At Øllingegaard they insist on the necessity of small scale processing for creating excellent quality. This brings about a question whether the dairy business can be transformed. Is it possible or thinkable to restructure the highly industrialised dairy business into smaller processing units? The manager at Øllingegaard states that this will take a long time. Murdoch et. al (2000) states that ecological objectives must act to displace established conventions if they are to profoundly reshape socioeconomic forms. In the case of Øllingegaard it is the 'conventional' conventions that is dominating both among the retailers, that Øllingegaard have an extensive co-operation with, and not least inside Arla which is the dominant, main competitor in the market. Building alliances with the consumers seems to be the chosen strategy of Øllingegaard, and as a small local player it is surely a long-term project to really have an effect on the overall distribution of dairy products both locally and not least nationally.

Even if the initiatives that we have been studying do not challenge the conventional system in terms of quantity, we have found that these initiatives offer qualitative new conventions about food in the food system. According to the double-layer model this concerns both the relations between the actors in the food system and their conceptions and handling of the products. We will first have a closer look on how these quality conceptions are expressed, and then see how the relations between the actors function in the different cases.

### *Quality perceptions*

There are several important factors in the three cases that point in the direction of a potential future reshaping of the food system. The introduction of small-scale processed organic milk has had an important effect on the market in the cases of Røros and Øllingegaard. The main contribution stems from the new and broader differentiation of quality, which have resulted in a grater selection of dairy products in the market. Both at Røros and Øllingegaard they emphasize that organic milk is a unique raw material that vouch for a special quality. This is a conception of quality that differs radically from what we found among the managers at the ‘conventional’ dairies.

In the Øllingegaard case freshness and taste are important qualities along with the idea of small scale processing and environmentally sound production. They want to tell the consumers true stories about their products, by presenting the farm and the dairy at Øllingegaard and describing the way the milk is produced. The quality is seen as a consequence of the gentle and crafts like treatment of the milk, which you will only get within a small scale processing. This stands in contrast to the conventional dairies where milk has become a highly standardised product, where qualities that differentiates for instance between the different seasons, regions, production systems or farmers, are left out.

The products from Røros raise a new awareness of local products both among Norwegian consumers, producers and processors. It is said that Norwegian consumers are brought up to trust “Norwegian food” (Berg 2000), which have resulted in that local varieties are overlooked. In the Røros case local, traditional products are emphasised, which also is associated with small scale, crafts like production. The fact that it is based on organically produced milk adds to the list of positive properties that the products hold, and it fits nicely with the conception of pure and clean products. It is important that the milk has been transported as short as possible. The combination of the traditional, local product ‘Tjukkmjølk’ with the organically produced milk has given a synergetic effect between the civic and ecological convention.

The experiences from Røros Dairy have influenced TINE to take a more active stand concerning their own marketing and distribution policy – and made a clearer distinction between bulk products and other food specialities. Today the Røros case is often mentioned as a success story of niche production in the public debate, even by TINE. It is also in many ways used as an example and model for TINE’s new strategies on niche products. TINE has established a separate unit, ‘Ostecompaniet’ (‘The Cheese Company’), that among others shall take care of the many different small-scale initiatives from farmers that are members of the national dairy co-operative. However, it remains to see the consequences for the organic- and local products from this reorientation.

At Hedmarken both the organic farmers and the local butcher focus on the transparency in the production process and the traceability of the products. Animal welfare is also an important consideration in this case. The consideration for local employment was a decisive factor when establishing the organic production at Røros, and it is also highly regarded by the actors in the meat initiative at Hedmarken. This emphasis on the wider societal benefits by producers are in keeping with aspects that ‘organic consumers’ also emphasise, according to a consumer survey from the Hedmarken region (Torjusen et. al 2001).

Together these cases illustrate the multitude of marketing opportunities that exists within local and organic food initiatives. The chosen ‘marketing strategies’ are influenced by the specific local situation and also affected by what kind of product that is being marketed. These diversified conceptions of



qualities and multitude of marketing opportunities is seen as a challenge and inspiration for actors in the conventional food system as well.

### *Relations between the actors*

Another important contribution from the introduction of organic food is in relation to how transparency, trust and reciprocity are looked upon and secured between the actors in the food system. Again we found two different ways of handling these issues within and between the conventional and local food systems. Within the conventional food system these questions are taken care of by establishing information systems such as quality standardisation programmes (i.e. HACCP), brands (Arla, TINE) and date stamping (that gives information about the freshness of the produce). In the alternative distribution systems a shorter distance both mentally/socially and physically between producer and consumer is considered as important in creating transparency and trust in the system, and emphasised in all three cases.

At Røros the close social networks that have been established during the years, have been a prerequisite for the success of the local, organic food products in the region. They have succeeded in creating an environment for co-operation where 'sustainable' conventions are emphasised among central actors in the region, including the organic farmers, staff at the local dairy and retail businesses as well as local consumer interests. One outcome of this co-operation has been the regional business organisation, Mat fra Fjellregionen (Food from the Mountain Region), and the three local distribution companies; Rørosmeieriet (Røros Dairy), Røroskjøtt (Røros Meat) and Rørosmat (Røros Food).

In the Øllingegaard and Hedmark case the local structure seem more fragmented, and the organic initiatives are from conventional actors to a greater extent viewed as competitors. The structural barriers are also important here, such that the decisions within the retail- and processing system are taken centrally and not locally. An explanation of these differences between Røros and the other two cases may be that Røros is situated in a marginal area, both regarding labour market, food market and agricultural production, whereas both the 'meat-initiative' at Hedmarken and the Øllingegaard Dairy are closer to the greater markets, and are situated in more diversified agricultural areas. Other explanations may be sought in the cultural, historical and social differences between the regions.

### **Grasping the interaction between organic farming and changes in the food system**

It is a main challenge that the effects of organic farming upon the food system cannot be studied under controlled conditions. It is not possible to study the transformative effects of organic farming on the conventional food system because the food system is as a totality influenced by numerous other forces and is itself influencing the subsystems. It is however, primarily a task of research to go beyond the mere description in terms of causality: the emergence of a more organically and environmentally sound food system is not necessarily a result of organic farming. It is more likely to describe this emergence as being in the same societal process which organic agriculture is embedded in. Methodologically it is a challenge to analyse the parallel emergence of different tendencies in rural community, not in a cause-effect relation, but rather in a *cause – effect network*. In real life, motivations for one action are interconnected with other motivations, and effects of one action can very well under other circumstances appear as a cause for other actions. Thus, food system participants' motivations are expressions of an ambiguous and complex interplay among a wide range of individual and social factors. This web can be

described a dynamic network of causes and effects. The network is dynamic because the various factors and their mutual relations are continuously changing.

## Preliminary conclusions

Organic food initiatives play an important role in creating local systems for organic food, but they play a more marginal role in the overall, conventional food system in terms of volume and money. However, in this paper we have shown that organic food system initiatives have a potential in transforming the conventional food system, not least because of the multitude of marketing opportunities that exists within local and organic food initiatives. But local initiatives also face some important dilemmas, regarding the possibilities for keeping the product genuinely local and organic when expanding the market. The challenge for local organic food initiatives is on the one hand to develop the concept without being overtaken by the conventional system, but on the other hand if these initiatives shall have any real impact on the general food system, they must not stay too small and marginal. Herein lie important challenges for the local organic food initiatives to build alliances in the food system, where commonalities and visions are shared among the actors involved. We have not argued that the cases in this study represent large scale transformations of the conventional food system, but rather areas where alternative visions can be developed, as spaces of hope for farmers and consumers in their search for sustainable food systems.

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