Future Interconnections Among Ecological Farmers, Processors, Marketers, and Consumers in Hedmark County, Norway: Creating Shared Vision

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Abstract

The role of food has changed from a local product that connects people with each other, and with nature, to simply being a global commodity. The potential consequences include difficulties in identifying our food, and perceiving our own identity. We are now distant from our food sources and increasingly distant from each other. This distance can be spatial, temporal, and psychological. One result is that many citizens place low priority on agriculture and food systems, lack insight and concern about resources and the natural environment, and have a short-term focus on immediate comforts at the expense of long-term sustainability. To search for alternatives, a visioning workshop brought together people with different roles in the food system, and we identified concerns with the current situation and created a shared vision for future interconnections in the food system in Hedmark County, Norway.

Keywords: *visionary thinking, regional food systems, sustainable food systems, ecological agriculture, organic farming*

Introduction

Hedmark County is on the east side of Lake Mjøsa in southeast Norway, a region with flat to rolling topography where agriculture has been important for many centuries. The soil is among the best in the country, and most agricultural and horticultural crops that can be grown in Norway are found here. Low, forested ridges crown the agricultural areas. Grain production as part of integrated crop and animal husbandry was of great importance in Hedmark up to about 1880, when increasing amounts of grain were imported from the USA and the areas around the Black Sea. In 1851-55, 110,000 tons were imported yearly, and the annual import had increased to 410,000 tons in the period 1911-15. Improved transport conditions, including the development of the railroad, increased the local grain crisis. The weakened economy of grain production forced the farmers in Hedmark to increase their production of milk and meat during the last part of the 19th century (Søberg 1982).

Animal husbandry has been greatly reduced in Hedmark since the early 1960s. The change was due to a governmental policy, linked to economic incentives to increase grain production in the best agricultural areas and to increase animal husbandry in the valley and mountain farms of Norway. As a result, the southern part of the Hedmark region is now dominated by monoculture grain cropping, and animal husbandry is almost non-existent.

Agricultural production has become industrialized and specialized in the region. The recent changes are illustrated by animal numbers and crop hectares in Hedmark County from 1929 to present (Table 1). Most livestock numbers declined, especially during the change in government policy and incentives just prior to 1969. The only category that increased was swine production, a sector not affected by government programs. Grassland, pasture, and root crops also declined, while cereal area increased dramatically. In the south part of the Hedmark region, over 64% of the total acreage was used for grain cropping in 1979.

Before the industrial revolution near the end of the 18th century, most farmers did not depend on a market to bring their products to the consumer. Historically, food acquisition

Table 1. Animal inventories and crop areas in Hedmark County, 1929-1999.

Animal Husbandry (numbers of animals in 1000s)	**1929**	**1939**	**1969**	**1979**	**1989**	**1999**
Horses	16	17	3			
All cattle	103	131	64	57	55	58
Milk cows	63	78	29	24	20	18
Sheep	66	76	98	11		
Goats	15	9	6	2		
Pigs	35	46	64	61	123	160
Plant production (hectares)	**1949**	**1959**	**1979**	**1989**	**1999**	
Grassland, harvested	50700	37600	25100	28200	29400	
Pasture	16200	12400	5100	4500	4000	
Green fodder	2900	2000	3300	4000		
Root crops	1800	1400	300			
Cereal grains	22500	36600	59000	61400	60000	
Potatoes	7200	6800	3500	4600	4900	

required a continuous interaction between people and the environment, and food represented a tight connection between people and nature. Food also enabled communication among people in the local community, since most transactions happened there. Food consumed in a community depended largely on what was produced in diversified, local agroecosystems (Harris 1969). As a result, the diets were determined by season, by location, and by tradition. Through industrialization and specialization of agriculture in each region, the situation changed. Less of what was produced was sold on the farm or close to the farm. Local, and then regional, traders became important actors. In Norway, farmers established cooperatives, first in the dairy sector and later for supplies of machinery and feed, as well as sale of meat, grains, and other products.

Looking at the food system in the Hedmark region in the 1950s, we find a relatively diversified agriculture with integrated animal and crop production. The food system was characterized by many small and medium sized actors. The farmers' co-ops had not yet been centralized, and they were supplemented by many small, private companies. Several local butchers were active in addition to farm-based slaughter (until 1995), every community had its own dairy, and the co-ops for potatoes and vegetables were supplemented by local intermediaries who transported the produce to the markets in Oslo (130 km travel distance). Food distribution to consumers largely took place through a large number of privately owned food-stores, and it was customary for many to buy their winter supply of potatoes and vegetables directly from the farm.

In the late fifties and early sixties the Norwegian government launched an agricultural policy that essentially enforced a regional specialization of farm production. Grain production was increased, through economic incentives, in the best agricultural areas, including Hedmark. One consequence was that the number of farm animals was greatly reduced on most farms through conversion to solely plant production. Animal production was moved to the valley and mountain farms of Norway. Today, those regions specialized in milk production import an average of 40% of their feed concentrate needs from other areas such as Hedmark that have specialized in grains.

As a result the Hedmark region is now dominated by monoculture grain cropping, and cattle husbandry is almost non-present. Agricultural production has been industrialized and specialized in the region. A parallel process has taken place in the processing and distribution activities. The many butchers and dairies are now reduced to a few, large units. In 1950, there were 11 slaughterhouses in the county, and in the year 2000 only two. In 1950, there were 18 dairies in the county, as compared to seven in the year 2000. The large units have systematically replaced local food assortment with national brands. On the distribution side, four large supermarket chains control 95% of the market in Norway (Borch and Stræte 1999). One consequence is an increased distance between farmer and consumer.

Parallel to what is found in Hedmark county today, the food system in many industrialized countries is characterized by different types and degrees of distance. *Spatial distance* from soil to table results in an increasing proportion of resources needed to process and move agricultural products. Regions with great spatial distances in their food systems also tend to have a large ecological footprint, defined as the "ecological load" imposed by a given population on nature (Wackernagel and Rees 1996). *Temporal distance*, due to preservation and storage of foods, contributes to increased spatial and dependency distance between farmers and consumers. This may result in changes concerning our knowledge about and trust in what we are eating. As consumers, we have become increasingly dependent on intermediary systems. Our confidence is to a lesser extent attributed directly to the farmer or the butcher or the baker because in most cases, we don't know them. Instead, we trust abstract systems to provide us with relevant knowledge and good quality foods (Giddens 1990). A broad consequence of these increasing distances might be a psychological detachment from our sources of food, creating a *distance of mind*.

As people become more distant from their food supply — in time, space, and understanding — other changes in perceptions of food may emerge. We now have vast amounts of information about the components and nutritional value of

food, including the recent explosion of nutritional information on the Internet. However, this information is scattered, and lacks context and linkages to individual experiences. Many choices based on vast amounts of scattered information are part of life in modern society according to Beck (1992) and Giddens (1991). According to these sociologists, taking expert knowledge into account and conducting risk analyses are part of living in a modern society. As consumers, we are expected to process a lot of information. There is no longer any given authority among experts — we have to choose which experts to believe in. Making informed choices is a major challenge, and the consumer as "chooser" is one aspect of contemporary consumerism (Gabriel and Lang 1995). Issues of trust become essential, and the conception of "safe food" can be seen as a social construction (Busch 1997). According to Fischler (1980), we have developed a modern food that lacks origin or history, that is without identity. Food "comes from a global everywhere, yet from nowhere that people know in particular" (Kloppenburg, Hendrickson and Stevenson 1996). Trade and the delocalization of food have generally had positive effects on food availability in industrialized countries while having negative consequences in developing countries (Pelto and Pelto 1985). In today's food system, there is little concern about the nature and magnitude of the fossil fuel subsidies (that will eventually dry out) needed to increase levels of food availability and consumption (Douglas 1984). Questioning of the industrialized and profit-targeted food system and issues of re-linking food and ecology were brought forth in the seventies (Lappé 1971; Lappé and Collins 1977; Gussow 1978). But today, there is still generally little information or incentive to keep a broad sustainability focus related to food (Torjusen and Vittersø 1998). Norwegian consumers experience lack of information about environmental and ethical implications of the production and distribution of the food they are buying, and many consider themselves as uninformed about environmentally sound food choices (Torjusen, Nyberg and Wandel 1999). As such, many authors are questioning the ecological and social sustainability of the globally based food system (Kloppenburg and Lezberg 1996; Dahlberg 1993; Stevenson 1998).

However, not all consumers care about where their food comes from or how it is produced. In a survey in Hedmark (based on the findings of the visioning seminar) 42% of the respondents were not interested in the source of their food, whereas 45% stated that they were interested in knowing about food sources (Torjusen, Nyberg and Wandel 1999).

The known negative social and environmental problems of industrialized agriculture have stimulated the development of alternatives. During the 1970s and the 1980s, much attention was given to environmental problems resulting from these farming systems. Loud calls were made to reduce fossil fuel-based technologies, reintegrate components of the production system, and produce safer and healthier food in ethically defensible and environmentally sound ways. Ecological (or organic) agriculture developed as an important component of the counter force of the industrialization process (Østergaard and Lieblein 1994). In Hedmark, as in the rest of Norway, the number of organic farms has increased sharply during the 1990s. In contrast, little has changed in the rest of the food system in Hedmark during the past several years. A few health food stores and farm outlets have been established, but this development has been slow.

Within this context, we planned a seminar to bring together people representing the key sectors involved in the food system — ecological farmers, processors, retailers, and consumers — to look at current challenges and future options. The main questions asked were: (1) What characterizes a desired food system in the future? (2) How do we improve the human relations in the food system? (3) How can we reduce the distances between components of the food system? In addition we were interested in reflecting on the process to be used in the seminar through the following questions: (1) What is the potential of visionary thinking for dealing with complex issues? (2) Can visionary thinking help us discover new possibilities?

A visioning seminar was organized in Hedmark to explore these questions, and a subsequent evaluation explored the impacts and consequences of the event.

Preparations for the Vision Seminar

Agricultural and nutritional scientists, farmers, agricultural advisors, local government representatives, and consumers — eight people in all — met in December 1995 for a two-day vision seminar on an ecological farm in Stange in the southeast part of Norway. Selection of participants was made to represent (1) different sectors of the food system, (2) local authorities in the region, and (3) practice and research, as well as food production and consumption. Each participant was expected to come with an open mind and an interest in ecological agriculture and food system alternatives.

Selection of seminar participants was also based on our experience that it is necessary to bring together people from different backgrounds when the agenda contains complex issues. We considered keeping the number of people relatively low essential to foster close communication and a high degree of openness and confidence in the seminar. This is especially important when participants do not know each other beforehand. The eight participants in the seminar included three ecological farmers, one of whom was also a retailer of ecologically produced food; two representatives of

Table 2. Seminar schedule for visioning seminar, Stange, Norway, December 1995.

Time	Activity
	Opening
First day	Get to know each other
1100 - 1230	Prerequisites to succeed - Introduction by facilitator
1230 - 1330	Lunch
1330 - 1530	Introduction to visions thinking - By facilitator • Why visions • What do we mean with visions? • What can stop us from visionary thinking? • Guided imagery
1530 - 1550	Break
1550 - 1750	Clarifying the problem formulation • Focus for a vision • Develop a shared picture of the present situation
1830	Dinner
Evening	Continued dialogue to find focus for vision
Second day	Vision 2005
0900 - 1200	• Move to the year 2005 and spend the time to open up for new possibilities
1200 - 1300	Lunch
1300 - 1500	Making the different parts of the vision more concrete
1500 - 1530	From vision to action - what will the next steps be
1530 - 1600	Reflecting on the seminar • What are the potentials of the methods and the ways of working that were used in the seminar?

local government, one of whom was the agricultural officer of the region; two nutritional scientists from the University of Oslo; and one agricultural scientist from the Agricultural University of Norway. The agricultural scientist planned the seminar in cooperation with a facilitator, experienced and skilled in visions thinking. Two days' planning of the design of the seminar resulted in the program schedule shown in Table 2.

In preparation for the seminar, the eight participants were sent a letter of invitation several weeks prior to the meeting, informing them that the explicit goal of the seminar was to develop a vision of a food system for the year 2005. They were alerted to the program that included visionary thinking, practice in imagery, clarification of the problem, creating shared visions, and moving from visions to action planning (Donaldson 1994; Parker 1990). The participants were also encouraged to reflect on the process and give feedback. Figure 1 shows the problem situation and specific challenges that were established as a point of departure for the seminar.

Our experiences were that traditional workshops with long presentations do not give room for the necessary creativity needed for this challenge. We were interested in

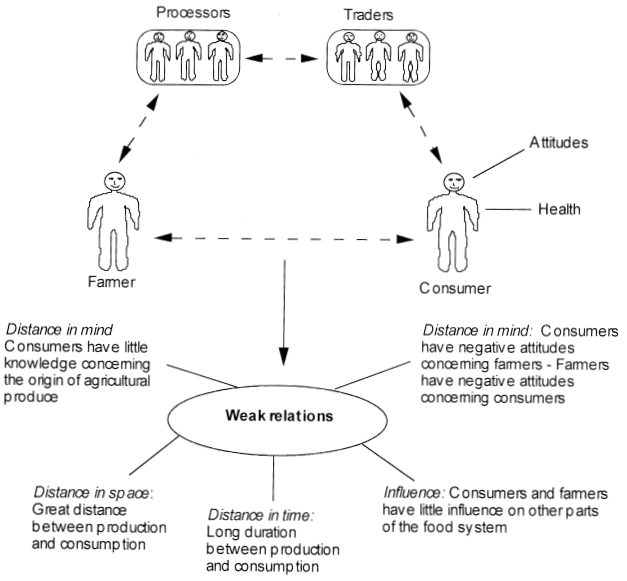

Figure 1. Relational diagram with current disconnects and distances between different players in the food system.

exploring whether visions thinking could help us break out of old thought patterns and discover new possibilities.

In accordance with Parker (1990) we saw visions as "powerful mental images of what we want to create in the future. They reflect what we care about the most, and are harmonious with our values and sense of purpose. Visions are the product of the head and the heart working together." According to Senge (1990), a shared vision is, at its simplest level, the answer to the question, "What do we want to create?"

The concept in this seminar was to envision how to move from the current situation to a future wanted situation, and to determine the actions needed to make that change. Through interviews three years later, we evaluated its effects on the people who were involved, and summarized a series of actions that were taken as a result of the seminar activities.

Process and Outcomes of the Visioning Seminar

The preparations, introduction, and initial activities were key elements in the process of the vision seminar. Even when prepared ahead, the participants clearly experienced frustration when going beyond the familiarity of prior experiences with structured programs and linear discussion of topics to engage in visionary thinking in an open-ended planning environment where they had to take charge of setting the ongoing and flexible seminar agenda and decide on further activities. Starting with a familiar topic, the current state of the food system, eased the frustration somewhat.

Mapping the Current Situation

To ensure a sound foundation and establish the current reality before visioning the future, we started as one group mapping the present situation of the food system in the Hedmark region, especially in relation to ecological food production (Figure 2). Although the group's interest focused on ecological production and foods, most topics in the figure are common to all food systems.

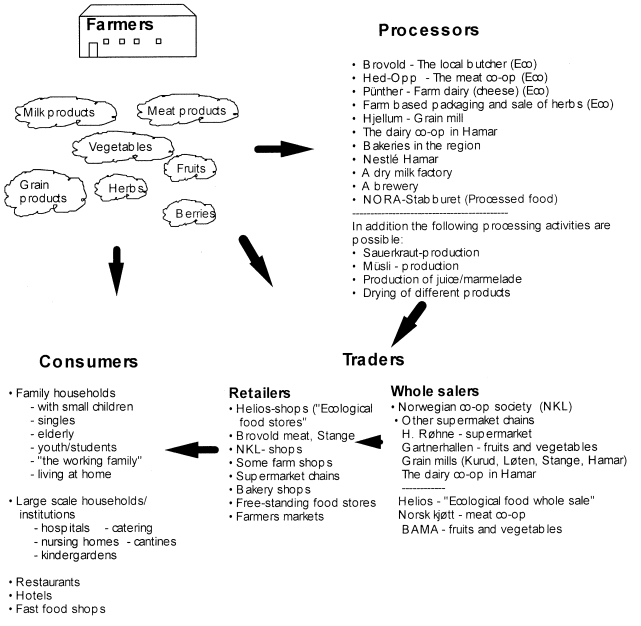

Figure 2. Current food system in the Hedmark region.

Based on this overview of the present situation, we explored the most desired focus for the visioning process: Is distance in time, distance in space, distance in mind or perspective, or some combination of these factors the best starting point for visioning about future food systems? It was a challenge for the group to further refine the visioning process, and to sort out which were goals and which were means. A trained facilitator was useful to help maintain focus. The process revealed a complex and multi-faceted food system, even on the local level, with many actors and varied activities.

Describing the Ideal Consumer

To begin to clarify the goals, we developed a 'mini-vision' on the first day using key elements in visioning: identification and personifying. First we asked, what will the future ideal consumer look like? We identified ourselves with a 42-year old mother of small children, and focused on her role in today's food system. In two sub-groups, we explored her relationship to food and agriculture. She is likely to be unsure about the relationship between food and health, with a belief that food should be cheap. She experiences time as limited, has little knowledge concerning origin and production methods of the food she buys, and is exposed to many conflicting messages about food value, nutrition, and health. The two groups further envisioned an ideal consumer in the year 2005. Results illustrate the diversity and richness of our discussions (Figures 3a and 3b) and describe an ideal consumer in a situation where many of the current problems in our food system have been overcome.

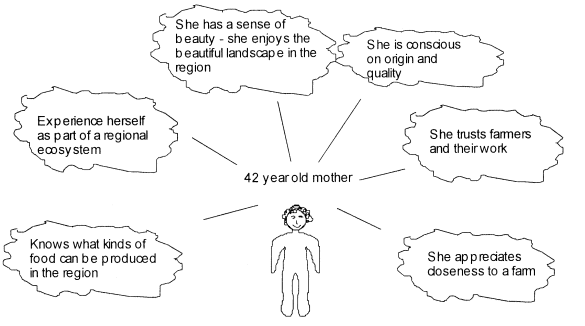

Figure 3a. Results of Group 1 visioning about the ideal consumer in 2005.

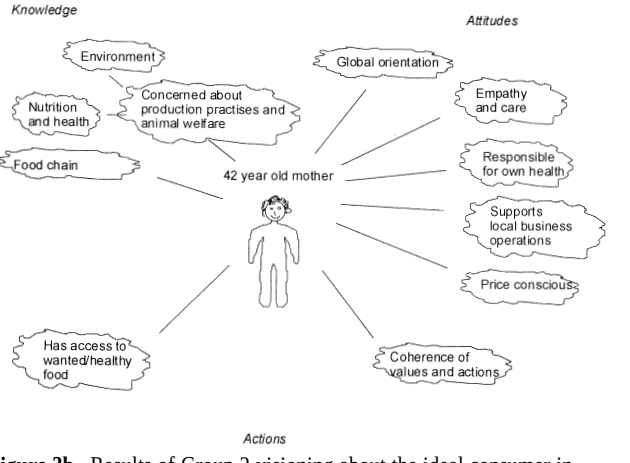

Figure 3b. Results of Group 2 visioning about the ideal consumer in 2005.

Distance in Space — Describing an Improved Future Situation

To further capture our vision, we went on to explore physical distances in the food system, discussing the consequences of a food system built around the concept and goal of close proximity. From the discussion on spatial relationships between producers and others in the system, we found that current settlement patterns with increasing concentration of people in cities formed obstacles for creating closeness to the farm. Other challenges included distant production, long

transportation distances, and demand for varied diets throughout the year. A new type of settlement structure as well as dietary and economical changes would be required to realize the desired outcomes shown in Figure 4. Close proximity potentially has a number of positive nutritional and social consequences.

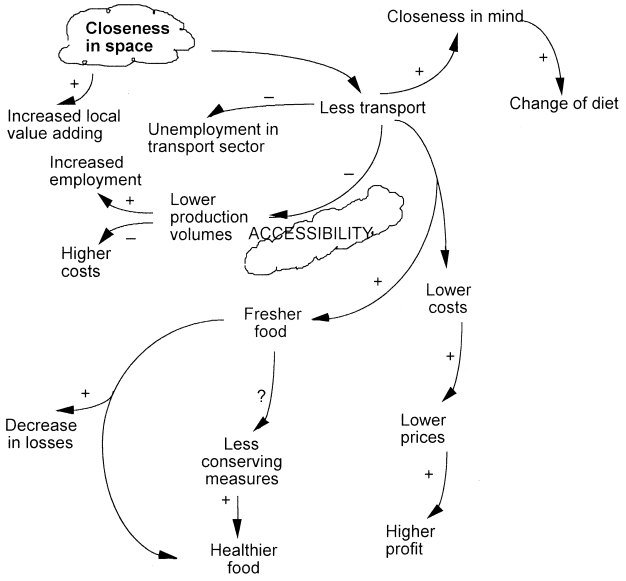

Figure 4. Temporal distance — conceptualizing the reduced distances and consequences in an ideal food system.

Distance in Time — Searching for Efficiency and Food Quality

To add another dimension to our vision, the group considered the issue of time. Starting with the assumption that time is important in the food system and a shorter span of time from harvest to consumption is desirable, there are obvious questions of seasonality of production in any one place, fragility of products, and time-consuming distances between sites of production and consumption. We identified factors and consequences of shorter timespans that included improved food quality, reduced losses and energy costs in transport and packaging, and improved consumer confidence related to food and food system issues.

Distance in Mind — Establishing Connections with Food

After exploring closeness in space and time, we expanded the visioning to describe how shared goals and interests among different actors in the food system could result in a reduced distance in mind. In some ways, close proximity of information and understanding could substitute for distances. For example, it is possible for a consumer to fully understand the food system and the impacts of production in a distant site if relevant information is available, including direct communication with the producer through the Internet, and a continual process of information exchange. This would not solve transportation costs or other complexities of a distant source, but would reduce distance of mind. Key relational aspects and values in an improved future food system include understanding people and production practices, acceptance and loyalty of these partners, and a feeling of believing in the overall food system. They all deal with the value relationships between producer and consumer, and between consumer and food.

Creative Problem Formulation

Based on this visioning of the conceptual distances in space, time, and mind, the group continued with a round of creative problem formulation. The goal of this process was to identify key questions that would have to be answered for the successful implementation of any visions toward a sustainable future food system. Some of these practical questions included finding out how to (1) reduce the number of steps between production and consumption, (2) develop locally based processing to supply a local market. (3) create loyalty and markets for local brands and local producers, (4) design and develop rational, resource-efficient forms of transportation, (5) use existing facilities and capacities in the processing industry, (6) strengthen marketing of ecologically produced food and influence consumption, (7) make agriculture more visible to reduce the distance of mind, (8) improve communication between farmers and consumers, (9) cooperate with schools to increase their interest in locally produced food, (10) develop local diversity within ecological constraints, and (11) establish contact with people with similar intentions in other areas.

The group concluded this session with several issues still unresolved. There were positive images of the conscious consumer, but frustration with the limited possibilities for consumers to link with production. There was an appreciation of how farmers would want to participate in such a local food system, but we were perplexed by the challenges of serious short-term costs of structural changes in the current system. Farmers and consumers may want to participate, but at the same time they may be discouraged by not clearly seeing how to proceed. From the discussion, the group concluded that one approach to reducing distances in space, time, and mind was to consider ecological agriculture as a unifying theme that would pull the pieces together and provide solutions to many of the issues raised above. To guide further visioning, the following expression was formulated: *Ecological agriculture nourishes the whole human being.* Figure 5 emphasizes the need for relationships between producers and consumers. It further shows how ecological agriculture could provide a conceptual meeting place where the

groups would come together to clarify both common interests and disagreements as basis for working towards common goals. This is both a conceptual and a physical coming together and requires further elaboration to move from vision to reality.

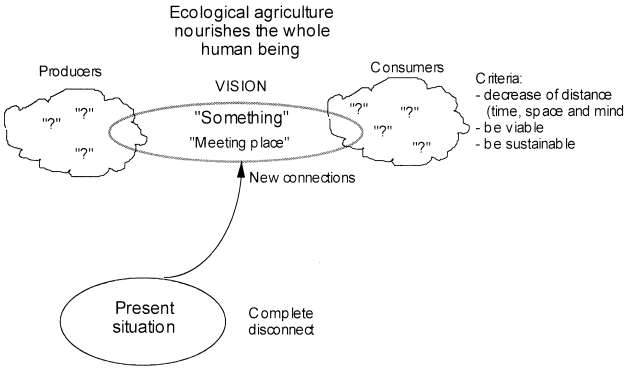

Figure 5. Ecological agriculture as a bridge between food producers and consumers in a local context.

Operationalizing the Ideas: A Farmers' Sales House

Rather than proceeding further with the visioning process, the group decided to focus on concrete means to obtain the desired future situation. Important criteria were that any new measures should decrease distance in time, space, and mind, in order to be viable and sustainable. Based on the ideas that came up, the group decided to work further with the concept of a multipurpose farmers' sales house and educational center. To envision what the house might look like, the group went through the following guided imagery: "Imagine that we leave the room where we now sit. We walk out into a field outside of the farm. Out in the field we find an air-balloon waiting. We get into the balloon, and it takes off. We can see the farm under us as the balloon lifts. We then fly with the balloon, admiring the beautiful landscape under us, and we fly until we are right above the farmers' sales house, where we notice a lot of activities. We then remove the roof of the sales house, so that we can see right into it. Now, what do we see there? What does the house look like? What kinds of activities take place?"

After the imagery, the individuals spent a few minutes collecting their thoughts and images. Then two groups were formed and each developed a common picture of the sales house. The image developed by one of the groups is shown in Figure 6.

This imagined sales house is located close to urban areas. It both demonstrates the total range of foods produced

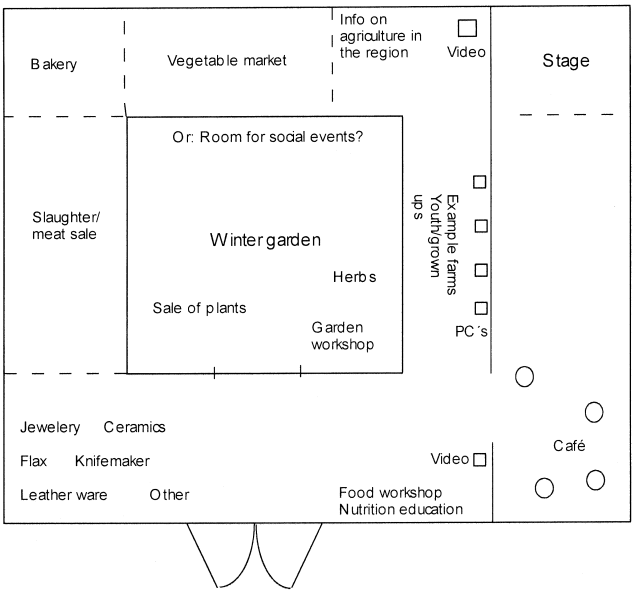

Figure 6. The farmers' sales house as a place for marketing food as well as educating people and bringing key local groups together.

in the area, and serves as a sales outlet for local farm products. Maps provide information about where the food comes from and where processing is located. There is space for displays and educational activities. The house becomes an information center, connected with local producers as well as other sources of information through the Internet. Youth play a high profile role in the planning and demonstration programs, to inspire future generations of food citizens (Stevenson 1998), whether in the role as consumer, farmer or person performing other functions in the food system. Through the activities in the house, it should be possible to decrease the distance between producers and consumers, for all those consumers who do not have direct contact with farms and farmers. There are directions for finding other local farm sales outlets and small business in the immediate area as well as information on distant production sites, such as for tropical crops.

The information on agriculture in the region also involves natural resource conservation, recycling, cultural landscape issues including landscape ecology, and other issues of local importance that require community consensus and serious communication and action. It could become the new cultural gathering point for each unique local community and interest group, supplementing or gradually replacing the vacuous conformity and extractive process fostered by a global marketplace.

Reflections on the Results of the Visioning Seminar

The participants saw reduced distance in mind between actors in different sectors as a key property of a future wanted food system. Increased awareness and knowledge about how the food system works, and one's own place within it, will lead to a number of benefits — both on a personal and a societal level. When there is mental closeness in the food system, "there are no hidden areas," as one of the participants expressed it. Transparency also was seen as a key characteristic. Greater involvement and care about the environment and other people in the food system can be achieved through direct, personal contact and commitment, or indirectly by increased availability of a broader set of information. Information about the food system will be important, but not sufficient to establish transparency, understanding and closeness of mind. Such information needs to be complemented by individual experiences concerning the food system, including its people.

The envisioned farmers' sales house can be viewed as a metaphor for a meeting place for the different actors in the food system, where the café and stage in particular represent possibilities for such direct experiences. As an educational center, the sales house can play an important role in connecting the next generation of children to their food supply and their natural environment. Here, consumers can meet directly with farmers who produce and sell them food. They will learn about their life styles, and generally establish an identity with where and how food is produced. And equally important, farmers can meet those who eat the food they produce, and learn about how it is perceived and appreciated and what consumers are concerned with. Common thinking to explore the components and functioning of a sustainable food system could occur at such a meeting place. Sustainability involves ecological, economical and social issues. It is further an intentional term: What do we want to sustain, and who decides? As such, this meeting place could become a prototype for a new food community for the future, where people all see themselves as part of something larger and on which they depend for their sustenance and security.

The properties of a future wanted food system described in the visioning process are closely interconnected. Transparency, which provides a culture of open information and experience, is crucial for establishing closeness of mind. It is interesting, but not surprising, that this form of distance was emphasized by the seminar participants. Both in a pioneer phase and for long-term flexibility and sustenance of good solutions in the food system, closeness of mind is of particular importance.

We regard ecological agriculture as an interesting basis for developing sustainable food systems, because of its emphasis on locally available, renewable resources as well as its goal to strengthen the intimate bonds between people and nature. What the seminar participants focused on related to reduced distance in mind and could be interpreted as a call for greater relational competencies in the food system. The guiding expression of "nourishing the whole human being," as one important contribution of ecological agriculture in moving the food system in a more sustainable direction, captures this focus on human relations and understanding. It highlights the potential of ecological agriculture as an integrating force for closer connections between the elements of the food system, both in terms of the natural and social environment. In this we agree with Stevenson (1998) who proposes relational competencies as a crucial element in developing sustainable food systems for the future.

Relational diversity will also be an important attribute of the envisioned food system. Where the food systems of the past were characterized by lack of choice, the possibilities for proximity and closeness in the future sustainable food system will be characterized by a multiplicity of choices, and several networks that are interconnected in larger food systems. But key activities will be regionally based, making it possible to compose the larger part of the diet from local food sources and to meet other actors in the food system. Reduced distance in terms of space and understanding will therefore complement each other. In the vision seminar, the sales house was suggested as one way of reducing the different forms of distance. In the case of trading local produce, the reduction of physical and mental distance will be part of the same process. The Internet opens up potential for understanding and mental or emotional closeness where reduced physical distance is not possible or favorable. Trade and long-distance transportation are part of a good solution, but only with a thorough understanding of the different aspects of the distant food systems with which the local system is linked. "Fair trade" arrangements are examples of the introduction of a broader set of premises for long distance import.

Reflections on the Visioning Process

The theoretical difference between conventional visioning as practiced in corporations and educational institutions over the past several centuries and the approach used in this seminar is the source and scope of that vision. While many successful businesses and respected universities have grown from the singular vision and autocratic leadership of a gifted and powerful individual, the concept of shared vision is a new approach (Senge 1990). In contrast, shared vision works by

"heightening everyone's genuine sense of influence and ownership of their organization" (Parker 1990). The fact that this approach has been adopted by many organizations in both private and public sectors attests to its potential for success. As stated by Milbrath (1989) in discussing future sustainability,

> *any society, but especially a new society, must first exist in the minds of the people. Every society most fundamentally exists as a set of mental constructs that takes many years to develop. Those images are thoroughly entrenched in our psyches, leading most of us to believe that our present society is so solidly fixed that we have no hope of changing it.*

The shared visioning process challenges those images and sets the stage for change. Visionary thinking, as a means to exercise food citizenship, builds relational competencies and create shared visions, and can as such be an important contribution to what Busch (2000) calls networks of democracy. He envisions a democratic society where there is room for both individual autonomy and the defining and reaching for the common good in a manner that embeds moral responsibility in the networks rather than in either individuals or structures.

The importance of shared visioning to bridge between professions and disciplines was apparent during the workshop. In accordance with Parker (1990) and Senge (1990), we found that trying to develop a shared vision brings people together. It unites and provides a link among diverse people and their activities. The key to establishing such linkages was that visioning led to focusing on creating common goals, transcending the limitations of being primarily associated with different roles in the food system, or moving beyond exclusive discussions within one particular discipline. Tapping into each person's inner capacities for creating and communicating images of a future desired situation opens new potentials for collective vision. Visioning provides an opportunity for those who seek meaning in transdisciplinary and transprofessional interactions. It has been our experience that every individual has the capacity to vision, but success in this way of working demands that people meet with open minds. Many academics and others are anxious to lecture on their specialties. It was important that the participants did not focus on transferring to others what they already knew, but rather focused on cooperation and communication to open up for new possibilities. We further found that there were no strict recipes, methods, or processes for how to make a vision thinking session successful. There can always be alternative, and even better, ways of bringing innovation into a situation. It is difficult to say beforehand what will work and what will not in a given session, although there is some predictive value from past experiences. We also found that fear of failure and lack of trust in one's own creative capacity can be major challenges to success in a visioning session.

We found that visions for a food system transcend the "Great Wall" between the social and the natural sciences (Morin 1973) as basis for interdisciplinary cooperation. Lévi-Strauss (1968) argues that food must not only be good to eat, but also good to think. As such, our statement "ecological agriculture nourishes the whole human being" encompasses both natural and human aspects of food. As a metaphor and a means to guide further thinking, it was important that such an expression could nourish and encourage "rich pictures" of a desired future situation. Some of the ways this expression opened up for thinking about food were:

- Food as something having an intrinsic value, not merely being attributed economic value in the "commodity sphere," as discussed by Lien and Doving (1996), where value is dependent on exchangeability of the food item
- Food as mediator of relations, both with local community and distant people and places. As such, food may be a mediator for what Kloppenburg et al. (1996) call the process of becoming native to a place
- Food as means to influence the community at large, including deciding what relations we want to be a part of
- Food as a means to create positive physical and emotional images of oneself, also discussed by Fischler (1988)

The guiding statement further recognizes our physical body as well as cultural community. It highlights the emphasis on reduced distance in mind in developing future food systems. Even if consumers don't live on a farm, or experience direct contact with farmers, they can develop increased understanding of where they are in the food system. Consumers can then envision where food comes from and how it is produced, helping them to re-identify with this crucial component of their well-being.

In many parts of society and in certain contexts, food will continue to be seen only as "commodity" and "source of nutrients," or as the way that agriculture in a disconnected way contributes to society. Yet, when successful alternatives are demonstrated, more people will become attracted to the options that show the natural environment as a source of food and resources, a place for recreation, and an essential part of human ecology as a multifunctional natural landscape.

The farmers' sales house is one potential and practical approach to reducing distance in space and time. This facility embodies the means for direct communication between producers and consumers, and brings the urban consumer into close proximity with the source of food, both through reflection and concrete experience. At such a meeting place,

food can bring people together and wider communication can be nurtured. The sales house is an obvious place for farmers to market their products, keeping much of the added value that would otherwise leave the farm and the local landscape and community. Moreover, the activities at the sales house lead to reduced distance in mind. People from different parts of the food system may discover common needs and values and can work toward a more desirable, interdependent future for their families and region.

Practical Impacts of the Seminar

Three years after the seminar we found that few concrete steps had been taken to realize the farmers' sales house, which was the key operationalizing idea emerging from the visions seminar. However, a number of later activities were clearly inspired by the visioning process. Among these were the following:

Consumer Survey

The visioning activities spurred our interest in knowing more about consumers in a total system perspective. If more locally based food systems are to be developed, then consumers must participate in the process. Compared to conventional farmers, ecological farmers are more interested in using locally available resources and meeting local food demands. Knowledge about consumers' perceptions of ecological food, and their attitudes, interests and values concerning ethical, social and environmental issues related to the food system, are important when exploring the potential for developing locally based food systems. Whether there are differences in attitudes between ecological and conventional consumers and how close to reality our vision about the ideal ecological consumer was were among our questions. A consumer survey was completed in the region where the vision seminar took place (Torjusen et al. 1999, 2001).

Nordic PhD Courses

Stimulated by the outcomes of the visioning seminar and greater awareness of consumers' roles in the food system, we planned and implemented residential, one-week Nordic PhD courses on ecological agriculture and food systems in 1996 and 1997. Students from several countries participating in the courses examined material flows and communication among farmers, processors, retailers, and consumers in the region (e.g., Lieblein 1997).

Education at the Swedish University of Agricultural Sciences (SLU)

Visions thinking was introduced at SLU as part of an MSc-level course, "Resource-preserving agricultural production from nature-conservation and societal perspectives." According to evaluations, the visioning activities were the most highly valued part of this course, and the students especially mentioned how visioning enabled them to turn the fragments of their course project work into a concrete whole.

New Nordic MSc-curriculum in Agroecology

In a new Nordic MSc-curriculum in agroecology, food-systems have found a key place along with visions thinking. In a prototype of this course in 1999, students were introduced to visions thinking as part of action learning. Their focus was the challenge of turning an abandoned school in a nearby region into a community center and a "pulsating lung" for education and development of sustainable agriculture and food systems in that region. After being introduced to visioning, the students were able to facilitate a visioning session with board members of the community center. These students were also highly positive about visioning as part of their education in ecological agriculture and agroecology.

These are four examples of what we might call the cascading effects of visionary thinking. During visioning the whole person and personality is involved. When a vision is captured, people seek creative ways to move towards the future wanted situation, often taking other concrete steps than those that were planned during the initial visions session. One outcome is that the process now has become integral to our education programs.

Visioning also directly influences the participants. During the reflection session at the end of the Stange seminar reported here, several expressed that they had learned just as much about themselves as about food systems issues during the visioning process. This was not unexpected, since the visioning process aims at involving the whole human being — with the head and heart working together. Three years after the seminar several of the participants still had clear memories about the activities, although not that much action had taken place in realizing a farmers' sales house in the region. We see this as evidence of the powerful effect of creating shared vision, also bearing in mind that the whole seminar took place over a period of only about 30 hours. The experience also illustrates the frustration of not achieving immediate goals in a short time frame. Visions thinking to explore our future wanted food systems must be seen in a long-term perspective, and our evaluation of the process should include awareness of the cascading effect of visioning and non-expected outcomes. The challenge is to maintain and further develop visions for future food systems.

There will always be pressures and a tendency to reduce, limit, or shorten visions, in order to reduce the tension between the present and the future wanted situation, with such conclusions as: "It was just an escape. There is too far

to go. We can do nothing." These are common expressions of frustration at the lack of implementation. Many of us who participated in the seminar still carry the vision, and search for the small steps that can be taken to move towards more sustainable interconnections. Our experience is that ecological agriculture provides a framework within which this could happen. Ecological agriculture can be a unifying theme, an arena for communication between farmers, processors, marketers and consumers or food citizens, if it can be viewed in a food system context.

Endnotes

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