

From niche to volume with integrity and trust

FULL CASE STUDY REPORT

Kiuruvesi municipal catering - Finland

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Abstract: The Kiuruvesi municipality the pioneer in using local and organic food (LOF) in the statutory municipal catering services. The LOF strategy has been determined since the 1990'ies. The strengths lie in the rich regional production structure of agriculture and in the commitment of the municipal authorities to the LOF concept.

The LOF strategy is based on territorial approach, and it has been adopted as means of enhancing the attractiveness of the municipality, which is located in a fairly remote area and which has been facing declining population development over the past decades. Prioritising LOF in public food services is an important ingredient in the Kiuruvesi municipality's brand as the capital of ecological Finland.

As a public actor the municipal catering service is constrained by the law of public procurements. Prioritising LOF requires careful planning of the tender calls, so that local products could be chosen among the offers. The major restriction in use of LOF is the availability of the products suitable in view of the needs of the institutional kitchens. The price constraints are compensated by substituting expensive items with nutritionally comparable less expensive items and by careful menu planning.

Over the years the LOF concept has brought about various kinds of food entrepreneurship to the region. The Kiuruvesi case, thus, allows evaluate the impact of the institutional kitchens on the development of the small enterprises and on co-operation among them and with the catering sector. It also demonstrates the gradual development of the competitive bidding procedure from price-based tender calls towards anticipatory dialogue and interaction among the producers and catering personnel and as an impulse to product development.

Content

1 Introduction.....	5
2 Case study approach, materials and methods.....	6
3 Finland and Kiuruvesi – the national context.....	7
3.1 Local and organic food	7
3.2 Kiuruvesi.....	8
4 Overview of the case.....	9
4.1 Presentation and trajectory	9
4.2 Basic facts.....	10
4.3 Stakeholder network.....	12
5. Analytical perspectives.....	14
5. 1 Organisation and governance.....	14
5.2 Business and management logics: the process behind ensuring economic performance and efficiency	17
5.3 The balance between quality differentiation and volume and economic performance	22
5.5 Quality dimension of primary production and mediation through the chain.....	28
5.6 Resilience of the municipal Kiuruvesi catering – long term perspective, change and social-ecological links	28
6 Future orientation	31
7 Verification of the results	33
References.....	33

Most local organic market chains have inherent problems in moving from niche to volume, and mainstream large-scale market chains have inherent difficulties in securing and advancing organic values. The project “Healthy Growth: from niche to volume with integrity and trust” investigated a range of successful mid-scale organic value chains in order to learn how they are able to combine volume and values, and to use this knowledge to support the further development of organic businesses, networks and initiatives. Research teams from ten European countries contributed with 20 case studies. More information and documentation can be found at: www.healthygrowth.eu

1 Introduction

Emphasizing ecology, ethics and sustainable development in life style and in productive activity, the Kiuruvesi town has profiled itself as the capital of ecological Finland. Securing the use of local and organic food (LOF) in municipal catering is an important ingredient in the municipality's brand. Seasonality is important part of the LOF concept, and it is accounted for; in the winter time instead of fresh tomatoes, lettuce and cucumber various root vegetables are used.

The use of LOF in municipal catering has been determined developed in Kiuruvesi since the 1990'ies, and Kiuruvesi is the pioneer in this area, both in Finland and also internationally. The strengths lie in the rich regional production structure of agriculture and in the commitment of the municipal authorities to the LOF. The yearly budget used for purchasing LOF products is about 200 000 €.

The major restriction in use of LOF is the availability of the products suitable for the need of institutional kitchens. On the one hand, the volumes needed in municipal catering services are fairly large, and on the other hand, the kitchens do not have preprocessing facilities which limits the repertoire that can be used. Price is also important, but the price constraints can be to some extent compensated without compromising the nutritional quality by substituting expensive items with less expensive ones and by careful menu planning.

The small enterprises have difficulties to get their products to the market. The municipality is a large buyer, and when the contracts are made, marketing is not a problem. This gives the entrepreneurs secure income and allows them to focus on developing their activities. In Kiuruvesi the LOF strategy has brought about new entrepreneurial activity, and small scale processing has been developed in view of the needs of the catering sector. The mutual interplay features, thus, co-production and the relationship has developed towards strategic partnership. Through the positive experiences from own municipality, several of the entrepreneurs have gradually gained footing as supplier in other municipalities in the region. The public catering of the municipalities can thus, be seen to comprise a protected space for the small and medium size enterprises (SME) to develop their activities.

As a public actor the municipal catering service is constrained by the law of public procurements. In order to enable prioritizing LOF, attention needs to be paid to the criteria used in the process of competitive bidding. "Organic" is accepted as a straightforward criterion in putting out tender calls, but prioritizing LOF requires careful planning of the tender calls, so that local products could be chosen among the offers.

The LOF strategy of the public catering is based on the territorial approach, and it has been adopted as means of enhancing the attractiveness of the municipality, which is located in a fairly remote area and which has been facing declining population development over the past decades. Production and local processing in Kiuruvesi are important also in view of the national markets. Especially the dairy farms and beef cattle farms have been developing towards modern concern type of enterprises. All this has fused faith in the future of the food sector in the region. There is a small local dairy (not organic), which is specialized in production of artisan cheeses for the national market, and a local slaughterhouse is being planned.

The Kiuruvesi case is interesting in view of the HealthyGrowth aims, because it allows evaluate the impact of the public catering on the development of the enterprises and on co-operation among them and with the catering sector. It also demonstrates the development of the

competitive bidding procedure towards anticipatory dialogue and interaction among the producers and the catering personnel and as an impulse to product development.

2 Case study approach, materials and methods

The data on the municipal catering have been obtained mainly from the Kiuruvesi official internet web page, from one research article (Tikkanen 2013), from one report on the status of local and organic food in municipal catering in Finland (Muukka et al. 2009) and from another report dealing with the impact of LOF on regional economy (Vänttinen & Korpi-Vartiainen 2010). A preliminary interview was carried out with the head of municipal catering service, Helena Laitinen in 20.3.2014. Another interview with Helena Laitinen, municipal authorities and the representatives of the customers of the public catering service took place 20.5.2014 (Table 1). The outsider representation of the Kiuruvesi model is based on the articles published in the internet blogs, on the interview with the representative of the supplier fishery company, Järvifisu (Lake Fish co.), on the group interview in May 2014, in which the insider representation was also captured (Table 1).

Table 1. The interviews carried out with the representatives of the Kiuruvesi municipality and of one of its food suppliers, the Järvifisu company.

Participant	Role	Date	I-1	I-2	I-3	I-3
			23.3.2014	20.5.2014	20.5.2014	20.5.2014
		Duration, h	0.5	2.5	0.5	2
		Age & gender				
Helena Laitinen	Head of the Kiuruvesi catering	45, F	X	X	X	
Tapio Knuutinen	Chair of the board of education	60, M		X		
Sari Tikkanen	Chair of the municipal council	45, F		X		
Jarmo Muiniekka	Municipal manger	60, M		X		
	Customer representatives	15-18, F,F,F,M		X		
Pekka Jauhiainen	Järvifisu partner	40, M				X

The significance of protected spaces for emergence of new enterprises and for their evolution is scrutinised more thoroughly by paying specific attention to one of the suppliers of the municipal catering, that of the fish products, the Järvifisu company. The compilation of the Järvifisu results is given as a separate case report (www.healthygrowth.eu).

The first interview with the head of the municipal catering took place in connection with a food fair occasion in spring 2014 in Helsinki. The purpose was to confirm the preliminary information obtained by the time of the interview from the various sources. The interviews 2 and 3 were tape recorded. In order to improve the outcome of the interviews the questions were sent about a week in advance to the head of the catering service and to the Järvifisu partners together with a short summary of the data compiled from other sources by that time. This allowed the interviewees to become acquainted with the topics to be discussed in the interview occasion and eventually to complement and correct the information. The interviews 2 and 3 by and large proceeded in the same order as the questions in the template designed for the HealthyGrowth case studies. In the interviews, free association was encouraged and

consequently, the same topics were brought up repeatedly. The interview material was therefore analyzed with qualitative data software (Atlas.ti) looking for references to development history, organization, strategy, communication, benefits, problems, producers, processors, future perspectives, constraints, conflicts, and coding the material accordingly.

3 Finland and Kiuruvesi – the national context

3.1 Local and organic food

Increasing the use of local and organic food (LOF) and stressing the seasonality of the food items as means to sustainabilise food production and consumption are among the principles of the Finnish food policy. In this connection, “local food” refers to genuinely short supply chains, i.e. production, processing and consumption are geographically close to each other. In addition, the focus of is on basic food items of local origins. These are to be distinguished from “locality food” or the pricy special products that are marketed as representing a certain region or certain traditional production mode (Marsden et al. 2000). The customers of such products may be very far away from the site of production.

The public actors are to be the path breakers in leading the development (Ministry of the Environment 2009, 2012; MMM 2012VN 2010, 2011, 2013). This is possible because compared to many other countries, the role of the public catering is exceptionally important in Finland. It provides over half of all meals eaten outside homes, and the great majority, 83%, is at the response of the municipalities and the state, the rest being staff canteens run by the private entrepreneurs (A.C. Nielsen 2008). The warm meal which is served free regardless of the parents’ economic status for all children in municipal day care and for all students in primary, secondary general and vocational schools comprises a significant part of the municipal catering services. The influential potential of the public sector to promote sustainable food consumption is due to both the large purchasing volumes and to the possibility to provide practical example on healthy and environmentally friendly eating habits (Ministry of the Environment 2008, 2009, 2012; VN 2009, VRN 2014).

The food markets in Finland are not very attractive in view of competitive and profitable business. The consumer basis is very small: there are only about 5 million inhabitants in the whole country. With only 17 inhabitants per square km in average the country is also sparsely populated and geographically, the population is unevenly distributed. The transport distances are therefore long, which increases the costs. In addition, the structure of the Finnish food sector is peculiar. The food business is heavily concentrated. Two major actors have 80 % of the markets. As market leaders they have the say which products end up to the shelves of the retail stores and on what price. Without either one of the major actors’ consent, the alternative small and medium sized actors have great difficulties in getting their products to the market. The economic situation of the small producers is, therefore insecure, and often very difficult. Their competitive position is weak, and they have difficulties to get their products to the market.

Contracts with institutional customers are, therefore, potentially important. They provide secure income, and the entrepreneurs can shift the focus from marketing to developing their activities. However, usually there is the problem of the availability of large enough volumes of products suitable for the needs of the institutional kitchens. The Kiuruvesi municipal catering case shows how the problems have been gradually overcome by determined development and

by committing the stakeholders. It, thus provides an example on the municipality's role in improving the SME:s position in the food markets.

3.2 Kiuruvesi

The Kiuruvesi municipality is a rural town located in the central Finland, in the province of North Savonia (Figure 1.). The land area is 1 328 km², with the inland waters included, the total area is 1 423 km². With seven inhabitants per square kilometer, the municipality typologically represents sparsely populated rural areas, the other municipal types being core rural areas, urban adjacent rural areas and urban areas (Malinen et al. 2006).

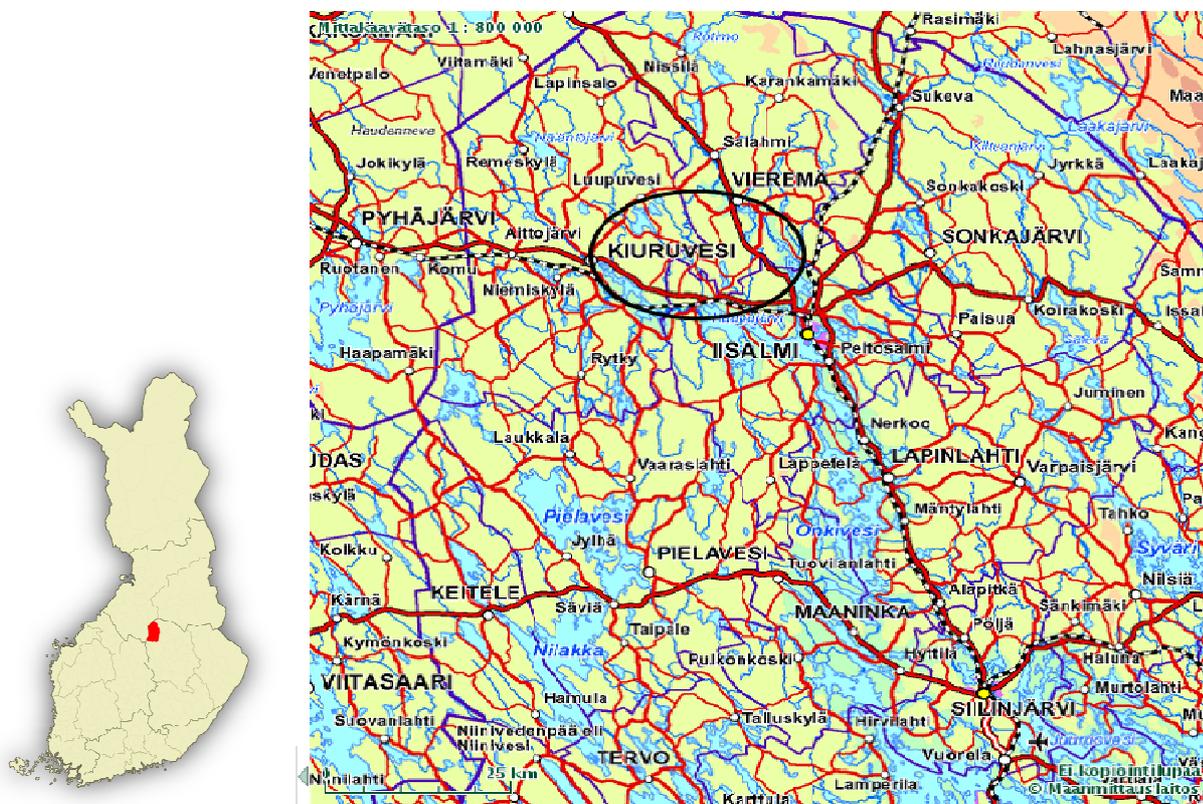


Figure 1. The geographic location of the Kiuruvesi municipality.

The population development has been long declining: in 1980 there were about 12 000 inhabitants, today the number is about 8 800. The 59% share of the people in active working age (15-64 years) is less than the average in Finland (64%). The level of education is somewhat lower than in Finland in average, in Kiuruvesi the share of people with only basic education is nearly 40%, whereas in average in Finland the share is 31%. The unemployment rate is about 14% which is somewhat higher than in average in Finland (11%, Statistics Finland 2015).

The economic structure is strongly biased towards primary production. It provides about 26% of the jobs for the inhabitants, the average in Finland being 3.7%. Because of the natural

circumstances, the Kiuruvesi region has been for decades among the major agricultural production areas of the country, the climate and soil are especially suited for the dairy production. Beef cattle is another important production line, nearly 15% of both milk and beef produced in Finland comes from the northern Savonia region, which comprises about 1% of the country's agricultural land area. 10% of the field area is organically cultivated. This is the average in Finland.

4 Overview of the case

<u>Date of foundation:</u>	1999
<u>Main actor:</u>	Municipal council
<u>Legal form:</u>	Public entity (municipality)
<u>Number of employees:</u>	40
<u>LOF items:</u>	Potato, tubers, green vegetables, bread, cereal, eggs, berries, pork meat, fish
<u>Number of meals per day:</u>	1300 lunches for schools, 850 meals for social & health care
<u>Distribution channels:</u>	Schools, day care centres, institutions of social & health care, home service, municipal staff canteen, work centre for rehabilitation
<u>Google hits fro Kiuruvesi LOF:</u>	7 230 (6 May 2015)
<u>Home page:</u>	http://www.kiuruvesi.fi/Suomeksi/English

4.1 Presentation and trajectory

As the ecological capital of Finland, in Kiuruvesi a lot emphasis is put on ecology, ethics and sustainable development in life style and in production. An important part of this brand is the LOF concept adapted in municipal catering. The impetus to prioritize local and organic food (LOF) in the municipal catering dates back to the 1990'ies; the municipality was then in an economically difficult situation, and something had to be done to reduce the costs of the municipal services. At that time, the municipal food services were organized under two sectors, the board of education was responsible for school catering, and the rest of the food services were integrated into the tasks of the social and health care. The initiative for the LOF came from the actors of the educational sector. In addition to the primary school of the municipal centre, there were 11 primary schools in the villages. The options were either to centralise the catering services by giving up the preparation kitchens in the village schools, or to do things in some other way differently. The catering personnel in the village schools advocated actively the possibilities to continue with the decentralised model by focusing on the possibilities the village farms could provide. It was seen as a matter of survival of the village schools and along with them, as a matter of survival of the villages themselves. The headmasters and the teachers of the schools as well as the village people gave their support to the decentralised model. In 2000, the board of the biggest of the village schools, the Rapakkojoki school with 60 pupils, brought forward an official motion for the municipality to become a pilot in use of LOF.

The board of education approved the motion. In the village schools, the kitchens have always used products from the nearby farms, sometimes from own school garden and from the forests. The LOF was not a new thing in Kiuruvesi, but this was the start of the determined developing of the LOF strategy. The municipal board supported the decision of the school authorities, and gradually the LOF concept has become integrated into all school catering in Kiuruvesi. This has paved the way for new ideas also in regional economy.

In 2000, the whole catering personnel in the Kiuruvesi schools participated in a training course in use and in increasing the use of organic food in the municipal kitchens. Ever since then, the catering actors in Kiuruvesi have been active in promoting the use of LOF. It has required reformulation of the menus and recipes so as to accommodate them to the availability of local raw materials. Efforts have also been made to substitute commercial ready-made meals by developing corresponding own products.

In the beginning, the schools had own kitchens, and the volumes needed for each school were fairly small. Initially the LOF products were locally available potato and other tubers, vegetables, berries and to some extent also cereals, and the producers brought them directly from the farms into the school's kitchens. The suppliers were found via announcements in local newspaper and via personal contacts. Because the volumes were small, the products could be purchased without the heavy process of competitive bidding. The products were unprocessed, and this caused problems the beginning both in terms of the violations of the hygiene regulations and in terms of the extra work required in the kitchens.

With the efforts of the head of school catering service, the LOF concept was expanded so as to cover all schools in the municipality. Regarding the fate of the LOF strategy, the powerful actor is the municipal council, because the economic resources allocated for the catering sector is decided in the municipal budget. The positive attitude of the municipal manager towards LOF has been important and has contributed to the adoption of the concept. A contributing factor was also the fact that the decision-makers were willing to accept two kinds of approaches to providing the food services: the LOF concept was integrated into the practicalities of school catering, whereas the social sector continued as before.

Over the years the situation has improved. The repertoire of the locally available products has increased and there are today also a variety of local organic products. The purchased products have also been processed in view of the needs of the catering service. All the purchases are nowadays centralised. Compared to the beginning, much more attention is paid to the competitive bidding process and information both on the process and its practicalities and on the needs of the catering service is delivered to the potential suppliers in advance before the tender calls are opened.

4.2 Basic facts

The yearly budget used for purchasing LOF products is about 200 000 €. At the moment, there are in Kiuruvesi municipality two central kitchens and four satellite kitchens. The one located in the Kiuruvesi gymnasium provides daily about 1300 lunches for the gymnasium and for the distribution kitchens: the Niva and Rytty primary schools and to Kiuruvesi upper school. The other central kitchen is located at the health care center, and it provides the meal services for the inmates and the personnel of the institutions (health care centre, nursing home for old people and for mentally handicapped), for home service, for the three kinder gardens and for the staff canteen of the municipality. This kitchen prepares daily altogether about 850 meals. The hot meals are prepared in the two central kitchens, and they are transported to the

distribution kitchens, in which only potatoes, pasta and rice are cooked. In addition, there are four satellite kitchens located in three rural primary schools, the Kalliokylä, Lahnajoki and Luupuvesi schools and in the municipal subcontracting enterprise Tekatuote, which is a rehabilitation work centre. In the satellite kitchens, the meals are prepared at the same site where they are served.

The share of the LOF is different in the two central kitchens: LOF is especially emphasized in the school meals. Data on the volumes of LOF are not available. In terms of Euros, the share of LOF in schools comprises today 43% of costs of the food purchases, organic products comprise 14%. In the entirety of the municipality - inclusive the schools - is the share of LOF is 23%, whereas organic products comprise only 2%. The share of the LOF varies somewhat from year to year depending on the availability. In 2010 the corresponding figures were 43% respective 25%.

The meals are served according to the menu rotating in periods of six weeks. The six-week menus are not the same throughout the year, but in menu planning attention is paid to seasonal availability of the products, to national holidays with specific food traditions as well as to local food traditions.

The total number of the personnel within the catering service is 40. The available resources for the catering sector are defined in the municipal budget and the costs including the food purchases, salaries, rents, maintenance costs etc. have to be kept within budget. The food purchases comprise about 26% of all costs of the catering sector, and the share of the LOF specifically is 6.6%. The salaries comprise the largest cost item or 53%, the costs of the internal rent are about 12% and 9% are other, unspecified costs.

Today the schools in Kiuruvesi have proceeded to the step four in the six-phased *Steps to Organic* training program¹. This status means that at least eight important organic raw material items are in regular use in the kitchen; the items of local organic produce are potato, various vegetables, berries and juices, the cereal and bread. The organic bread for schools comes from a local bakery, but the wheat flour is not of local produce, but comes via national supplier. The day care centers use organic milk; the small amount needed to satisfy the need is bought from an organic dairy, but this dairy is not local.

There are no data on changes of the purchasing price of the LOF products. Over the years, both the menus as well as the number of customers have changed. The machinery used in the kitchens has been renewed. Also the repertoire and the volumes of the LOF products have increased. It is, therefore, not possible to estimate how much and into what direction the LOF concept has influenced the costs of the catering sector.

Initially the LOF concept was introduced as a response to an economically difficult situation in Kiuruvesi. Since then the development has taken place gradually in small steps. The use of LOF has steadily increased in pace with the increasing number of suppliers. There have not been big crises or big leaps forward. The following are the important milestones in the development:

¹ The *Steps to Organic* -training program is a voluntary program aimed at helping professional kitchens to increase their use of organic products as means to support sustainable development within the catering sector. The program comprises 6 steps by which the kitchens gradually increase the use of organic products. In the first step, the kitchen regularly uses at least one organic product and/or item of raw material. In the second step at least two, in the third step at least four, in the fourth step at least eight and in the fifth step at least 20 important raw material items as organic products are in regular use in the kitchen. In steps one to five, other organic products are used where practicable. In the sixth step, the kitchens use a substantial variety of organic products from all raw material groups. Conventional products are used only when no organic alternative is available (<http://www.portaatluomuun.fi>).

- 1) initial impulse at the end of 1990'ies
- 2) training of the personnel in schools kitchens in use and in increasing the use of LOF 2000
- 3) joining the *Steps to organic* training –program 2001
- 4) incorporation of the LOF concept into the municipal strategy 2002
- 5) fusion of the meal services of the schools and the social sector into one administrative unit 2010
- 6) merging the two central kitchens into one 2014 (merge is postponed until 2015)

4.3 Stakeholder network

The stakeholder network of the Kiuruvesi municipal catering service is presented in Figure 2.

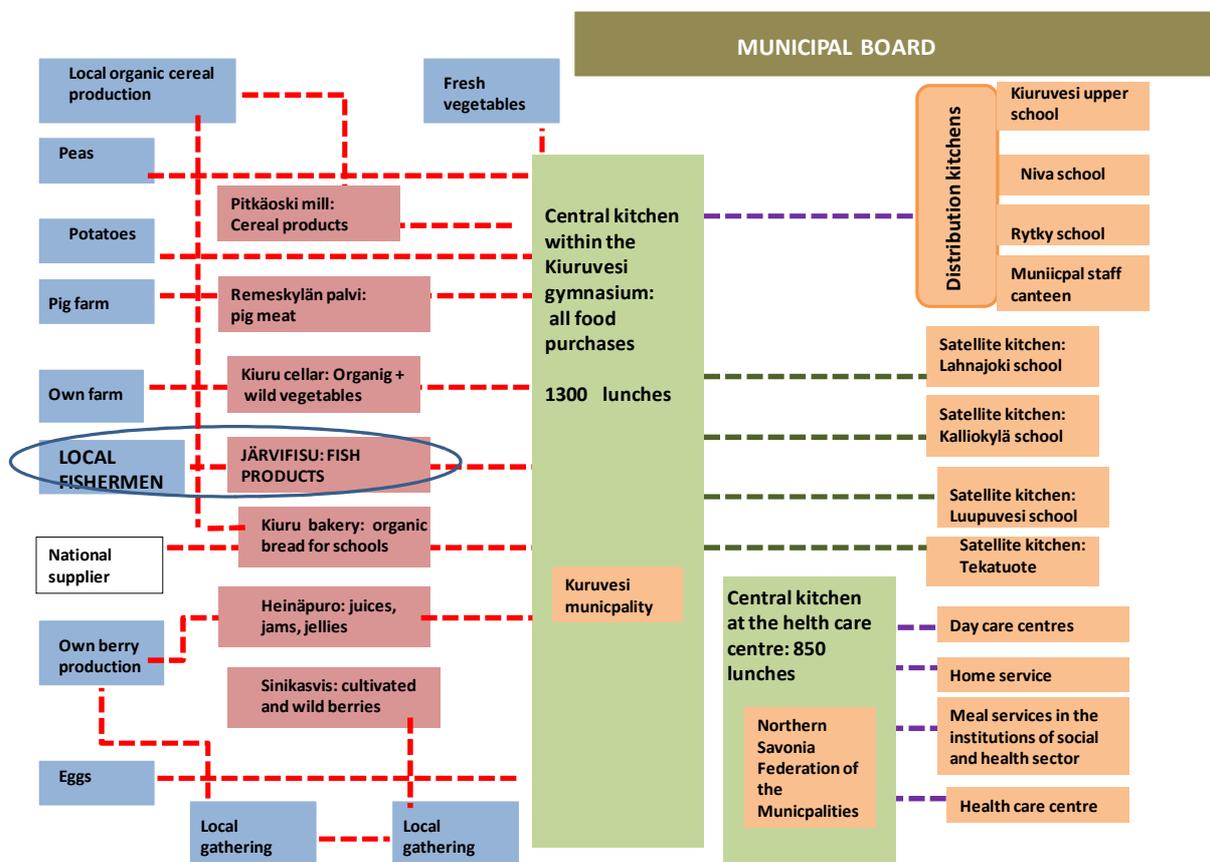


Figure 2. The stakeholder network of the Kiuruvesi municipal catering. The supplier of the fish - Järvifisu - is indicated in the figure, and it is looked more closely in a separate report (www.healthygrowth.eu).

Among the suppliers there are a couple local organic processors:

Kiuru cellar processes vegetable products (onion, carrot, swede, parsnip, nettle) cultivated on own farm. It is also the supplier of frozen vegetables that are imported from elsewhere and mediated via organic whole sale.

Cereal products, (cereals, flour, hulled grains), are bought from the Pitkääkoski mill, the suppliers are local organic farmers.

Kiuru bakery is the supplier of organic rye bread and mixed cereal bread served for the schools. Rye and barley are of local produce, but because of the natural circumstances wheat cannot be grown in the area, and wheat needs to be purchased via a national supply chain.

Other organic products used in the municipal catering are eggs, fresh vegetables (turnip, chinese cabbage², herbs) and dried peas. These are bought directly from the producers.

In addition to the local organic products, the catering service uses wild food and conventionally produced products of local origin. There are 14 local suppliers (producers and processors):

The vegetable enterprise Sinikasvis is the supplier of local berries and berry products. The cultivated berries come from own farm, and the enterprise buys the wild berries from the local berry pickers.

The supplier of the pig meat and pig meat products is Remeskylä smokery, a local enterprise with own pig farm.

Potatoes are bought directly from the local farmer as well as fresh and pickled cucumber, which is bought directly from the producer. Cucumber is cultivated both in open air and in green houses, and the enterprise has processing facilities at the production site.

Järvifisu is the supplier of the wild lake fish and fish products. It is an enterprise focused on fishery activity, and it co-operates with local fishermen. The processing is minimal, mainly gutting, filleting and packaging as well as preparation of raw fish mass from pike, a product that has been developed specifically for the needs of the municipal customers. The enterprise is not a certified as organic producer (such a certification does not exist for wild fish), but belong to the category "wild food".

Other wild food used in the municipal catering, are nettle and forest berries. The kitchen personnel would be willing to use also forest mushrooms, but so far there have been no offers from the suppliers.

Several of the products used in the catering service are not available locally, or locally available organic options are too pricy for the municipal catering. White cabbage and part of the root vegetables as well as poultry and beef products are among the domestic conventionally produced items, because there are no local producers/processors. Domestic apples are served when they are available, other fruit is naturally imported. An attempt is made to substitute fruit by domestic apples and by domestic wild and cultivated berries.

In addition, part of the fish is imported. There is plenty of local lake fish. However, in Finland with lake fish there is in places a risk of mercury overdose. The Finnish Health Authority with no resources for continuous monitoring has taken the cautious stand and categorically restricts the use of all lake fish in the public catering. The lake fish is also quite pricy, which also limits its use

² Regular white cabbage (*Brassica oleracea*) is not produced in the region in sufficient volumes. The Chinese cabbage (*Brassica rapa*) is different type of plant and used for very different types of recipes

Although Kiuruvesi is among the important areas of dairy farming, local milk and milk products are not available. The dairy industry in Finland is heavily concentrated and milk produced in the Kiuruvesi area is transported for processing to the nearest dairy located in Oulu (distance about 200 km), and the processed products are then brought back to Kiuruvesi. A small amount of organic milk is used in the kinder garden, but it is also imported from elsewhere, since there is no organic dairy in the area; the nearest organic dairy went bankrupt a couple years ago. The reason was that the market leader of the dairy sector started to import less expensive organic dairy products from abroad and stopped marketing domestic organic dairy products. The domestic enterprise did not find new distribution channels and was expelled from the markets.

5. Analytical perspectives

5.1 Organisation and governance

Although there is an increasing tendency in Finland to externalize the statutory catering services, the Kiuruvesi municipality has chosen to keep the service within the municipal decision-making, which secures openness and the public control of the services.

The catering service is under the control of the municipal board, and the yearly budget is decided by the board. The implementation of the strategy is at the responsibility of the food service manager of the municipality, who also has the operational responsibility for the use of the resources. As the public actor, the municipal catering service is constrained by the strict regulations of the EU purchasing law.

The LOF concept was introduced to the Kiuruvesi school catering in the end of the 1990'ies, in an economically difficult situation. Something had to be done to reduce the costs of the municipal services. School catering was administratively under the board of education, and the social and health care sector was responsible for the rest of the statutory municipal food services. At that time, the village schools had own preparation kitchens. In search for cost savings, the options were to centralize the catering services and to remove the kitchens from the village schools, or to do things in some other way differently. The LOF concept was seen as a feasible alternative for concentrating the catering services into a large central unit.

The catering personnel in the village schools advocated actively the possibilities to continue with the decentralised model by focusing on the possibilities the village farms could provide. The caterers initiated an active discussion on values and goals of organic production and sustainable development, which were mentioned in the municipality's strategy. The formal initiative for the LOF came from the actors of the educational sector in 2000 in form of an official motion for the municipality board. The active promoters were, thus, the school kitchens' catering personnel and the board of education. The village people supported the idea. LOF started as an experiment in one of the village school kitchens. In the beginning there were doubts about the expediency of the LOF concept. Among the decision-makers the discussions focused on local versus organic. Local was fairly easily accepted, but organic was considered as snobbery. The municipal officials instead, approved both aspects of the LOF concept as an alternative to the price-based catering service of that time.

With organizational re-arrangements in 2010, all municipal catering services were brought within a single administrative unit. There are now two central kitchens, one serving the schools and one serving the customers of the social and health sector. The latter is at the responsibility of the Northern Savonia Federation of Municipalities, and the federation buys the meal

services from the Kiuruvesi municipal catering. The federation does not consider the LOF concept as necessary and emphasises in its procurements, instead, the price-competitiveness. The different opinions culminate in the short term cost savings aimed at by the federation, whereas the Kiuruvesi actors stress the significance of the meals as part of the good care of the patients. The municipal board has accepted the dual situation and this has led to riding on two horses: the share of the LOF products used in the central kitchen preparing the meals for the social and health care is much lower than in the kitchen preparing the schools meals.

One of the bottlenecks is the availability of suitable LOF products. During the experimental phase, the volumes needed were moderate, because LOF was implemented in one single pilot school. The items were brought practically directly from the farms, and this increased the work load in the kitchens. In the beginning, an extra 5% resource allocation in the municipal budget was allotted for the catering sector because of the increased workload. In the beginning of the new millennium, the LOF concept was integrated into the municipal strategy. Today with two central kitchens when all the purchases are centrally organized, the volumes are considerable larger, and the kitchens cannot any more accept products directly from the field. Over the years, the use has increased gradually as the entrepreneurs have been able to fulfill the needs and as new entrepreneurs have emerged. Since the kitchens do not have facilities no personnel for the time-consuming raw material preparations, developing small-scale preprocessing has been an important prerequisite for increasing the share of LOF items in the municipality's food services.

The LOF strategy is constrained by the law on public procurements, which aims at securing equal opportunities for the suppliers. The law presumes that tender calls are put out for competitive bidding. It is fully possible to use organic production as the purchasing criterion. However, the law does not allow using "local" as the criterion. Much attention is, therefore, paid to the competitive criteria when putting out the tender calls. Price is neither the primary nor only criterion. Instead "combined affordability" is aimed at by looking for the most economically advantageous tender (MEAT). In this a variety of criteria is used. They deal with packaging size and their recyclability, delivery times and frequency, freshness, various specific product attributes and nutritional requirements, eventually organic production, overall impacts on regional economy, employment and entrepreneurial activity. The criteria are discussed in advance with the potential suppliers, so they know exactly what the needs are and can judge whether or not they can meet them commit themselves as the suppliers. All this requires considerable purchasing know-how, active interaction with the potential suppliers and familiarity with their products.

With the small population basis in Kiuruvesi, the volumes of the food items needed in the municipal catering are also moderate. Therefore, the purchases remain often below the threshold value (at present 30 000 euros³), and this allows purchasing without the necessity of full process of competitive bidding. For such items it is sufficient to clarify the price range of the products available in the market. In addition to the law on public procurements, the nutritional recommendations, food legislation and the legislation on municipal services form the normative basis. Naturally the catering sector is also constrained by the municipal budget.

Depending on the product, the contracts with the suppliers are written for up to 4 years. In case of true competition, long contract periods are considered as beneficial both sides, because they allow mutual adapting. If there is only one supplier, the contracts are written for one year in order to allow entrance of other potential players. At the moment this is the case

³ The procurement law is presently being revised and with the emphasis on genuinely short supply chains and on easing the use of local products several changes to the regulations are anticipated.

with Järvifisu, the fish supplier. Also the price tends to be high, in case there are no competing offers.

Before the contracts are signed, there is an extensive process of anticipatory dialogue among the interested suppliers and the catering service. In this process the needs of the professional kitchen are clearly brought up and the possibilities for product development are discussed.

The suppliers are by and large satisfied with the municipal customers, an example is Järvifisu, the supplier of fresh fish (see the separate report at www.healthygrowth.eu). Even though the entrepreneurs could get a better price by selling the products via retail, the long-term contracts allow leeway for the entrepreneurs to plan their activity. The regular income also carries the enterprises over the quiescent periods. The problems with the municipal customers mostly deal with the volumes written into the contracts. These are based on the previous year's consumption, and they are, therefore, only approximate. The unexpected reductions in the pre-ordered volumes need to be sold within a definite time frame, because the supplier cannot store the products endlessly, either. If not sold to other customers, even changes of few hundred kilos in the orders cause significant economic losses for an enterprise with small turnover. The municipal customer is aware of the problem, and a solution is being sought together.

The contracts are much more specific today than they were in the beginning. The potential suppliers are informed of the fact that exact amounts cannot be given in the tender calls. The required volumes are best available appraisals, and there may be need to adjust the orderings later. Both the catering service and the suppliers occasionally run into unexpected situations. There may be problems in delivery, in functioning of the kitchen equipment or sudden decrease in number of customers or personnel. Sometimes the supplier is not able to meet the agreement in full, e.g. because of poor yield, and the catering service has to complement the supply from some other source. The problems have been solved by flexibility in both ways. Direct contacts and interpersonal feed-back are considered as important. The functioning interaction among the stakeholders shows openness and trust in their relations.

The know-how of the actors of the Kiurvuesi catering is boosted by various training courses and by sharing their experiences in various seminars and fairs organised by the national organizations, (pro Organic, EcoCentria, Association of Finnish Local and Regional Authorities, Ministry of the Agriculture and Forestry). The catering also co-operates with research organizations. With continuous updating of the knowledge and know-how and with the position as the path-breakers in developing the LOF concept the kitchen staff is motivated and satisfied.

“The employees have a lifelong vaccination in favor of LOF”, (chair of the board of education).

From the point of view of the kitchen personnel, the major difference compared to today's situation is that in the beginning the LOF items came more or less directly from the farms and their processing required extra work load. This was possible in small schools with few tens of pupils, but today most of school food is prepared in large volumes in the central kitchens, and pre-processing is an absolute prerequisite.

The pupils are by and large very satisfied with the present day school food. It is however difficult to judge, to what extent the satisfaction stems from the LOF concept and to which

extent from the overall improvement and diversification of the school food over the years. Anyway, the Kiuruvesi pupils are very well informed about the school food. The interviewed pupils are very satisfied, when they compared their school meals to the experiences they had from other places (as immigrants from elsewhere, visitors or exchange students).

“Our food is so good compared to what we got in the Brussels. When we came back, we went to hug our cook”, (the pupils in the group interview).

5.2 Business and management logics: the process behind ensuring economic performance and efficiency

The Kiuruvesi case represents public actor, and the strategic goals are not business-oriented, but are dictated by the legislation regarding the obligations of the municipality to provide the services for the inhabitants.

The region has long traditions in farming and the prerequisites for agricultural production are excellent. Implementing LOF is a strategic choice that has been consciously taken. It is considered as an important driver in reviving economy and livelihood in an area suffering from declining population. LOF strategy is one attempt to solve the impossible equation of less tax payers (aging population) and more responsibilities imposed to the municipalities. The use of LOF has been determined developed during the past 15 years. The commitment to the overarching goal is articulated in the municipal strategy as follows: *“Local food production and processing, the marketing of the products and encouraging the entrepreneurs is one of the focii of the municipal development”*. According to the strategy, the goal is operationalised by increasing the share of LOF gradually in order to make sure that the producers are able to accommodate their supply to the needs of the municipal catering.

The common principle guiding the stakeholders’ activities is to prioritise local products in order to improve the municipality’s economy. This prioritisation does not apply only to food purchases, but to all municipality’s procurements of products and services. For the public actor, the social issues are naturally important. The frame for these is regulated by law. Profitability, employer retention, increasing the share of LOF and firm economic basis are all considered as important. The LOF strategy is seen as an important impulse for the entrepreneurial activity. It, thus, needs to be profitable for the entrepreneurs, but it needs to be profitable also for the municipality in terms of the costs of the catering services. In food purchases, the prioritisation order is local organic, local, domestic organic, domestic and imported organic. The following citations illustrate the attitude of the actors:

“Organic is good, but it is not purchased at any price”, (head of the catering service).

“Compared to the European situation all food produced in Kiuruvesi is organic”, (municipal manager referring to the unpolluted environment in the area).

“Realizing organic idea is not restricted to farming, but it means social cohesion, interaction among stakeholders, it is a way of life”, (chair of the municipal council).

In short, municipal catering is to be developed in harmony with the nature, but it also needs to be economically feasible and efficient. The goals and their ranking according to the interviewees are listed in Table 2.

Table 2. The goals of the Kiuruvesi municipal catering, and their importance ranked from 1 to 5. Ranking scale: 1= high priority objective... 2, 3, 4, 5 = little importance.

Goals	Ranking
Profitability	2
Employee retention	2
Growth of the LOF	2
Maintain a solid financial base	1
Altruistic objectives:	
o Ensuring suppliers existence	1
o Contribution to income and employment in the region	1
o Protection of the natural	2
o Animal welfare	2
o Realising the “organic idea”	2
o Social care	1

The food is not sold to the customers, but it is paid by the tax income i.e. from the municipal budget. The municipality is not making profit, and profitability is here understood as economic feasibility. The interviewed actors emphasized altruistic objectives: enhancement of regional economy is the core task of the municipality, and the consequences of improved economy benefit the common good.

One of the main the restrictions in use of LOF is the availability of the products. Today, when all food purchases are concentrated into one administrative unit, the volume of the purchases is large compared to the volumes needed in single schools. Another restriction is the operational environment of the municipal kitchens: the kitchens do not have preprocessing facilities which limits the repertoire that can be used. Small scale preprocessing e.g. slicing, peeling, chopping and grating the root vegetables, of the products before they enter the kitchen, is an absolute necessity.

“Upgrading means also a better price for the entrepreneur”, (municipal manager).

The availability is, thus, to be secured both in terms of the volumes and degree of upgrading. Price is also important, but the price constraints can be to some extent compensated with new recipes and careful menu planning.

“Expensive products are served more seldom”, (head of the catering service).

Increasing the share of LOF is not just a matter of changing the regular raw material repertoire into the LOF products. Implementation of the LOF concept has meant more focus on seasonality of the products, considerable changes in the recipes and careful menu planning. In order to keep the costs reasonable, expensive products such as fish and meat are served more seldom than before, and they are substituted with other cheaper, but nutritionally comparable

products. The nutritional quality is not compromised because in Finland, the national nutritional guidelines are the axiomatic basis for the public meals. It is also fully possible to prepare tasty meals without expensive ingredients. Substitution and use of seasonal products, however, requires profound professional skills and a lot of knowledge. An important part of the LOF strategy is to boost the competence of the personnel by continuous education.

Implementation of the LOF strategy requires good co-operation between the municipal catering sector and the producers and processor. This applies both to the overall availability of the basic raw materials and to pre-processing of the products in view of the needs of the municipal kitchens. With emergence of new small enterprises and small scale preprocessing at the production site the repertoire has been gradually increased. This is part of the product development that has taken place in view of the needs of the municipal catering. Co-operation has been developed especially in the anticipatory dialogues that are carried out among the head of the catering service and the potential suppliers, before the tender calls are put out. Certain products and recipes designed specifically for the professional kitchens have been invented as a result of co-production among the processors and actors of the catering sector. Examples are fish loaf and fish balls made out of perch (Järvfisu) and easy to cut rectangular sausage (Remeskylä smokery) as well as the bread served in schools (Kiuru bakery). With co-production the relationship has evolved from mere suppliers towards strategic partnership. One of the entrepreneurs co-operates with municipality's social enterprise, bringing into the picture also the aspect of social responsibility.

The municipality's food purchases are strictly constrained by the law of public procurements. In order to enable use of the LOF items, much attention is paid to the purchasing know-how, and to the criteria used in competitive bidding. "Organic" is accepted as a straightforward criterion in putting out tender calls, but prioritizing LOF requires careful planning of the tender calls, so that local products could be chosen among the offers.

The purchases are based on contracts, the length of which - depending on the product - is from one to four years. Before the tender calls are put out, the potential suppliers are informed about the requirements regarding the volume, various quality attributes, pre-processing, packaging size and its recyclability, delivery times etc. In anticipation of the next round of the tender calls, discussions are also carried out during the contract period. These are face-to-face discussions among the head of the catering service and the supplier in question. The contracts are made with one supplier, but this of course, can co-operate with other suppliers in order to make sure that the needs of the public catering are met. Some of the processors have several suppliers, but the agreements upstream are not the concern of the catering sector.

The strategic foci are (Table 3) and the management instruments that are used (Table 4) reflect these goals. The ranking in the tables is that of the interviewees. From the service provider's (municipality's) point of view, good customer service and good quality products of local/regional origin are considered as extremely important. The traceability of the origin secures also the transparency of the supply chain including the environmental and animal welfare aspects. The social aspects are important, too, and for a public actor, these are naturally integrated into the activities.

Table 3. The strategic foci and their importance ranked from 1 to 5 in management of Kiuruvesi municipal catering ranked by the actors. Ranking scale: 1= high priority objective... 2, 3, 4, 5= little importance.

Business/management strategies	Ranking
○ Supplying a particularly high quality product and service	1
○ Good customer service	1
○ Maintaining good and trust-based long-term business relationships	3
○ Product differentiation	3
○ Building on a better understanding of consumer trends	3
○ New/alternative suppliers	2
○ Maintaining local/regional production base	1
○ Reduction of transports	2
○ Ensuring transparency	2
○ Professionalization of management	2
○ Maintaining of social standards	1
○ Collaboration along chain and with market partners, developing business partnerships	2
○ Promotion of innovation	4
○ Networking	3
○ High animal welfare standards/Improving environmental performance	2
○ Preparing the business/initiative for growth	4
○ Creating a dynamic organization that is prepared to meet the challenge	3
○ Other: flexibility, clearly outspoken criteria for in tender calls	2

The strategy as a whole is based on the gradual increase in use of LOF, and this is dictated by the availability of the LOF products. It is essential to collaborate with the suppliers. Co-production among the suppliers and catering staff has developed the mutual relationship from mere business relations towards strategic partnership. It is also considered as important to find new suppliers both in order to expand the repertoire of the LOF products and to make sure that there is true competition between the suppliers; with only one supplier the prices tend to get high. Long-term business relations benefit both partners, but they are not the primary aim. An effort is made to provide meals that are tasty for the customers. However, public catering services provide everyday meals that fulfil the strictly defined nutritional requirements. This restricts the actors' playroom, and understanding customer trends or product differentiation and innovation are not primary concerns.

The process of public procurement highlights the need of professional management. This is because the law on public procurements is rather complicated. Promoting LOF items, preparing nutritionally balanced and tasty meals and, at the same time, not violating the law requires specific knowledge. In the tender calls the offers are asked for approximate amounts, which are based on the data from the previous year's consumption. The orders may, therefore, need to be adjusted later. This has caused some dissatisfaction among the suppliers. On the other hand, sometimes the supplier is not able to meet the agreement in full, e.g. when the yield fails, or machinery breaks down and the supplier cannot provide the amounts he has promised. The catering service however, needs to provide the meals and in such occasions, the supply has to be complemented from some other source.

“We do not push to the extreme, we just go to the store and buy what is missing. Sometimes we also need to postpone our own orders”, (head of the catering service)

Thus, both the catering service and the suppliers occasionally run into unexpected situations. Flexibility in both ways is considered as important. Good personal relations and physical proximity help to find solutions. The trust-based personal contacts have been built over the years in the so called anticipating dialogues, which is carried out before the tender calls are put out.

The interviewees stress high quality of the meals, good customer service, local production base and social standards. Providing high quality service means nutritionally balanced and tasty meals. This is fully possible, but it requires professionally very competent personnel. This is because the economic constraints set by the municipal budget restrict the use of expensive food items, which have to be substituted without compromising the quality. Good customer service means that the catering personnel also listens to the customers and pays attention to their wishes. The meals are, however, regular everyday food, so product differentiation and promotion of innovations are not the primary concerns, neither is growth because the customer basis is given. Networking is important in view of competitive bidding, because the catering personnel need to be familiar with potential suppliers in the regions. Networking refers also to sharing experiences with actors of the catering sector in other municipalities.

Table 4. The management instruments of Kiuruvesi municipal catering and their importance ranked from 1 to 5. Ranking scale: 1= high priority objective... 2, 3, 4, 5= little importance.

Management instruments	Ranking
○ Quality assurance systems	5
○ Quality testing	5
○ Regular negotiation of 'fair' prices	2
○ Top-up of consumer price transmitted to local producer	not applicable
○ Competition analysis to better understand where the products rank in the marketplace	5
○ Preference for local chain partners	1
○ Transparency of product origin	1
○ Forward contracting of supply volumes	not applicable
○ Payment within a few days	not applicable
○ Supply up to needs of chain partner (quality, quantity, in time)	1
○ Control of social standards	3
○ Joint marketing	3
○ Chain partner meetings and cultural or regional events	5
○ Knowledge transfer	2
○ Qualification measures	2
○ Sharing stalls at a fair, joined organisation/sponsoring of seminars/events	5
○ Animal welfare standards, definition, control, communication	2
○ Open communication within the organisation	2
○ Flat hierarchies	2
○ Clear responsibilities on each level	1
○ Definition of social standards plus controls	2
○ Kindergarten, health care (family friendly)	statutory
○ Informative attitude (own magazine/journal, newsletter et.)	3
○ Profiting from own production (free breakfast in bakery, contingent of beer in breweries, reduced vegetable prices of shop assistants etc.)	statutory
○ Annual team building events	4
○ Regular sponsoring of events/projects in the community	5

Supply up to the needs of the catering service is of utmost importance. The quantities and the quality criteria as well as the delivery times are agreed upon in the contracts. Price negotiations take place on a regular basis in connection with the process of competitive bidding. It is the LOF concept that is important, and the customers are informed about the origin of the food. In a small place, there are not very many competitive suppliers and information on those who have made contracts with the municipality is publically available. Maintaining the professional skills requires continuous training of the personnel, and the training occasions also provide an opportunity to change experiences (knowledge transfer). The staff has participated training courses on legislation and purchasing know-how, eco-efficiency in the institutional kitchens, recipe adaptations and environmental responsibility.

Within the organization, the responsibilities of each party are clear. Within the given budgetary frame the kitchen staff makes the practical decisions on food purchases, and the municipality's purchasing unit takes care of the payments. This together with direct personal contacts creates an atmosphere for open communication.

Other management instruments specific for the Kiuruvesi case are the anticipatory dialogues among the head of the catering service and the potential suppliers, their co-operation in developing new products in view of the needs of the public catering, menu planning and recipe innovations. The head of the catering service negotiates personally with the suppliers in order to make sure that there is mutual understanding regarding the volumes, quality, degree of pre-processing, packaging size. These discussions are part of the co-production. Transparency, communication, flexibility and trust are important attributes in these discussions.

With emphasis is on long-term impacts on public health, social cohesion, regional economy and on the environmental questions the overarching strategy can be described as sustainability strategy. The border conditions to implement the strategy are dictated on the availability of the LOF products. Thorough knowledge on the potential suppliers is, therefore, required.

So far the cost and benefits along the chain have not been an issue that has been discussed. The producers would probably get a better price if they sold the products to the retail or via some other distribution channels. However, the public buyer is a reliable partner and the demand is secured by the long term contracts. A win-win situation is sought for by negotiating such a price which the municipality can accept and which is reasonably profitable for the suppliers. With the short supply chain and good personal relations it could be possible to improve the co-operation further, so as to account for the fairness and expanding the role of social enterprises.

5.3 The balance between quality differentiation and volume and economic performance

The core values of the Kiuruvesi catering are local entrepreneurship, local and organic production, quality, traceability, environmentally friendly production, animal welfare and continuous development. With these values Kiuruvesi has profiled itself as Finland's ecological capital. Securing the LOF in municipal catering is an important part of the brand of the municipality. The decision-makers especially stress localness, whereas the municipal officials have seen the importance of promoting the use of both local and organic food. Organic and local are not seen as competing with each other, as long as organic is local. They justify the LOF strategy by overall sustainability arguments and in particular by its positive influence

on regional economy. The stakeholders have faith in organic production and especially in local production:

“Every food scandal pours out into the domestic crib” (municipal manager).

“Organic is not only a production mode, but it is the Kiuruvesi way of life” (head of the board of education).

As a public actor the activity is regulated by law. The catering service itself does not aim at growth, because the customer basis is given by the size and structure of the population. The growth aims deal with increasing the share of the LOF products. This is constrained by the availability of suitable LOF products in view of the needs of the municipal catering and in sufficient volumes. The kitchens neither have facilities nor personnel for time-consuming slicing, washing, grating etc. Because of the increased workload extra 5% resource allocation was accepted in the beginning.

Over the years the use has increased gradually as the entrepreneurs have been able to fulfill the needs and as new entrepreneurs have emerged. Developing small-scale preprocessing has been an important prerequisite in increasing the share of the LOF products. Today with two central kitchens when all the purchases are centrally organized, the volumes are already considerable, and the kitchens cannot accept any more products directly from the field. Further steps in pre-processing have been taken as a co-production among the catering professionals and entrepreneurs by developing recipes and products specifically in view of the needs of the catering sector.

Economic performance is about adapting the service within the resources allocated to it in the municipal budget. Price is not the primary criterion, but it is important in a municipality with unfavourable population structure and with high unemployment rate.

“We do not buy organic at any price. First we prioritise local products, then local organic, domestic organic and domestic products. Imported organic are only bought if domestic are not available”, (head of the catering service).

The overall frame for the resources allocated for the catering sector is defined in the yearly budget, and the costs have to be kept within that frame. This is a challenge and attention has to be paid to the working practicalities. The staff, however, is well motivated:

“The staff has been vaccinated into the LOF idea”, (chair of the board of education).

Fair distribution of the economic performance along the chain is not an issue as such, but price negotiations are part of the purchasing process, and the agreed price is naturally written into the contracts. The suppliers probably could get a better price e.g. by selling the products to retail but, on the other hand, the municipality is a reliable customer and the customership is longstanding. The stakeholders appear to be satisfied with the arrangement, because they themselves have chosen the municipality as their customer. The entrepreneurs also want to renew the contracts for the next periods, and new entrepreneurs have also expressed their interest.

The use of the LOF products in municipal catering has increased in pace with increased pre-processing. Pre-processing has also brought about new opportunities for the suppliers; today several of them have expanded so as to become suppliers for other municipal customers in the

region. Today the LOF concept is well established and it seen as means of enhancing the attractiveness of the municipality located in a fairly remote area and which has been facing declining population development over the past decades.

5.4 Communication of values and qualities among the members of the food chain

A schematic picture on the communication and its frequency among the stakeholders is shown in Figure 2. The interviews have provided knowledge mainly on the ways, frequency and contents of communication between the catering sector and the stakeholders. The mutual communication of the primary producers and processors was not captured. Communication among other stakeholders is inferred from the information obtained in the group interview.



Figure 2 . Communication and its frequency among the stakeholders of Kiuruvesi municipal catering.

Communication between the catering sector and the suppliers is about the practical aspects of implementation, and it is largely based on interpersonal relations. Formal decisions on basic operational principles are made by the municipal board, and practical details are agreed upon in face-to-face discussions with the suppliers. These are then complemented in various ways, by telephone, direct contact, e-mail, when the need arises. The core communication among the catering sector and suppliers is linked to the tender calls and it deals with formulating the

criteria in view of the process of competitive bidding. The communication towards municipality is mostly about budget and formalities in connection with procurement process. The municipal board is also important actor, because its decisions are needed when the municipality hires facilities for the supplying entrepreneurs (e.g. Järvifisu is a tenant in the municipality owned hall). In general, the board decides about the foundation of new enterprises by applying the law of construction and land use.

The livelihood services are part of the municipal general services. This office has the responsibility on developing entrepreneurship and livelihood in the municipality. There are three office-holders in Kiuruvesi. Their task is to prepare the matters to be decided by the municipal board and to help the entrepreneurs in practical matters. The livelihood services also deliver information about the upcoming tender calls via announcements in newspapers. In the announcement, it is clearly stated out which products are sought in the tender call and what is the submission date of the tender. Depending on the product, the potential suppliers are primary producers or processors. The officials help them by informing about the required documents and their filling. This communication is mainly via e-mail and telephone. The livelihood sector contacts the suppliers once more before the submission date to make sure all the relevant actors are aware of the situation.

Among the catering staff and the suppliers the feed-back is built in into the process of competitive bidding. Anticipatory dialogues before the tender calls are put out have become formalized form of communication. Before the tender calls are put out, the head of the catering service sits down with the interested parties. In the tender calls a number of criteria are defined and the potential suppliers are informed about the requirements in the face-to-face discussions. The aim is to formulate the tender calls in such a way that local products can be chosen among the offers. The producers also receive all necessary information about the volumes, delivery, degree of processing, packaging required product qualities, so the potential suppliers know what is expected from them and to what they commit themselves when they sign the contracts. This anticipatory dialogue is experienced as extremely useful both by the catering boss and the suppliers. Mutual feed-back is continuously given also during the contract periods *ad hoc* or when need arises. Often this communication deals with practical matters. The supplier may have problems in keeping the delivery schedule or the necessary product volume, or the catering sector may have unexpected changes in its demand. Irregular, but continuous feed-back about the development needs, uprising questions and over all experiences is done in anticipation of the next tender call and in view of the necessary product development. These discussions are personal phone calls or face-to-face dialogues and they are the core in mutual learning.

The central kitchens and the satellite and delivery kitchens are naturally well informed about unexpected incidents, such as problems in delivery, in functioning of the kitchen equipment or sudden decrease in number of customers or personnel.

QR codes or other quality assurance systems are not relevant for the catering service, because the LOF-producers are all known and because of the thorough discussions before the tender calls. If there are problems in product quality, the relevant supplier is immediately found and contacted. The producers also inform the catering staff, if he is not able to fulfil the commitment (e.g. because of the poor yield), so the catering can find a temporary supplier. This has also taken place.

The communication between the catering sector and municipal decision-makers is mostly about the overall operational frame of the sector and about the budget. The strategy itself is not questioned, but its implementation is constrained by the municipality's economic situation.

The decisions are made via regular democratic process. There are conflicting opinions regarding the food services of the social and health care. In Kiuruvesi, these are at the response of the Northern Savonia Federation of Municipalities, which purchases the meals from the Kiuruvesi catering service for the customers of the municipality's social sector. In addition to the customers' specific needs, the topic discussed with the representatives of the federation deals also with the costs of the meals. The buyer does not consider the LOF concept as necessary and would prefer products that are more price-competitive. The municipal board has accepted the situation and that this has led adopting two approaches in food services: the share of the LOF products used in the central kitchen preparing the meals for the social and health care is much lower than in the kitchen preparing the schools meals..

Communication among the suppliers and the catering sector has gradually developed into its present form, and it appears to function. In a small place the personal contacts are important and they also allow flexibility, when need arises. The e-mails and telephone contacts are also personal by nature, since people know each other from previous incidences, such as board meetings and municipal services, parents meetings, hobbies and professional contacts and contacts via third parties (common acquaintances). With developing the purchasing procedure so as to comply the strictly regulated law on public purchases, more formal forms of communication have become established. Over the years, this has become more and more important, and it has become integrated into the competitive bidding process a formalized part of the process. It has however, not removed the significance of the personal communication. Rather, the two forms complement each other.

Processing of the LOF products takes place mostly within the same enterprise as primary production so the no specific communication channels between the producer and processor are needed, it is a matter of organizing own work. The notable exception is the mill, which buys the cereal from the farmers.

The fish supplier - Järvifisu - e.g. uses contracting fishermen. Being fishermen themselves the Järvifisu partners have easy straight forward communication with the fishermen. Communication is mostly about practical matters of fishing, weather conditions, catch volumes and their delivery - Järvifisu partners have promised to buy in all the fish the contracting fishermen catch (see the Järvifisu report at www.healthygrowth.eu).

The primary producers do not directly communicate with the end consumers about their products used in municipal catering. Reputation is one form of feed-back: in a small place, the local residents know who has produced the food they are eating and they are also well aware about the production circumstances. The farmers know this, and it is a good guarantee for the decency. The producers are likely to get feed-back in some form at least, if there is something to complain about. The feed-back is either directly outspoken or it reaches the target indirectly via gossips.

“The jungle radio functions”, (gymnasist).

The customer feed-back is not enquired on a regular basis, but the feed-back in any form is welcome. Initiatives are taken seriously, and the catering professionals pay attention to them. In schools there is a booklet, in which the students (end customers) can write down their comments and express their wishes and proposals. It is most often about what kind of food the pupils would like to have, and about what they do not so much care about. Sometimes the notes go far beyond the food and become inappropriate:

“Sometimes the note book needs to be taken for some time into the penalty box”,
(head of the catering service).

Occasionally, they also give direct feed-back during the lunch break. Customer feed-back is however, not regularly asked:

“Consumption of the served meals is a good indicator for customer satisfaction”,
(head of the catering service).

As a municipal actor there is no need for marketing the services specifically. End customers and locals in general are informed about the weekly menus in the municipality’s internet pages. Information on the municipal suppliers and their product repertoire is also given. The subjects related to municipal food service are also taken up every now and then in local newspapers. Kiuruvesi experiences have been brought up also in national fora.

Being the pioneer in use of the LOF products, extension and research are interested in Kiuruvesi municipal. Experiences from Kiuruvesi have been published in reports (Muukka et al. 2009, Vanttinen & Korpi-Vartiainen 2010) and also in peer-reviewed articles (Tikkanen 2013). Kiuruvesi is often referred to as an example on good practices in various seminars and fairs focusing on local and/or/organic food and/or public catering. The head of the catering service has actively participated in such occasions, because sharing knowledge with actors from other municipalities is an important part of fostering the adaptive capacity. So far this kind of communication has been rather unidirectional, and the Kiuruvesi representative usually is invited as a key note speaker.

Several of the local producers are part of the domestic marketing networks of SME producers focusing on organic, local and niche products; the Best of the Provinces⁴, MakuMaku⁵, Food from Finland⁶, Genuine Tastes focusing on local and regional products⁷. These networks provide information on small and medium-sized businesses in the food sector. They are designed to help the customers find local food businesses and to find out what products are available in own region, and thus to improve the customer-meet-producers interface. From the viewpoint of the municipal food service, these networks are of little use. This is because the catering staff already knows the potential local suppliers, and the suppliers themselves are active when the municipality puts out the tender calls. Besides many of the products marketed via these networks are specific niche products and far too pricy for municipal customers.

In summary, the most important means of formalised communication are the anticipatory dialogue among the potential suppliers and the head of the catering service, the help the municipal authorities provide to producers before the tender calls and the formal procedures of the municipal decision-making. Less formal communication among the same actors takes place via e-mail, telephone and face-to face personal contacts. The communication among the suppliers, catering service and their customers is informal and irregular, and relies on personal contacts.

⁴ <http://www.maakuntienparhaat.fi/yritys.asp?YritysID=150>

⁵ <http://www.makumaku.fi/>

⁶ http://www.foodfromfinland.com/products/company_listing/organic?C=400&product_id=7

⁷ http://www.aitojamakuja.fi/index_eng.php?lang=eng

5.5 Quality dimension of primary production and mediation through the chain

The Kiuruvesi case deals with public actor and with the municipality's statutory service. It provides everyday meals for the customers, who are pupils in basic education and in gymnasium, children within the municipal day care, and the customers of the social and health care. The basic requirement is that the meals fulfil the nutritional standards defined by the national nutritional recommendations, and that the costs of the service are kept within the allocated resources. Therefore, several of the questions in this analytical perspective are not applicable here.

There is wide consensus about the LOF concept among the local stakeholders. The qualities linked to the LOF items are local entrepreneurship and regional economy, closeness of the customers and producers, environmental care, animal welfare and traceability. The farmers do their best, because in a small place the producers are known to all, and it is for their own benefit to establish a reputation as reliable and responsible producer. These qualities are built into the LOF concept, and the customers mostly know, which items are LOF products and which are not.

The products are bought from the processors and the producers on the basis of competitive bidding, and the price is agreed upon when the contracts are signed. Price is, however, not the primary or only criterion. A variety of other criteria are used. They are very detailed and deal among other things with various specific product qualities, delivery details, packaging types, traceability, that have been required in order to enable the catering to choose local products. By signing the contract, the supplier who wins the competitive bidding, commits himself to fulfil the defined criteria. In the supply chain, the contracts are made among the catering service and a single supplier of the different products. This supplier may co-operate with others, who have the same products in the repertoire in order to secure the volumes needed in the catering area. The contracting supplier, is responsible that also the other producers' products fulfill the quality requirements that have been agreed upon.

The process of tender calls and competitive bidding among the suppliers secures fair price from the point of view of the procurer, the municipality. The price setting between the producers and processors or the distribution of the economic performance in general along the chain is not considered to be the concern of the municipal catering. The suppliers probably could get a better price e.g. by selling the products to retail or directly to the customers. However, the suppliers are interested in selling to the municipality and establishing long-lasting (the contracts are up to for 4 years) customership with a reliable public actor. The suppliers appear to be satisfied with the arrangement, because they themselves have chosen the municipality as their customer. Usually, the entrepreneurs also want to renew the contracts, and several new entrepreneurs have also expressed their interest. The incentives for the primary producers are thus, long-lasting agreements with the reliable public customer.

Overall impact on reviving regional economy and customer satisfaction contribute positively the suppliers' motivation to co-operate with the municipality. These are also the qualities that are mediated by the LOF concept along the supply chain.

5.6 Resilience of the municipal Kiuruvesi catering – long term perspective, change and social-ecological links

The LOF concept of the Kiuruvesi municipal catering was introduced in the end of the 1990's with the aim to find new action models in an economically difficult situation. Determined developing of the concept started as an experiment in one of the village school kitchens. Since

then there have been internal changes within the catering service. Because of the declining population development, several of the village schools have been closed, most of catering services are now concentrated into two central kitchens, there are only four satellite kitchens in three remaining village schools and within one municipal enterprise. Initially the catering services for the schools and for the needs of the social and health sector were separate, but today both are organized under one unit of the municipal catering service. This unit sells the meal services to the Northern Savonia Federation of the Municipalities, which is the responsible actor in providing the catering services for the social and health care.

It has been - and partly it still is - difficult to find local producers. Presently the share of the LOF comprises in schools 43% and in the entirety of the municipality 23% from costs of the food purchases. One may ask why the share of the LOF items used in Kiuruvesi catering is not larger than it presently is. One reason is the fairly northern location of the municipality, which very much restricts the repertoire of the agricultural products. Another reason is the heavily concentrated structure of the Finnish food sector focusing on the economy of scale. The consequence is that processing takes place in few large units plants into few very large units. Even though Kiuruvesi is in the midst of the main primary production areas of dairy and beef, the great majority of the products are processed elsewhere. Therefore, the supply chains of the beef and milk products are not short, and they are not considered as being of local origin.

The availability of suitable LOF products has been the major problem both in terms of repertoire and pre-processing, because there are neither facilities nor personnel for the time consuming treatment of the unprocessed products. The suppliers, therefore, need to meet the kitchens' needs. The initial problems with inadequate pre-processing have been overcome, and the products are now suitable in view of the needs of the kitchens. Over the years and with new suppliers, the repertoire of the LOF items has gradually expanded. A contributing factor has been the improved purchasing procedure featuring the anticipatory dialogue carried out together with the potential suppliers and the head of the catering sector before the tender calls are put out. This has allowed the suppliers to adapt their activities so as to meet the needs of the catering service. The procedure has also brought about co-operation, learning together and co-production among the suppliers and the catering professionals.

The head of the catering service has a good knowledge on the situation in the field, and the potential suppliers receive thorough information on the requirements in advance before the tender calls are put out. The contracts are today much more specific than they were at the start. There are 40 permanently employees and the know-how of the staff has improved. Maintaining and updating this expertise is an essential part of the LOF strategy.

The implementation of the LOF strategy has taken place gradually, so far no critical stages specific for the food service can be identified. Rather the crises are connected to the overall development in Kiuruvesi. The critical moments are connected with the municipality's economy, in which the food service is only one ingredient. Because of the declining population development, several of the schools have been closed down, and the number kitchens has been reduced. A critical step is probably coming up very soon, when the presently existing two central kitchens are to be merged into one. The two kitchens have had a very different approach to the LOF: in the schools LOF has been determined developed, whereas the social sector prefers to aim at short term cost savings and, instead of combined affordability, the focus is on price competitiveness of the food purchases.

The most significant change compared to the time before the central kitchens is that with much larger purchasing volumes the law on public procurement now obligates to submit the food purchases for competitive bidding. This has very much influenced the purchasing

procedure. With the active anticipatory dialogue between the catering sector and the potential suppliers the mutual relationship has developed from supplier-buyer towards partnership and co-operation.

The initial impetus was the economic crisis in the 1990'ies, but the crisis in the end of the 2000 did not have marked influence. The municipality is, however, constantly struggling with the economy. Ultimately, the catering sector is constrained by the municipal budget, and cost savings are sought by paying attention to the recipes and menu planning as well as to the working practicalities.

Concentration of the activities is taking place also in Kiuruvesi. The fate of the remaining satellite kitchens has been discussed from the point of view of the municipality's economy. The future renovation needs of the kitchen facilities have also been considered, because the activities of the present two central kitchens are to be merged into one in 2015. The authorities have now concluded that centralizing the services into one large kitchen brings about cost savings. In light of the performed economic analysis, the present model appears to be competitive with other alternatives, and no measures have been taken to remove the remaining kitchens from the village schools or to change the present system of transporting warm meals from the central kitchen to the cook –and-chill concept.

The food service is under the democratic control of the municipal decision-making. The ultimate responsibility is on the municipality, whereas the head of the catering service has the operational responsibility. She takes care that things are running and the costs are kept within the budget. Her activity is subject to the surveillance of the municipal board.

The adaptive capacity of the catering staff is secured by continuous training and updating their know-how. The head of the catering service sees to it that the catering personnel participates in various training courses and update their knowledge. One major actor in extension is Ecocentria⁸, and the Kiuruvesi catering professionals have actively participated in various activities and training courses organized by Ekocentria. Participation is not really voluntary, because training is counted as working time. However, the personnel have never opposed, but take eagerly part in it. Training is practical hands-on courses, the funding of which comes mainly from the Ministry of Agriculture and Forestry. The topics have dealt with legislation of public procurement and purchasing know-how, with eco-efficiency in the institutional kitchens and adapting recipes as well as with environmental responsibility.

Kiuruvesi is the pioneer in using LOF in public catering, and the experiences have been shared with actors from other municipalities. This communication with other municipal caterers allows discussing problems, knowledge sharing and mirroring own experiences against those in other municipalities. It is an important part of fostering the adaptive capacity, although so it has been far rather unidirectional.

Sustainability in connection to food is understood broadly. For the stakeholders, it is not only about the environmental questions related to farming and to use of energy, water and recyclable and durable materials for packaging and serving. It is also about transports, food waste, nutrition and economy. It is important to prepare tasty meals, so food is not wasted. In schools, nutritious tasty meals contribute positively to students' performance, and in health care they are part of the patients' treatment. In the long run, the impact on regional economy is seen to be positive in consequence of the cost savings brought about by better population health. Further, sustainability deals with societal issues such as community cohesion, personal

⁸ <http://www.ekocentria.fi/en>

contacts and dialogue between catering service and entrepreneurs, with subsistence of the farmers and with viable local economy.

”Realizing organic idea is not restricted to farming, but it means social cohesion, interaction among stakeholders, it is a way of life”, (chair of the municipal council).

”If the farmer sees that there is a nest of a northern lapwing⁹ he marks the place and goes around it when ploughing”, (municipal manager)

”Municipality’s procurements are really important for the livelihoods of the region. Food purchases are only one part of it”, (municipal manager).

”For the local bakery we are a really big customer. If Kiuruvesi stopped buying from them, they would run into trouble”, (head of the catering service)

”If we buy Spanish tomatoes it gears up entrepreneurship in Spain. Local food gears up local entrepreneurship here”, (municipal manager)

”I believe that Järvifisu would not exist, if Kiuruvesi town was not their customer. When you look at the Järvifisu’s future perspectives today so it has been of utmost importance that there has been co-operation and product development and we have together looked how lake fish can be used”, (head of the catering service)

There is wide consensus among the stakeholders regarding the principle to prioritise local products in order to improve regional economy, and they have firm confidence in the LOF-concept also in future. It already has contributed positively to local economy and to local identity.

Presently, the poor economic situation of the municipality is most critical constraint. The stakeholders hope that even though additional resources are not allocated, the present allocations would not be reduced. Generation change in the enterprises may also present a threat. Some of the present suppliers are approaching retirement age. The younger generation is not always interested to take over, and in some cases the continuation of the activity is at stake. Natural catastrophes were also mentioned as potential threats (the night before the interview there was an exceptionally heavy thunderstorm).

6 Future orientation

Although there is an increasing tendency in Finland to externalize the statutory catering services, the Kiuruvesi municipality has chosen a strategy to keep the service within the municipal decision-making, which secures openness and the public control. Prioritizing local and organic food in public catering is a strategic choice and the main arguments are the strengthening the imago of Kiuruvesi as the organic capital of Finland and the positive influence the LOF strategy has to regional economy. The present status in use of LOF items in municipal catering is the result of a gradual, but consistent and determined development that has taken place over 15 years. Emphasis on local applies to purchases of food as well as to those of other commodities and services. Mainstreaming organic production is not considered as a problem.

⁹ *Vanellus vanellus*

Over the years, the main concern has been the availability of sufficient volumes and sufficient range of LOF products. This is because the natural circumstances severely restrict the repertoire of what can be produced in the area, and the missing dairy and slaughterhouse are additional severe restrictions. Certain degree of preprocessing is also necessary to enable their use in professional kitchens. With new suppliers the repertoire of pre-processed products has gradually increased, and initial steps in product development have already been taken as co-production among the catering professionals and suppliers. The co-operation in view of product development continues also in future. It is also important to find new suppliers both in order to further expand the repertoire of the LOF products and make sure that there is true competition between the suppliers; with only one supplier the prices tend to get high.

In the beginning there were in doubts in Kiuruvesi about the reasons of expediency of the LOF strategy. Today the LOF concept is widely accepted among the different political parties, and the strategy itself is not questioned. The success stems from the shared view among all parties on the long-term benefits of the LOF strategy, and from the commitment of the municipal decision makers to the strategy. Although the municipal strategies are written for each four year period of the municipal council, it is highly unlikely that the LOF concept will be questioned in Kiuruvesi. However, the meal service for the municipality's social and health care is at the responsibility of the Northern Savonia Federation of Municipalities. Instead of the LOF approach, the federation emphasises the price competitiveness in its procurements. So far, Kiuruvesi municipality has accepted that the share of the LOF items is much lower in the meals served within the social and health care than in the schools. In autumn 2015 the activities of the present two central kitchens are going to be merged into one, and then the two approaches need to be streamlined. Because the municipal actors in Kiuruvesi are strong proponents of the LOF strategy, the discussions on short term cost savings versus combined affordability of the LOF have again gained momentum.

The poor financial basis of the municipality is the most critical constraint. As in other municipalities in Finland, Kiuruvesi has also difficulties in coping with its responsibilities towards the inhabitants. The municipal catering service is statutory. The costs of the service are not paid by the customers directly, but they are covered by the municipality's tax income. The service needs to be cost-effective, and it needs to be accommodated within the budget frame of the municipality. The service is, thus, not aiming at profits, rather, "profitability" means economic feasibility in the present circumstances. Because of the age structure of the population is biased towards older and because the unemployment rate is fairly high, there is a growing demand for municipal services. However, for the same reasons the tax income is constantly shrinking. There is an economic "sustainability deficiency", i.e. the municipality responsibilities exceed the tax income.

The LOF strategy was initially adopted in order to revive local entrepreneurship in an economically difficult situation at the end of the 1990'ies. The concept has shown to be workable. It has brought along new vigour to the food sector in the Kiuruvesi region, and it has fused faith also in future of the sector's livelihood. All in all, today the outlook of the food sector in Kiuruvesi appears to be good, and the stakeholders are confident with the LOF concept. The municipality has also plans to set up own slaughter house and own dairy. If realized, local processing of meat and milk would considerably improve the possibilities to increase the share of the LOF in municipal catering. It also opens up the possibilities to develop specific niche products (locality food) from the raw materials produced in Kiuruvesi to be exported elsewhere. The reputation is hoped to attract tourists and so to inflate the tourist sector as well.

Until today the catering service has focused on co-operation with the entrepreneurs. Regarding school catering, in future more attention will be paid to the schools in order to improve food literacy among the pupils. This necessitates increased co-operation with the catering staff and the actors of the education sector. Aiming at the green flag status is one possibility to improve the co-operation. From the beginning, the school authorities have been active proponents of the LOF concept. The official motion for the LOF came from the actors of the educational sector. Against this background further development of the concept with the schools is, therefore, both natural and likely to be influential.

7 Verification of the results

The report is based on one group interview, a couple of interviews with of one person, the head of the Kiuruvesi catering service and the representative of one of the suppliers (Järvifisu). The questions were sent before hand in order to allow the interviewees to prepare in advance and to look for relevant documents. Background information was obtained from the Internet page of the municipality and from a number of publications. Numeric economic data were not available.

The manuscript of the report, together with the summary leaflets in Finnish and in English, was sent to the head of the Kiuruvesi catering service with the request for commenting and verifying the results. No further claims were presented, and this was considered as the approval of the content of the report.

All interviewees were committed to the LOF approach. In order to get more varied picture, it would have been interesting to interview also the representative of the Federation of the Municipalities. The federation is responsible for the catering services provided for the customers of health and social sector, and its view on the statutory food services deviates from that of the Kiuruvesi actors.

References

- A.C. Nielsen. Register on hotels, restaurants and catering services
2008.<http://fi.nielsen.com/news/documents/HORECATIEDOTE.pdf>.
- Malinen, P., Kytölä, L., Keränen, H. & Keränen, R. 2006. Suomen maaseututyyppit 2006. (Summary: Rural typology of Finland in 2006.). Ministry of Agriculture and Forestry. Helsinki , 1-67.
http://www.mmm.fi/attachments/5enfdAPe1/5kYqNENOF/Files/CurrentFile/MMMjulkaisu2006_7.pdf:
- Marsden, T., Banks, J. & Bristow, G. 2000. Food supply chain approaches: exploring their role in rural development. *Sociologia ruralis* 40 (4): 424–438.
- Ministry of the Environment 2008. Getting more from less. Proposals for Finland's national programme to promote sustainable consumption and production.
<http://www.ymparisto.fi/default.asp?contentid=62075&lan=en>.
- Ministry of the Environment 2009. Sustainable public procurement. Public sector becomes a pioneer in sustainable public procurement.
<http://www.ymparisto.fi/download.asp?contentid=103507&lan=fi>.
- Ministry of the Environment 2012. From less more wisely. Revised program for sustainable consumption and production 2012. [in Finnish]. Helsinki. www.ymparisto.fi/julkaisut: Ministry of the Environment. 58 p.

- MMM 2012. MMM:n suuntaviivoja luomualan kehittämisohjelmalle. "Luomu 20/2020". [Proposal for organic promotion and development program "Organic 20/2020", in Finnish] Ministry of Agriculture and Forestry. Helsinki.
http://www.mmm.fi/attachments/luomu/66XvsujSO/mmm_luomuohjelma_2012.pdf: 1-3 p.
- Muukka, E., Kuosmanen, L., Ylinampa, M., Blomquist, U., Kärkkäinen, I., Soininen, T. & Soininen, J. 2009. Local food in municipal catering. A survey on local food purchasing in Finnish municipalities. *Savo Vocational College Publication* EkoCentria. Savonlinna, Finland: 1-65 p.
- Statistics Finland. 2015. Official Statistics of Finland (SVT). <http://www.stat.fi>.
- Tikkanen, I. 2013. Procurement and consumption of local and organic food in the catering of a rural town. *British Food Journal* 16 (3): 419-430.
- Vänttinen, R. & Korpi-Vartiainen, J. 2010. Lähiruoan käyttö julkisen sektorin ammattikeittiössä. Ruokasektorin aluetaloudellinen hyöty Pohjois-Savossa. [Use of local food in the professional kitchens of public sector. The regional economic benefit of the food sector in Northern Savonia, in Finnish]. *Sisä-Savon Seutuyhtymän Julkaisuja* 2010/1: 1-29 p.
- VN 2009. Resolution of the Finnish government on promoting sustainable choices in public procurements 8.4.2009. [in Finnish]. Council of State, Helsinki, 6 p.
<http://www.ymparisto.fi/download.asp?contentid=101162&lan=en>.
- VN 2010. Government report to parliament on food policy [in Finnish]. Council of State, Helsinki. 19 p.
http://www.mmm.fi/attachments/maatalous/maatalouspolitiikka/newfolder_14/5tTDQgJLk/selontekosuomi.pdf:
- VN 2011. The program of the government of Prime Minister Jyrki Katainen. [in Finnish]. Helsinki, <http://www.vn.fi/hallitus/hallitusohjelma/pdf332889/fi.pdf>: Council of State, Helsinki. 90 p.
- VN 2013. Lisää luomua! Hallituksen luomualan kehittämisohjelma ja luomualan kehittämisen tavoitteet vuoteen 2020. [More organic! The government program and goals for developing organic sector by 2020. Helsinki: Ministry of Agriculture and Forestry.
- VRN 2014. Terveyttä ruoasta. Suomalaiset ravitsemussuosituksset. [Health from food. The Finnish dietary recommendations]. National Nutrition Council. 60 p.