

JÄRNA, SWEDEN

– Community consciousness as the base for a learning local ecological food system

Introduction

The objective of this paper is to give an overview of the local organic/ ecological food system (LO/EFS) in the town of Järna, in Stockholm County, Sweden. This local system has been developing over the past 40 years and today presents a positive example of what residents within a small semi-rural area can achieve regarding local organic food production, processing and marketing. Through hard work and collective action, positive change has been possible.

This paper paints a background picture of the history of the biodynamic farming community and food system in Järna, describes what is happening in the community today, as well as how key groups within the community view the future direction of the community and its food system.

Method of inquiry

This case description of Järna was developed through interaction with members of the Järna community over the course of 6 months: from June 2003 to January 2004. In addition to semi-structured interviews, information was gathered through meetings with residents involved in food production, processing and marketing and other key informants. Two different meeting forms were employed: The Open Space Technology (Owen, 1997) and a variation of Appreciative Inquiry (Cooperrider and Whitney, 1999). The Appreciative Inquiry meeting yielded much information about the historical events that have contributed to the Järna of today, while the Open Space Meeting was decidedly oriented towards the future. In addition to primary data derived from interaction with the community, statistical data (SCB, 2004) and previous documentation of the food system activities in Järna, were used to complement this description. (Adler et al., 2003; Björk, 2003; Solér, 2000)

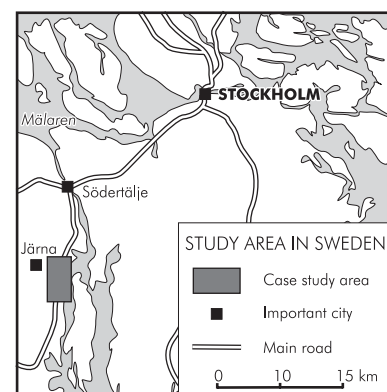
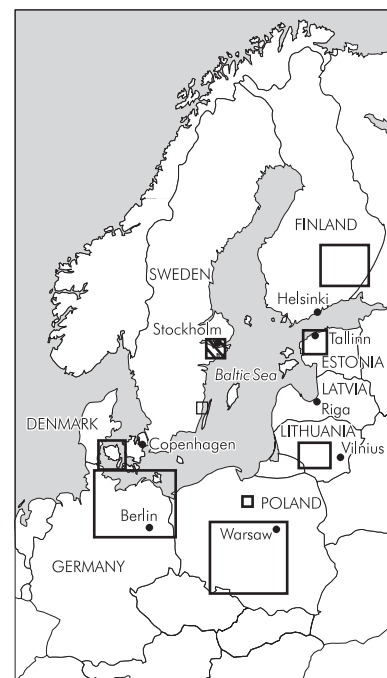
Södertälje municipality and the town of Järna

This section presents some basic geographic, demographic and economic information related to the town of Järna and the municipality in which it resides in order to give some contextual information regarding the relationship of Järna to the surrounding society.

Geography

The town of Järna sits within a larger municipality called Södertälje, which itself lies within Stockholm County (see map). The Södertälje

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municipality has primary jurisdiction over the town of Järna, although Järna has local control over schools and some health provisioning. Being close to Stockholm (60 km) residents of Järna and Södertälje easily access the Stockholm area, which is the largest economy in Sweden. This closeness to a major urban center also facilitates tourism to Järna. In fact, the town of Järna attracts many tourists and visitors both to take part in the cultural and educational activities that occur there as well as due to the strong ecological profile that the Järna area has built up over the years.

The climate in Södertälje is mild during spring and fall, with cold dark winters, and warm summers with long hours of daylight. Figure 1 shows the average precipitation and temperatures by month over the years 1961–1999.

The soil in the Järna region is composed primarily of clay loam, with a humus content between 2 % and 3 %. A large proportion of silt predisposes the soil to crust formation. The soil under the topsoil depth is stratified, with glacial varved clay at the bottom. The glacial clay is nearer to the topsoil in elevated areas, whereas in the more low-lying areas the clay content is lower and the soils dry out more quickly during the spring (Granstedt, 1992). The soil and climate conditions have a strong influence on the type of agriculture that can be profitably pursued in the area and this, in turn, affects how self-sufficient the community can be with regard to various products.

The farms in the Stockholm area are considerably larger than the Swedish national average. Table 1 shows total farmed area in Stockholm county and Sweden with farm area categorized by farm size. In Järna the average size of the four primary farms supporting full time farmers of grain, milk and meat is 110 ha, indicating that the farms are large by Swedish standards, but close to the regional average.

The land use in Stockholm county, as can be seen in Table 2, is much more strongly agricultural (17 %) and urban (14 %) than the Swedish average. This reflects the situation in the Järna area as well. This is only natural given that more intensive land uses like agriculture dis-

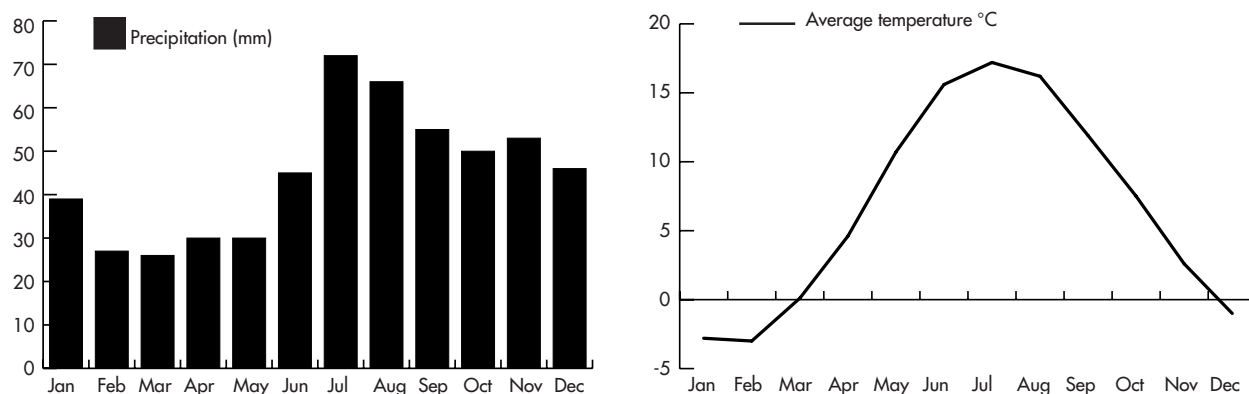


Figure 1. The average precipitation and temperature by month 1961–1999.

place less intensive uses like forestry near urban areas.

When comparing the percentage of farmed area under certified organic production, the distinction between Järna and the rest of Sweden is quite strong. In Table 3 we see that Järna has 43 % of its total farm production area under certified organic management, compared with 21 % for Södertälje, 6 % for Stockholm County and 5 % for Sweden as a whole. These statistics support the premise that Järna has a strong ecological profile, both nationally and regionally.

Demography

Södertälje municipality's population is currently 79 600 inhabitants. Of these 43 % have a foreign background with people of Finnish, Turkish, Syrian, Iraqi, Lebanese, German, Norwegian and Chilean backgrounds being the largest groups. The town of Järna has around 7 500 inhabitants of which 28 % have a foreign background (SCB, 2004), compared to the Swedish average of 17 %. Compared to the rest of Sweden, Södertälje municipality and the town of Järna are quite international. With regard

	2,1– 5,0 ha	5,1– 10,0 ha	10,1– 20,0 ha	20,1– 30,0 ha	30,1– 50,0 ha	50,1– 100,0 ha	100,1– ha	Total area of arable land
Stockholm	713 0,8 %	1 745 2,0 %	5 557 6,5 %	5 291 6,2 %	8 830 10,3 %	19 061 22,2 %	44 564 52,0 %	85 761
Sweden 2002	41 110 1.5 %	91 570 3.4 %	200 735 7.5 %	193 279 7.2 %	376 113 14.0 %	717 112 26.8 %	1 060 022 39.6 %	2 679 941

Table 1. Total farmed area in Stockholm County (including Södertälje and Järna) and Sweden by farm size with percentage of farms in that size category.

	Agricultural land	Land under forest	Built-up areas and associated land	Quarries, pits	Mires	Bare rock, high mountains and other land	Water	Total land and water area
Stockholm	116 070 17 %	321 500 47 %	93 500 14 %	1 100 0,2 %	11 000 2 %	108 750 16 %	26 990 4 %	678 910
Sweden	3 563 330 8 %	23 423 500 52 %	1 121 900 2 %	35 000 0,1 %	4 945 000 11 %	7 944 760 18 %	3 995 990 9 %	45 029 480

Table 2. Land use in Stockholm County (including Södertälje and Järna).

	Järna	Södertälje	Stockholm County	Sweden
Area under organic production (ha)	483	1 800	5 656	136 940
Total farmed area (ha)	1 135	8 761	87 370	2 705 984
% of farmed area that is organically certified	43 %	21 %	6 %	5 %

Table 3. A comparison of the percentage of total farm area under organic production in Järna, Södertälje, Stockholm and Sweden. (SCB, 2001; Bingham, J. pers. Comm.)

to employment, 25 % of the workforce of Södertälje works within the manufacturing industries. Södertälje has two large international companies, the car and truck maker SAAB-Scania AB, and the pharmaceutical company AstraZeneca AB. Together they employ approximately 12 650 people. After these, the municipality and the county council employ the next largest group with around 6 680 employees. The primary industries (fisheries, agriculture and forestry) employ approximately 350–400 adult men and women, which is approximately 1 % of the total employed (SCB, 2004). The total area of Södertälje municipality is 523 km², and the population density 151 per km² (SCB, 2004). The age profile of Södertälje municipality is very much in line with the Swedish national average (see Figure 2).

History of the municipality

Since the end of World War II, Södertälje has grown as a municipality as it incorporated Järna, Östertälje and other small nearby towns. The period of 1960–1980 saw rapid growth in the society as a whole with development of all types of infrastructure, especially new housing, waterworks and roads. It was during these years that many immigrants moved to Södertälje. Currently Södertälje is expanding once again, primarily due to the employment available in one of the major corporations mentioned above. (www.sodertalje.se.)

In order to paint an accurate picture of this case for the reader, it is important to make note of some distinctions between the town of Järna, and the activities of the community that is at the heart of this case. Lying on the outskirts of the town of Järna is a constellation of businesses and social activities that are all in some way connected to anthroposophy.

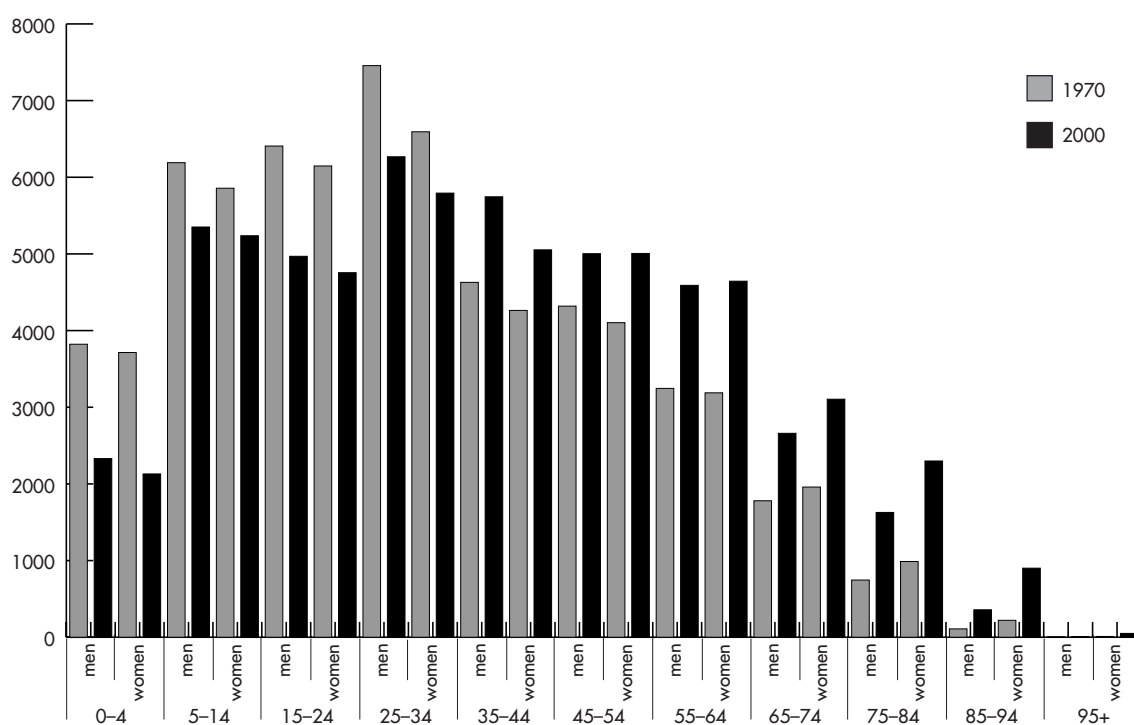


Figure 2. Population by age in Södertälje municipality in 1970 and 2000.

Anthroposophy is a humanistic spiritual science, based on the life work of Rudolph Steiner (1861–1925). Anthroposophy seeks to integrate many aspects of human life, and humanity's relationship to the larger cosmos and includes specific prescriptions for education, agriculture, medicine, art, music and spiritual practice. In Järna, over 30 companies, not-for-profit foundations, primary and secondary schools and alternative health care institutions currently operate, all based in some way on anthroposophic principles. It is estimated that there are approximately 2 000 people employed in these.

Biodynamic agriculture is the form of agriculture associated with anthroposophy and the teachings of Rudolf Steiner (1924). It is largely founded on the concept of viewing each individual farm as a living organism. This philosophy translates into a number of specific practices including: the integration of animals and crop production on mixed farms, the use of special preparations to maintain and enhance the flow of cosmic and life energies within the farm organism, the timing of planting, harvesting and cultivation activities in accordance with the phases of the celestial bodies (including the sun, moon and outer planets), and by the complete avoidance of all chemical fertilizers and synthetic biocides in the farm system. Demeter is the name of the organization responsible for the international certification of biodynamic products, and the Swedish branch of the Demeter organization is located in Järna.

Most of the farms that comprise the production base of the LO/EFS in Järna practice biodynamic agriculture. Although the food system in Järna as a whole is based to a high degree on local production, it does import considerable quantities of food from both Europe and the rest of the world. What is unique to Järna is the concentration of biodynamic farms in one place, and the well-developed consumer network that buys the produce of these farms.

With regard to the local purchasing and processing of food, the anthroposophical movement in Järna creates synergy within itself and is in many ways self-reinforcing. Because many of the businesses surrounding the farms are anthroposophical in orientation and prefer to buy biodynamic food, there is a ready market for the local production. This is important to take note of in that the food system has evolved within an environment where some important (and possibly unique) preconditions exist.

Regional/local agriculture and society

History

A meeting was held on June 16th, 2003 with a group identified by Artur Granstedt, the director of the Biodynamic Research Institute in Järna, as being key actors in the Järna area with regard to the LO/EFS. The meeting participants engaged in an open process of collective inquiry, offering their ideas as to what has led to a positive development of the local food system in Järna through its history. Participants were asked to focus on the "positive core" – that which they felt makes Järna a

positive example in terms of ecologically-produced / locally-distributed food. A large timeline including past, present and future was placed on the wall. On this timeline participants were invited to put activities, initiatives, names of people, happenings, events, incidents, organizations, etc that made Järna a positive example. This mapping was done together by the participants and meeting facilitators/authors of this paper, and focused solely on that which was considered by the group to be positive. After the participants had written down their contributions, they were asked to tell the group about what they had written and why. When this was finished, a group reflection ensued during which time any thoughts and ideas the participants had about the timeline were voiced.

This approach was inspired by the attitude underlying the methodology known as Appreciative Inquiry. Instead of focusing on problems, we (the authors) chose to start by focusing on the moments of innovation and breakthrough in the development of the local food system in Järna. This helped give us (the authors) an understanding of the creative forces in Järna that contributed to making it a positive example of a sustainable local food system. The idea was to let the residents themselves describe their history, because their understanding is based on experience, and a collective recollection of history recounted by those who have experienced it is likely to be more accurate than the accounts of single individuals. The primary purpose of this meeting was to initiate contact with those members of the community that played a role in the LO/EFS, and to lay the ground for future collaborative work that was respectful of the path the community had traveled thus far.

The anthroposophic community in Järna has a long and unique history that encompasses the better part of 80 years. In the late 1920's and continuing until the post-WWII years, a number of key cultural personalities initiated anthroposophy-inspired educational activities beginning with the "Vibyholmsskolan", and "Mikaelgården". Particularly important was Mikaelgården, founded in 1940 as a school where the mentally challenged could receive a holistic education based on the pedagogical principles of Rudolf Steiner. This was also a period in which some key individuals moved to the area from Central Europe and brought with them anthroposophical ideas and practices, planting the seeds of what was to become this unique part of Järna today.

In 1949, the Nordic research circle on biodynamic agriculture was founded by Bo Pettersson, Bo Storén, Gösta Widegård, Hans Glaser, Jerker Engborg, and Kjell Arman. This important collaboration began a period of development of a number of initiatives related to biodynamic agriculture and anthroposophy, and laid the foundation of the agricultural activities in Järna. Later, in the 1960's, more developments transpired regarding the evolution of food and agriculture related activities in Järna, building on the work of these pioneers. For instance, in 1964, the Saltå Kvarn flourmill and bakery began to operate. This brought a new level of organization to the food system in Järna by adding proces-

sing capacity and economic development that was consonant with anthroposophic values. Solbergahemmet, a school of curative education, was also founded in the 1960's. Järna area farms were purchased – Skilleby Gård (1964), Ytter Eneby Gård (1964), and Skillebyholm (1972) by a local real estate developer Åke Kumlander; Nibble Gård (1966) by Frans Carl-gren and Skäve Gård (1970) by Lars Evers. These initiatives were backed by a group of investors and helped establish a permanent presence for biodynamic agriculture in Järna. Through these actions the production base of the LO/EFS was secured. Vitahuset/Rudolf Steiner Seminariet, a college focusing on anthroposophic education and the training of Waldorf schoolteachers, was founded in 1964. Also in the 60's the food distribution company, Biodynamiska Produkter (BP), was founded by Artur Granstedt and began operations. This expanded the web of economic activities related to local organic food production. These initiatives and acquisitions gave the anthroposophic movement in Järna a polycentric distribution in the landscape, and nurtured the roots of an anthroposophically-oriented economy.

In the 1970's Ekobanken (the Ecobank) was founded and began operating. This made it possible to borrow money for anthroposophical initiatives. In addition, Skillebyholm's fall farmer's market began to operate, which was a way for the community to celebrate local agriculture, and to find a way to increase the number of people visiting Järna, where the emphasis was on local food. This has continued until today and is now very popular, with long lines of cars forming each year as many people from the surrounding towns and cities come to visit Järna at this time.

Another development in the 1980's contributing to the establishment of today's local ecological food system, was the weekly Biodynamic Production seminar meetings in Järna (1978–84), where researchers and agricultural practitioners met to discuss biodynamic agriculture. Also in the 1980's, the first academic Doctor finished his Doctoral thesis on the Quality of Biodynamic food in 1981 (Dlouhy, 1981). With regard to the links between Järna and the surrounding community, Anders Engström, a strong supporter of biodynamic agriculture and local food initiatives, began to work in the local KONSUM shop in Järna. This helped establish a crucial link in the local ecological food system by providing an outlet for locally grown food to the entire community.

The 1990's saw some additional significant developments that have contributed to the current positive situation in Järna, with regard to local ecological food. In 1992, the Culture House (Kulturhuset) was built. This building has a very distinct design that is visible from a distance and gives the anthroposophic initiatives in Järna a public face, a *public persona*. The chef in the kitchen at the Culture House, Robert Westerdahl, serves high quality and locally grown biodynamic food as much as possible, giving visitors a positive introduction to the delights of organic local food. In the early 1990's the Biodynamic Research Institute Foundation (SBFI) was begun under the leadership of Dr. Artur

Granstedt. This research institute has primarily focused on the implications of mixed farming systems for the recycling of nutrients within farms, and the reduction of nitrogen leaching to local water bodies. The Swedish portion of the BERAS project is largely undertaken at SBFI. In 1998, the local consumer initiative "Initiative Locally Grown" (Initiativ Närodlat) was begun, partly inspired by Artur Granstedt of SBFI. This aims to create a more deeply networked local ecological food system in Järna. This initiative is a collaborative effort between consumers, farmers, food processors and shopkeepers interested in increasing the availability of locally grown organic produce. They are the most active community group organizing the local ecological food system in Järna. Also during the 1990's, a large local farm, Säbygård, converted from conventional production to certified organic production (KRAV-certified). This was seen by many to be an important symbol of the lessening tension between the biodynamic farming community and the surrounding community.

Looking at the situation during the past few years up until today, there is a growing demand for locally grown organic food. Some people believe that the worsening food quality in the industrial food sector has stimulated the demand for biodynamic products. Their experience indicates that customers search for taste, healthfulness and quality first, then they choose products that are good for the environment. There is some research that supports this. (Bjork, 2003, Solér, 2000) Many customers in Järna are of the opinion that biodynamic production unites all of these aspects and this perception helps support the local farm shops in Järna. Another recent initiative considered to have a positive influence on the growing demand for locally grown ecological food - though not directly associated with Järna - is Bondens egen Marknad (Farmer's Own Market) in Stockholm. This initiative has been igniting the demand for locally grown, high quality food and has, to some degree, influenced the Järna community, though they have been working on these issues for decades. Another important development is that Saltå Kvarn, the local flourmill and bakery, started a campaign in 2003 to increase the production of biodynamically grown grain. They pay producers approximately 25 % more for this compared to organically grown (KRAV) grain. (1.95 - 2.45 SEK/kg BD versus 1.55 - 1.95 SEK/kg KRAV). This has begun to inspire a significant changeover to biodynamic production methods, with many organic growers converting to biodynamic.

At the present time, new alliances are being formed between some members of the biodynamic farm community and various Swedish organizations such as the Ecological Farmers Union (Ekologiska Lantbrukarna), the Small Farmers Union (Sveriges Småbrukare), etc. These, combined with popular education courses and marketing campaigns, are furthering the communication of the values of the Järna community to a larger audience. Some feel that this is part of a larger positive trend in the Swedish population towards understanding and discussing the need for quality food products, and local production.

Present situation

This section describes the different individuals and institutions in the Järna area that are currently involved in the production and consumption of ecologically/locally grown food, either within the business sphere, or as private groups. This information is based on interviews with various members of the community who are in some way involved with the local food production system in Järna. (See list of interviewees at the end of the paper.)

There are nine biodynamic farms and market gardens that operate directly in the Järna area that serve local customers with their produce. These farms and their main produce are listed in the table below. The Järna farms are all certified by the Biodynamic Agriculture Association of Sweden and receive the right to use the DEMETER trademark in their marketing activities.

One farmer cooperative operates in Järna: Järna Odling. They represent the local biodynamic farmers and gardeners and own two brands: Järna Grönt (vegetables) and Järna Kött (meat). This is run as an economic association – a producer's cooperative.

Looking Forward: The Open Space Meeting

The first large group meeting focused on that which was considered positive, the second meeting looked at what needed to be changed to improve the system. The meeting form chosen for this second meeting was Open Space Technology (Owen, 1997), as it would allow participants to further understand the situation in Järna, and to create space for further development of the system. The Open Space Meeting was convened on October 1, 2003 and was attended by 36 people from the community who were interested in discussing the local ecological food system in Järna, and particularly what future developments were needed to improve the system in general. The meeting was titled "Can we eat our way to a better environment?". Participants included representatives from all groups involved in different aspects of the local organic food system in Järna. They included farmers, processors, restaurant owners, shopkeepers and consumers.

During the meeting, participants were encouraged to suggest to the group the topics that most interested them and invite others to discuss that topic. These topics are indicative of the kind of issues that are important to the different individuals/groups playing important roles in the local ecological food system, and for this reason they are listed below. This list of topics was generated by the participants in the morning and discussed for 4 hours in the late morning and afternoon:

- How is the changeover to ecological agriculture going in Sweden?
- How can consumers create economic security for local producers and processors?
- The menu has meaning.
- Ideology/intention vs. Economy/practice.
- Stronger local food in schools/care for the local economy through

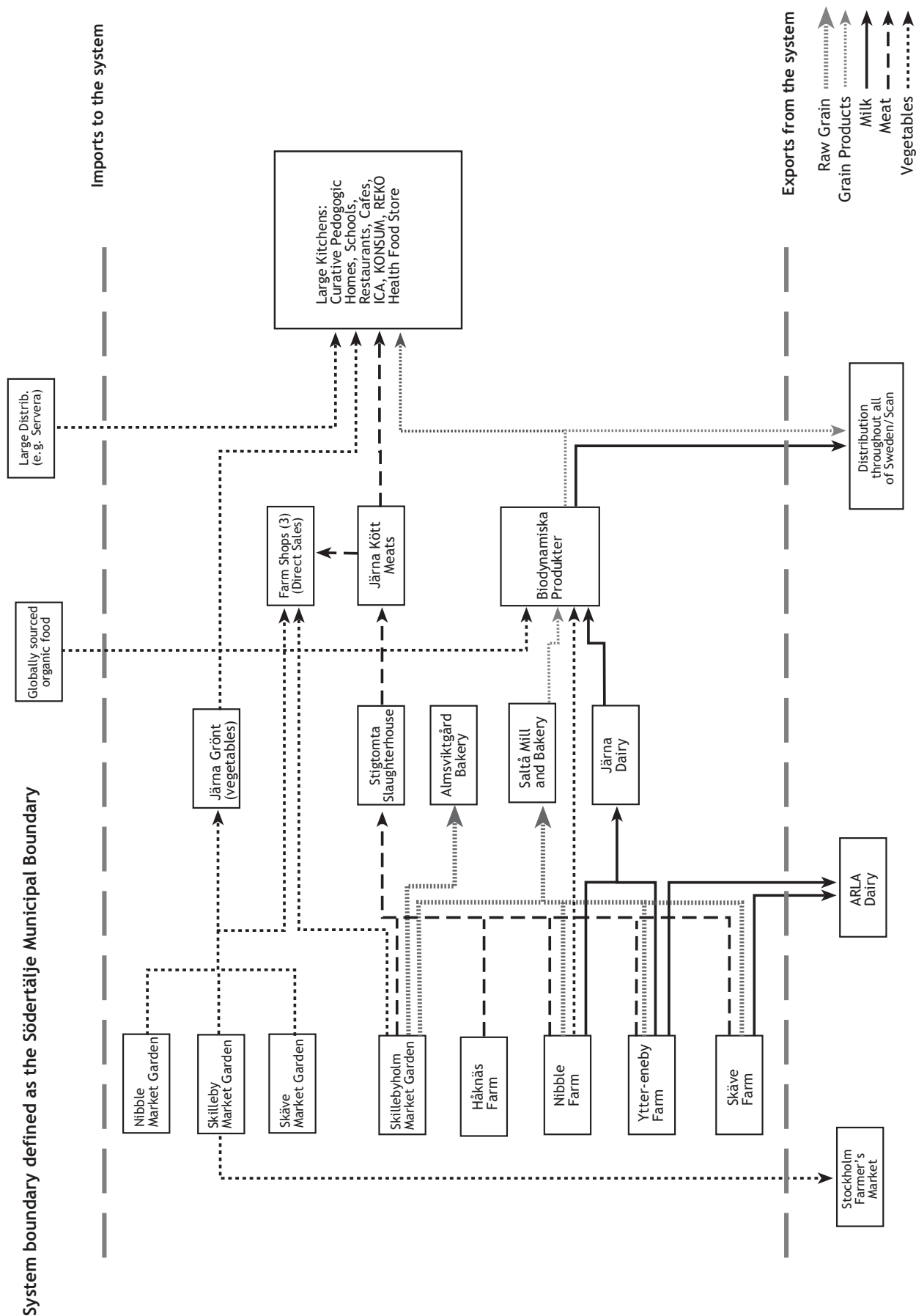


Figure 3. Diagram of the Local Ecological Food System in Järna.

Producers

Farm	Ownership & Management	Production	Customers
Nibble Gård (farm)	The Nibble Foundation is both owner and manager. Artur Borg and Christoffel van der Helder are the farmers.	Milk: 38 dairy cows (258,000 kg milk). Meat: 10 lambs, 36 calves, 6 cows Crops: 90 ha fodder, 25 ha grain, 10 ha for bread grain, 15 ha for animals, 2 ha potatoes, 0.3 ha beets.	All milk is delivered to Järna Dairy. Meat is sold through Järna Kött, the farmers co-operative. All bread grain is sold to Saltå Kvarn, the local flourmill and bakery.
Skilleby Trädgård (market garden)	Agape Foundation is the owner; Martin Fellqvist is the gardener.	Crops: 2.5 ha vegetables, 0.05 ha greenhouses with vegetables. Open land growing is primarily fresh veggies, not storage crops. Greenhouse crops are spring starts and 10 varieties of tomatoes in the summer and fall.	Vegetables sold through either Järna Grönt, Biodynamiska Produkter, or at the Stockholm Farmer's Market.
Ytter Eneby Gård (farm)	The Agape Foundation is the owner of the farm. Dagfinn Reeder leases the farm from Agape, and he and his wife farm it together. They have one employee.	50 dairy cows (348 000 kg milk), 10–20 ha pasture, 30–40 hectares of bread grain (oats, winter wheat).	Most of the milk is sold through Järna dairy; any surplus is sold to Arla. Grain is sold to Saltå Kvarn.
Nibble Handelsträdgård (market garden)	Nibble is owned as a corporation (AB). Dag Salomonssen is the lead gardener.	3 ha mixed vegetables, berries, herbs, greenhouses (0.10 ha).	Their produce is sold through their own shop
Skillebyholm (farm and garden)	The farm and garden are operated as part of an education in biodynamic agriculture. The foundation "Skillebyholms Odlingar" runs the farm and garden and the Skillebyholm Foundation runs the school as a non-profit endeavour.	4 calves, 3 sheep w/lambs, 3-4 horses, 40 chickens. 10.4 ha grain, 8 ha pasture, 0.5 ha mixed vegetables, herbs, flowers, 0.75 ha fruit, berries. 4 heated greenhouses (0.06 ha).	Their produce is sold to the restaurant and farm shop at Skillebyholm, their bread grain to Almviksgård and Saltå Kvarn bakery. Eggs and meat are sold in the farm shop.
Skäve Gård (farm)	The farm has an "economic association" for practical management (Skäve ekonomisk förening) that is run by Holger van Woude. The Skäve Foundation owns the farm, is responsible for the debt and charges rent to the association. The association does the work and day-to-day management.	Milk: 50cows (294,000 kg milk) Meat: 26 calves, 20 cows, 4 heifers, Crops: 80 ha grain (oats, winter wheat), 60 ha pasture.	All milk is sold to Arla. Meat is sold through Järna Kött, and grain to Saltå Kvarn bakery.
Skäve Trädgård (market garden)	Privately owned through an economic association. Skäve Foundation sees to it that there is someone to run the garden.	2 ha mixed vegetables, herbs.	Vegetables are sold at the Skäve farm shop and through Järna Grönt.
Glashuset at Skäve	The Skäve Foundation must see to it that there is someone to run the greenhouse. Berit Holte runs the garden/greenhouse.	Greenhouses (0.10 ha) producing basil and tomatoes (for pesto).	
Håknäs Gård (farm)	Private farm, owned by Åke Jonsson.	100 ha pasture and fodder for 80 steers, approximately 40 slaughtered per year.	Meat is sold through Järna Kött.

Processors and distributors

Organization	Ownership & Management	Description
Saltå Kvarn mill and bakery	Saltå Kvarn is a corporation (AB), thus ownership is by stock. Previously it was owned by Agape Stiftelsen but was sold to investors. The VD is Johan Ununger.	This is the major bakery and flourmill in Järna, buys from all over Sweden and occasionally abroad, and sells all over Sweden. It buys biodynamic (BD) grain above organic, in order to keep the brand image and DEMETER certification. It is changing towards more local (Swedish) purchasing with an offer of 25 % price increase for BD grain. They bake for both their own label, as well as Organic (KRAV) certified bread for KONSUM shops.
Järna Mejeri (dairy)	Thomas Stenius is the manager of the dairy.	This dairy buys all milk from Nibble and some from Ytter Eneby. They have many special fresh products (milk, yoghurt, soft cheese, sour milk, etc.) that are sold only in Järna, but hard cheese is shipped all over Sweden through the Biodynamiska Produkter network.
Järna Syrat	Achim Böppler is owner and manager of this small company. He took over from Thomas Stenius.	He processes vegetables for Sour Kraut etc. He makes some local purchases of vegetables and harvests honey. His products are sold through local shops, etc.
Stigtomta Slakteri (slaughterhouse)	This is a small private company, possibly a corporation.	It is used by Järna farmers, but is located 50 km away and serves both conventional and organic producers.

Retailers and restaurants

Organization	Ownership & Management	Products
Biodynamiska Produkter	This is owned by a Foundation. John Gerard is chairman of the board and Tobias Zeiher is manager.	This is the only wholesaler in Järna, and the biggest DEMETER wholesaler in Sweden. They distribute hundreds of KRAV and BD certified food products from all over Europe and the world for sale to retailers wherever they are. They purchase some fresh vegetables, but have no explicit local distribution.
Nibble Handelsträdgård	Dag Salomonsson and Petter Fillipsson are the managers. Ownership is through shareholders (AB).	This is a local retail shop where KRAV and DEMETER products are sold. They have a similar selection to the wholesaler BD Produkter. People from both Järna and the surrounding area come in to shop there. They sell from their own market garden, as well as KRAV and BD vegetables and fruits from the world market, according to seasonal availability. Generally, they sell their own produce first, then locally grown, then buy from BD Produkter (which buys from the world market).
Skillebyholms Gårdsbutik farm shop	This is owned by the Foundation "Skillebyholms Odlingar" and managed by Elisabeth Lütke.	This farm shop sells locally-produced BD meat, vegetables, some grain products, and handicrafts mostly to tourists.
Saltå Kvarn bakery and Café	This is managed and owned by Saltåkvarn AB.	They sell Saltå bread, as well as coffee and cakes, baked at the bakery. They also sell some fresh local products, when available.
Café Linné	This is owned by Kulturforum AB, and managed by Robert Wester-dahl.	They cook and serve gourmet BD and organic food at a small restaurant attached to the Kulturhuset. The chef buys as much local BD produce as possible.

Vidarklinikens Café	This is owned by The Vidarkliniken Foundation.	This café serves patients of the clinic, mostly coffee, tea and bread, etc.
Skäve Gårdsbutik farm shop	This is owned by the Skäve Foundation and managed by the garden manager.	It is similar to Skillebyholm.
Rudolf Steiner Seminariet cafeteria	This is owned by the Rudolf Steiner Seminariat Foundation.	It serves meals to Seminariet students and staff etc. and is similar to Café Linné in menu and purchasing.
KONSUM shop	This is a national food chain which is a weak member-owned cooperative.	They buy local produce from Järna Grönt and Järna Odlaring as available, and from BD Produkter.
ICA shop	This is a national food chain of privately owned shops. Thomas and Ann Lindberg are the owners.	They buy local produce from Järna Grönt and Järna Odlaring as available, and from BD Produkter.
Häslökost - REKO	They buy local produce and produce from BD Produkter.	

Large and private kitchens

Organizations	Purchasing
3 Waldorf schools	They do some local purchasing through Järna Grönt and Kött, and also buy through Biodynamiska Produkter and Servera, a large wholesaler.
Curative education homes in Järna (approx. 10)	They do some local purchasing through Järna Grönt and Kött, and also buy through Biodynamiska Produkter
Vidarkliniken	They do some local purchasing. There is considerable potential for future networking.
Private consumers	Studies by Björk (2003) and Solér (2000) show that many who shop in Järna are committed to BD products and choose them over all others, regardless of price.

local purchasing.

- To what degree do subsidy and economy steer production?
- The school's food.
- Local production vs. solidarity with the south.
- How can we do business without speculation?
- How do we go from words to practice?
- How can producers engage in the local market?
- Lengthening of the growing season.
- Which environmental questions are most important? Or, how do we know that we are doing the right thing?
- Eco-village group discussion.
- Am I responsible for where and what?
- Water quality in growing and processing food.
- To work with everyday food. The attitude of youth as evidence of success.
- What is the consumers' responsibility for the landscape?

These topics are indicative of the kinds of issues that are important to the individuals and groups who comprise the local food networks in Järna. The purpose of describing these here is to give evidence of the motivations with which many within the Järna area approach food and the environment. This is, in a sense, the background consciousness

within which the local ecological food system activities take place. This consciousness is possibly one of the most important elements influencing what can be done in a given community.

Discussion

Obstacles

Despite these successes described above, it is important to recognize the bottlenecks within the local ecological food system in Järna that need to be overcome if the system is to improve. There is currently too little processing capacity for milk. For instance, although Skävegård is a biodynamic certified farm they are currently selling all of their milk to Arla, the largest Swedish dairy, as certified ecologically grown, but not as biodynamic, for which it qualifies. Ytter Eneby Gård also does this with a portion of their milk. The problem is largely one of under-capacity at the local dairy (Järna Mejeri), and this in turn leads to a sub-optimization of the system as whole. The economy of Skävegård is especially affected. They could receive an additional 10–20% income without changing their production strategy.

Another major bottleneck is vegetable and root crop production. Generally, the demand for all the products grown in Järna is much higher than what is produced; both within the community and by Stockholmers, who live just 60 km away. Issues mentioned by the farmers that limit production are access to land, poor soils for some crops, as well as a need for risk capital to enter new areas of production. In addition, one farmer mentioned that there is a lack of good advisory capacity within Sweden for biodynamic production, compared to his home country of Holland.

Furthermore, there are issues related to the price of Biodynamic produce, which is generally the highest priced food on the market. For instance, the local public schools began a process to purchase food from local farmers, many of whom are biodynamically-certified, but they found the prices prohibitive. The premium price commanded by biodynamic produce is also putting pressure on local farmers to seek lucrative markets away from the immediate Järna area. For example some farmers are selling their produce in the Stockholm area, both at small shops and the farmers' markets.

BERAS planned action

Based on the discussions in the Open Space meeting in October 2003, a number of initiatives were begun in collaboration between actors in the local community and actors who work with BERAS Work Package 1. The first initiative is dealing with prolonging the availability of locally grown food within the Järna area. A series of follow up meetings between the local farmer cooperative manager and those at the meeting who were interested in the topic were held. The main bottleneck identified was the fact that there simply is not enough biodynamically-certified produce available in Järna to justify a winter storage system

large enough to have a significant impact on winter food consumption. In addition, the soils in the area were too poor to justify the expense for any of the local farmers to begin growing root vegetables in large quantities. As they were unable to overcome these bottlenecks at the present time, this issue remains as an area of concern for future work. A second initiative has dealt with the issue of increasing locally grown BD food served in the schools. This project was initiated by Kerstin König who works for the local school district and who attended the Open Space meeting. She wants to get locally grown food into the local schools. The project started in October 2003 with 4 people (1 BERAS researcher, 1 person from the Agenda 21 office of Södertälje municipality and 2 employees of two local school districts, including Kerstin König). Six months and six meeting later, farm managers from two farms, as well as the teaching and kitchen staff of two schools, are involved and a way forward has been identified. In the spring of 2004 school children will start visiting the two chosen farms and the schools will purchase some vegetables produced on these farms. The project has received some financial support from the Agenda 21 office and will continue into the fall, and hopefully for years to come.

Conclusion

The local food system in Järna is a good example of what can be achieved by a large group of people with diverse roles acting towards common ideals in the same place. One of the greatest strengths of the system is that it creates an environment where economic considerations are not the only considerations that steer the activities. The authors feel that the primary reason that this occurs to such a high degree in Järna is that the community has become an oasis of sorts for alternative thought and alternative spirituality that stands juxtaposed to the somewhat conservative culture of Sweden. This "oasis" seems to be the result of a complex mix of factors that can be seen as exerting both a push and a pull on the people who choose to live and work in Järna. A push in the sense that those in Sweden who have deeply held spiritual or cultural values that run slightly at odds to the prevailing culture may seek a community where their values can be more freely expressed, and Järna is one such community. And a pull in the sense of the self-reinforcing dynamics that emerge when a critical mass of ecological and progressive business activities are centered in one geographic location. Through our interviews and interaction with the community, it became clear that both the farmers and their customers greatly value having the farms in Järna, and the customers support them by buying their produce at reasonable prices, which can be much higher than the national average. Furthermore, many people who live in Järna are very health conscious (Björk, 2003), and the strict environmental standards that steer biodynamic production give the extra reassurance that the products on offer are the healthiest and highest quality available. This helps producers command a premium price and, in turn, stay in business. In addition,

having many of the farms owned through non-profit ownership, with the land owned outright by a non-profit economic association, takes some of the pressure off the farmers as they do not need to repay large bank loans for their land, only their equipment and yearly business activities. The ownership of the farms by non-profit foundation was designed to make it possible for biodynamic production to take place in the community indefinitely.

In closing, our experiences in the community tell us that what makes Järna a good example of a sustainable local food system is, first and foremost, the consciousness of the people who live and work there, who choose to weigh their farming and food purchasing decisions against ecological and social criteria, as well as economic ones. Additionally, insights gained through our interaction and dialogue with community members indicate that the community is a place where experimentation can be undertaken that can lead to the birth of new ideas related to social and ecological sustainability, which provides more evidence of the influence of progressive consciousness. Examples of this experimentation are the new biogas installation at Ytter Eneby Farm and the new organic food home delivery system called 'Ekolådan', run by Biodynamiska Produkter. Further indication that consciousness is a primary driving force organizing the activities in Järna can be seen not only in the agricultural and food system activities upon which this documentation has focused, but in the many other socially and ecologically oriented activities that take place in the community, such as the alternative health care center Vidarkliniken, and the many homes for curative pedagogics that located in and around Järna. Although it is impossible to single one thing that is responsible for the success of the LO/EFS activities in Järna, a primary factor must certainly be the fact that the system is a creation of the work of many dedicated and caring individuals who took the initiative, and expended the time, money and energy to build up and sustain the system over time. A system that we have found to be appreciated by all who partake of it.

References

- Adler, S., Fung, S., Huber, G. & Young, L., 2003. Learning Our Way Towards a Sustainable Agri-Food System. Centrum for Uthålligt Lantbruk (CUL), Swedish University of Agricultural Sciences, document no. 39. www.cul.slu.se.
- Bjork, C., 2003. Driving forces, motives and hindrances for the consumer. (in Swedish with English summary). Stiftelsen Biodynamiska Forsknings Institute, Järna, Sweden.
- Cooperrider, D.L. and Whitney, D., 1999. Collaborating for Change: Appreciative Inquiry. San Francisco, CA: Barrett-Koehler Communications.
- Dlouhy, J., 1981. Alternativa odlingsformer – växtprodukters kvalitet vid konventionell och biodynamisk odling (Sveriges lantbruksuniversitet, Inst. F. Växtodling, Rapport 91). Uppsala.

- Granstedt, A., 1992. Case Studies on the Flow and Supply of Nitrogen in Alternative Farming in Sweden. I. Skilleby-Farm 1981-1987. *Biological Agriculture and Horticulture*, Vol. 9, pp. 15-63.
- Owen, H., 1997. *Open Space Technology: A User's Guide*. Berrett-Koehler, San Francisco.
- SCB, 2004. *Statistisk Årsbok*.
- Solér, C., 2000. *Consumers as Agents for Change*. Gothenburg Research Institute/ Stiftelsen Biodynamiska Forsknings Institute, Järna, Sweden.

Personal Communications

Those present at the meeting on June 16th, 2003 in Järna:

Catharina Hausmann, Initiativ närodlat
Robert Westerdahl, Initiativ närodlat (participation for first half)
Hans-Petter Sveen, Järna odlarring (participation for first half)
Johan Ununger, Saltå kvarn
Artur Granstedt, Biodynamiska forskningsinstitutet (SBFI)
Olof Thomsson, SBFI
Hans von Essen, SBFI
Andrew Haden, SBFI
Hillevi Helmfrid, SBFI
Tracy Birge, SBFI
James Bingham, Stockholms länsstyrelse

36 member of the local community attended the Open Space meeting on the 1st of October, 2003.

Additional Interviews

Hans von Essen, SBFI
Artur Granstedt, SBFI
Hans Petter Sveen, Järna Odlarring
Peter Muller, Farmer, Skillebyholm Gård
Holger van Woude, Farmer, Skäve Gård
Arthur Borg, Farmer, Nibble gård
Dagfin Reeder, Farmer, Ytter Eneby Gård
Dairy manager, Järna Mejeri
Sales Manager, Saltå Kvarn
Manager and co-owner, Stigtomta Slakteri
Achim Böppler