

Bioforsk Report

Vol. 3 No. 41 2008

iPOPY discussion paper 2/2008

Organic and conventional public food procurement for youth in Finland

Minna Mikkola



Center for Technology and Society

Münster University of Applied Sciences



SIFO

Statens institutt
for forbruksforskning
National Institute
for Consumer Research

DTU

Technical University of Denmark



UNIVERSITY OF HELSINKI

Ruralia Institute





Main office
Frederik A. Dahls vei 20,
N-1432 Ås
Tel.: (+47) 40 60 41 00
Fax: (+47) 63 00 92 10
post@bioforsk.no

Bioforsk Organic Food and Farming
Tingvoll gard
NO-6630 Tingvoll
Tlf: + 047 03 246
Faks: + 47 71 53 44 05
okologisk@bioforsk.no

Title:

Organic and conventional public food procurement for youth in Finland

Autor(s):

Minna Mikkola

Date:

19.02.2008

Availability:

Open document

Project No.:

2010099

Archive No.:

Archive no

Report No.:

3(41) 2008

ISBN-no.:

978-82-17-00344-1

Number of pages:

24

Number of appendix:

2

Employer:

Ruralia Institute of the University of Helsinki

Contact person:

Contact person

Keywords:

Organic food, youth, public procurement, health,
school meal systems

Field of work:

Food policy and nutrition

Summary:

Public catering in Finland has strong historical roots from the 19th century, connected with the rise of the national state, industrialisation, democracy and modern times in general. The school meal system developed hand in hand with work place meal services, and inherently the aim was to offer lateral support for workers' and pupils' activities by healthy and wholesome nutrition. The public catering had initially a strong label of welfare services and implied economical use of ingredients.

Later on, the character of public service of the welfare state was emphasised, as public catering was perceived as a way to promote equality between citizens. The public meal system, and school meal system as part of it, represented not a self-evident and 'natural' developmental path, but can be seen as a result of extensive political, economic and organisational efforts, even fights. Further on, the nutritional and cultural orientations were strengthened when the public school meal system was made a statutory free service for all pupils, first in basic education, and later in secondary education. Today the Finnish welfare state meets the challenge of greying societies and decreasing labour force, and the school meal system, as all public provision systems, in confronted with the trend for increased efficiency and economical operations, including food procurement. Even within these restrictive organisational environments, there is interest in environmentally friendly food and sustainable development by public caterers, municipal officials and politicians of all parties. While the conventional meal system is the prevailing one, there are also movements towards sustainable catering in hundreds of schools around Finland, connected to Education for Sustainable Development (ESD) program.

The report is produced within the project "innovative Public Organic food Procurement for Youth", iPOPY, and will be updated and revised during the project period (2007-2010).

Approved

Project leader

Turid Strøm, Director at Bioforsk Organic

Anne-Kristin Løes

Introduction

For thousands of years agriculture and forestry have been important economic sectors in Finland. Currently, Finnish agriculture has basically two developmental tracks; one of them follows the principle of intensification and the other extensification, including organic agriculture. Eutrophication has been the most visible environmental problem of Finnish agriculture and food sector, although climate change and greenhouse gas emissions begin to be identified as one important environmental aspect of the sector. Moreover, agrochemicals have been partly approved as necessities but also been criticized for being foreign substances in our food and environment.

Organic acreage was in Finland in 2006/2007 nearly 6,5 %; the organic share of the food market was 0,8 % and the yearly increase about 7 %. According to the Finnish Programme to promote sustainable consumption and production (2005), organic acreage will reach 10 % in 2010 and 25 % in 2025. Organic food commodities will be available in nearly all product groups, and the share of local and organic food will increase 10-15 % yearly in commercial and public catering. Local food is currently used in public catering particularly in rural areas; organic food has had less market due to its higher price, as well as less developed supply chains and wholesale availability. However, interest in sustainability has been expressed by a large number of public catering organisations, serving statutory free meals for basic and secondary education institutes.

Ruralia Institute of the University of Helsinki has specialised in food system research, education and training. The Institute has focussed on the development of organic agriculture and food sector for nearly two decades. The innovative Public Organic food Procurement for Youth project (iPOPYP-project) 2007-2010, approved by CORE Organic Funding Body Network and funded in Finland by the Ministry of Agriculture and Forestry (MMM), offers a valuable research opportunity with other European research partners to promote organic agriculture and food sector on a new platform: the consumption of organic food in public catering organisations. We look forward to promote Education for Sustainable Development (ESD) by enhancing learning of sustainable practices embedded in everyday activities like organic school meals served for school communities.

Minna Mikkola

Project researcher

University of Helsinki

Ruralia Institute

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1 National conditions

1.1 Political organisation and policies

Finland has a population of about 5,3 million citizens, of which about 70 % lives in urban areas like cities and towns. The trend seems to continue as rural areas become ever more depopulated. Urban areas act as growth centres, as do also small municipal centres surrounded by rural areas. These are often grouped in three categories: the rural areas near to urban areas, to be used for urban sprawl and limited agricultural production; the middle rural areas for agricultural production; and the deep rural areas, where it is challenging to keep up the agricultural production without near-by neighbors.

Finland is a bilingual country, and 92 % of the population speaks Finnish as mother tongue and 6 % speak Swedish; Sami (Lappish) population speaks their mother tongue Sami (Finnfacts 2008). Additionally, the 'new Finns' speak mostly languages like Russian, Estonian, Somalian and several different Asian and African languages.

Finland is parliamentary republic, and national government is The Council of State, comprising the Prime Minister (Mr Matti Vanhanen, Centre Party) and up to 20 ministers. A new Government took office in April 2007. It is a majority coalition formed by the Centre Party, the National Coalition Party ('the right wing'), the Green League and the Swedish People's Party of Finland. The Social Democratic Party and the Union of Left (the left wing) are in opposition. The parties have rather stable and equal support, the three largest ones (the centre, the right and the left parties) having each about 21-24% share of the votes. Particularly the Centre Party has rather strong ties with rural population. In spite of the left-right axis and the differences it should bring along, all parties agree about the Nordic welfare state model and look for ways to keep it 'still going strong'. However, the model meets severe cost pressures as the 'social carrying capacity' - the number of working tax payers per the number of recipients of social benefits - tends to decrease. The problem has been recently dealt with by a Nordic expert group of high-level economists, and they suggest solving the problem by increasing productivity for work in general and particularly for municipal services, increasing the use of IT and introducing higher age for pensioning.

Municipal elections are organised every 4 years, and political parties, active in national policy, also have their municipal representants. The municipal policies and the management of public services varies to some extent in terms of municipalities and their political orientation. The municipalities have municipal board of elected representatives of political parties as the decision making body, informed by municipal government with officials of particular sectors who also implement the decisions made. The members of particular sector boards like the social and health care board are selected by parties and act also as important decision making bodies, concerned with detailed decisions. Their decisions are based on the information and presentations by sectoral officials, who in practice effect on the quality and organisation of public services. Presently, in Finland there are extensive projects going on within the municipal field, and one of these aims at renewal of the municipal service structure. Due to this development, not only are the municipalities merging together, but also hospitals, schools, emergency centres, tax offices and for instance central kitchens as well merge into larger units. The strategy for increased output and efficiency is the common approach recommended by high-profile experts. Basically, the state regulations have rendered municipal services mandatory and the municipalities are to find ways how to develop their activities in the 'graying society'. In general the right wing parties have more positive relation to co-operation with commercial service producers and public-private partnerships, whereas the left wing parties emphasise the societal responsibility, equality and in particular public management of services.

1.2 Structure of the education system

In Finland education system is built on the principle of continuity; there are no 'gul-de-sac - educational paths', but the learner can always search for higher education. The educational path of the children starts at day-care, for which families are entitled by the subjective right to day-care, starting when maternity leave is over. The children normally go to day-care centres at the age of about one year. The families who nurse their children at home, get nursing subsidy from the state and an additional subsidy from their municipality. These children may go to day-care centres when they are 3-4 years old or even later. The day-care of children takes place normally between 07:00 - 18:00, and offers the possibility for mothers to work. More than 80 % of Finnish women work outside home.

The one year preschool phase is offered for children at the age of 6 years, and it takes one year. This first educational 'touch' is organised at day-care centres. The basic education (compulsory schooling) or primary education concerns pupils from the age of 7 until the age of 15, and the corresponding classes in basic education schools are classes 1-9. There is also the voluntary class 10 for those aiming at better evaluation and increased possibilities for secondary education. (Finnish National Board of Education 2008).

Secondary education is divided on the one hand in upper secondary schooling, ending with matriculation examination, and resulting in optional access to universities (science universities) and universities of applied sciences (formerly polytechnics). Secondary education can also have vocational orientation in vocational schools and apprenticeship training. Secondary education is implemented in 3 years and the students are normally 16 when they start this phase and end it at the age of 18 years. Nowadays it may take 4 years for the student due to the so-called course-format upper secondary schools, whereby the students choose their courses and schedule their learning themselves. (Finnish National Board of Education 2008).

After secondary education the tertiary education is offered by either universities or universities of applied sciences. (See Appendix 2 for Education System of Finland, Finnish National Board of Education 2008). The municipal education sector is responsible for organising primary and secondary education. The municipal social and health care sector organises the municipal day-care. Finnish National Board of Education is the body planning and regulating educational activities on the primary and secondary level education, and they publish national study plan and grounds for the plan. Universities of applied sciences (29 altogether) are regulated by law and payed for their costs by municipalities, often as joint municipal corporations. Science universities (20 altogether) are funded by the state and the budget negotiations are carried with the ministry of education. (Finnish National Board of Education 2008).

The public catering reaches all the educational levels and the meals are free in the day-care as well as primary and secondary level education. On the tertiary level education meals offered to students are subsidized by the state. The meal served to students typically costs for them about 2 euros (2008), and includes warm meal, salad and water, excluding bread and milk/juice; if the meal is a soup, the bread is included and the price is about 1,80 Euros.

1.3 Regulatory framework

1.3.1 Development of public catering for labourers and officials

The public catering in Finland has its roots in the traditions of the grand duchy of Finland. The decree from 1868 orders the entrepreneur in a paternal way to see to it that "the servants, particularly the underage, dependant on his house and food, are kept to honouring God, decency and good manners, and that they have a healthy dwelling, and enough and suitable nutrition...". By industrialisation the close connection between the masters and servants broke down, when the labour and the workers with

it moved to factory halls. Because the workers were away from their homes, the factory patrons became responsible for offering food for their workers, some of whom were children. Already in the end of 19th century the time for rest and eating was heavily regulated, aiming at good labour conditions and productive work. There were also problems with the catering of the time; the workers were not willing to pay for proper food but wanted to eat "only delicacies like pancakes and raisin soup". At those times, many factory catering sites were closed down due to missing customers and became a regular practice later by the time Finland declared independence from Russia in 1917. (Tarasti 1988).

Already by the 1930' there were vocationally educated catering managers, paid by the industry, who served warm meals for labourers. After the war 1944 in the "rebuilding era" the labourers needed proper food when constructing bridges, roads, rails and other public infrastructure. A new organisation was established, called "Construction site services", which also catered warm meals for office workers; the meals were served against payment. In the beginning the activities were profitable, but by the increase of small construction projects the activities became increasingly unprofitable and the company became bankrupt. A new company was established through painful funding negotiations with the ministries; State Nutrition Centre was created in Finland in 1947. (Tarasti 1988).

The State Nutrition Centre's activities had from the beginning a strong social label as workers' welfare services. By the end of 1960's the work had generally become more office-based and the main activities started to move to even larger office buildings, where catering services stated that "the users' benefit is first to be looked after". The catering activities were initially run without profit, and the main idea was to increase the quality of meals. Later in the 60', the activities were to be more profitable, create contacts with customers and clarify the basics of public catering. In the beginning of 1970's the nutrition science offered basis for the new developments. Additional regulations were developed to secure the accessibility to catering sites, and timing of the meals as well as a minimum number of eating guests (at least 50) for establishing a satellite unit was determined. The state covered costs from the kitchen infrastructure and equipment. The local catering unit was responsible for the dishes, ingredients and labour. The state also subsidized the meal prices by circa 30 %. The basic principles of cost recovery, efficiency, healthy nutrition and securing the customers the possibility to interact with service providers was based in laws and decrees from 1976. (Tarasti 1988).

Educational institutes are not separately mentioned in the tasks of State Nutrition Centre but it was already organising meal service in Finland for more than 30 schools in 1975. In 1986 the organised meal service was offered to about 90% of state workers. In 1986 the Centre was reorganised in three main functions: administration, planning and development as well as business development. Each individual catering unit was designed by planners to conform to good equipment, occupational safety, efficiency, hygiene, and interior decoration in lunch and dinner halls. The catering sites also developed co-operation with users, as catering boards were created. The thematic meals were started in the 1980'; Mediterranean, traditional, Indian, American, Russian or other cultural themes were used, as also particular ingredients and harvest menus were cooked. (Tarasti 1988).

Some examples of the regulating activities give an idea of the publicly led development of public catering: in 1947, the Ministry of Construction bought "Construction site services", and Finnish parliament gave a decree for "State Nutrition Centre"; in 1953, catering sites were 223 and personnel 280; in 1953 ILO gave a recommendation for work place meals; in 1968 Common Nordic nutrition recommendations were published; in 1974 the university meal service began; in 1971 the first office for nutrition therapist was established; in 1975 the report of work place meal commission was published; in 1977 Ministry of Finance guidelines for work place meal implementation in state institutions and guidelines for catering boards for users were published; in 1983 the law for vocational education and social benefits included free meal service; in 1986 the catering sites were 328 and 1694 personnel and the recommendation by Finnish Board of Medication for work place meals was published. The story of State Nutrition Centre in Finland (today a commercial company, Fazer-Amica, as part of a larger conglomerate) is a story of negotiated, centrally organised economical meal services relying heavily on nutrition recommendations and modern working methods. They were implemented by professional

staff, benefitting the daily welfare of small-salary people working and studying throughout Finland in state office buildings, construction sites and educational institutes. (Tarasti 1988).

1.3.2 Development of public catering for educational sector

The development of school meal regulations runs parallel with the work place meal regulatory framework, and the implementation was largely culturally uniform. In 1860-1890 the primary school system started to take shape, and the pupils needed hostels, which also served meals. In 1896 school meals were discussed for the first time in the meeting concerning primary schools, and in 1905 a school catering association was established by a private person, Mrs. Augusta af Heurlin. There were in the beginning 11 catering units, and in 1913 the state provided the first funding for school catering, after several proposals. In 1921 the law concerning primary school costs ordered that the state would pay two thirds of costs for nutrition for those with limited resources. In 1923 the first guidelines were given for school meals; first, during the daily teaching, there must be one breakfast time, at least of 30 minutes, which must not decrease the length of tuition hours and the intervals between the tuition hours. Second, the breakfast must be organised hygienically, preferably with a doctor, and pupils must be served with warm meal (for instance porridge) against payment, and the state funding must not be used. Third, the breakfast time includes also time for the pupils for staying outside. Fourth, teachers must supervise the meal time, so that pupils will not remain without the meal without a compelling reason. Fifth, pupils shall be notified that they must eat before coming to school. In 1929 general Mannerheim's children's protection association published "The proposal for meal order in primary schools" which suggested, that pupils health demands that in each primary school there must be a catering unit. In 1930's new school buildings were planned with catering facilities and in 1932 nearly 30% of schools had a catering unit. Sadly enough, in a research by Finnish National Board of Education in 1930 it was stated, that only 40% of pupils were in full health. In 1943 the law stated for the first time that municipalities shall serve pupils a free meal during full working days. (Lintukangas et al. 2007).

Since 1940' the school catering operations have been continuously developing, with small incremental amendments, and in 1967 the nutrition content was defined as energy content corresponding one third of the daily need. In 1970 it was further stated, that the timing of school meals must follow the commonly used family meal times. In 1977 all municipalities had established restructured primary education, and several municipalities served also secondary education students a free warm meal. Further redefinitions for the school meal followed in 1981, and regulated further the nutritional content, meal planning, special diets, dining halls and timing, hygiene, personnel, educational tasks of school meals and control responsibilities at the school meals. (Lintukangas et al. 2007).

The previously developed and detailed regulatory scheme was made more flexible in 1991, when the school sector as a whole was to some extent deregulated. The primary school regulation stated, that pupils must be offered a purposefully organised and supervised free school meal, allowing quantitatively sufficient amount of food to be eaten. The minimum time remained, however, the same: 30 minutes, but the time slot and strict nutritional sufficiency details were abolished. However, the regulation for secondary education pupils' rights for free and sufficient school meal was confirmed and this regulation ordered 30 minutes for their school meal duration as well. The regulations from 2003 and 2004 emphasised the common national educational framework which was to be applied in education as regulated in law. Accordingly, the tuition must follow the age and capabilities of pupils and tuition must promote healthy development and growth of pupils. The cooperation by parents and school was emphasised. Today, school meal system is part of educational plan of basic education as well as part of pupil support system. The educational plan is developed together with health- and social sector officials on the municipal sector, and it must include a plan regarding the central aims and principles of pupil support; the nutrition and health as well as manner education are clearly concerns of the present school meal system. (Lintukangas et al. 2007, National Core Curriculum for Basic Education 2004).

1.4 Context for school meal discussions

One of the organisational contexts for school meal discussions is the budget presentation for municipal councils and economy officials by municipal catering managers, whereby especially the price of the ingredients, but also of labour force, equipment and other aspects of catering are discussed. These discussions are based on the inherent principle that school meals are prepared from healthy ingredients, as understood by national nutrition recommendations. Normally the funding is increased by the rate of inflation. However, there are also cases whereby the catering managers discuss with different municipal officers for instance in youth agencies about the use of healthy snacks and meal preparation courses. The teachers and rectors also may have some influence on the school meals, particularly on the festive arrangements or educational implementation. However, the relation of teachers varies in different schools; some teachers are concerned about school meals, development of educational material, implementation of education and manners exhibited by pupils, whereas some wish to avoid the situation and again some make efforts to participate and control the events in the dining halls.

The Finnish parents' association, comprising of more than 1250 local associations, sees the school meal as relatively satisfactory nutrition for young people. The overall view of parents is that the warm meal system is ubiquitous and functional, and that municipalities cannot reasonably be expected to provide better meals. However, there are also views by parents and catering personnel, which stress the dependency between the costs of ingredients and the quality and tastiness of the meal. The quality here does not refer to healthiness, but rather the ingredients, which could be better; like soft and fresh bread, fresh and 'different' vegetables, chicken breast or the like. Although the meal is free there are some local parents' associations which have organised to pay a subsidy for procurement of school meal ingredients in only some schools in Finland. The Finnish parents' association has tried to influence not so much directly upon school meals, but on the vending machines in the school premises serving beverages and candies. Parents' association has communicated to rectors of primary and secondary education schools for giving up of the vending systems. This discussion was lively a few years ago, and has had some effect, though the development takes place rather slowly through decisions made by the teachers and rectors school by school.

The media like newspapers and TV take sometimes up the topic of school meals, often in positive spirit as examples of the good nutrition and food culture education (Lintukangas et al. 2007) but there are also cases to the contrary. Some years ago school meals were expected to follow the 'high street' offerings like hamburgers, pizzas and other snacks. This 'attack' was overcome by the grounds that public services are framed within Finnish food culture and exemplify economical and healthy everyday meals affordable to average families. The recent blame concerns the industrial co-operation: the minced meat beef, 'Swedish meatballs' and spinach pancakes are industrially made and heated up in the kitchens. The 'missing' home cooked food has been a surprise to some parents in Helsinki Metropolitan Area, and gained negative attention some weeks ago. Sometimes organic 'eco-day-care' units and schools present their dedication to organic food, which is an inherent part of their ideological or religious background. Particularly Lutheran church and Steiner-schools have been using organic and local food as an integrated part of their educational activities. Generally, local and organic food are understood to answer to sustainability needs and are promoted by hundreds of preparation kitchens all over Finland, and these units gain every now and then visibility in local newspapers. However, the development of school meal system towards the use of organic food can not be seen to be a 'hot issue' in Finland as it is seen as a reformative effort; most positive relation to it has been taken through Education for Sustainable Development (ESD).

2 Statistics

2.1 Municipal structure

The six provinces in Finland (formerly 13) include in 1.1.2007 altogether 416 municipalities, of which 400 in 'continental Finland' and 16 in Åland (See Appendix 1 for provinces and municipalities in Finland, Sisäasiainministeriö 2008). Half of Finnish municipalities have less than 6000 inhabitants and hence Finnish municipalities are on the average rather small. The six largest municipalities by the number of inhabitants are Helsinki, Espoo, Tampere, Vantaa, Turku and Oulu, which include 30 % of population and 40% of jobs. Three large municipalities, Helsinki with 564 000 inhabitants, Espoo with 235 000 inhabitants and Vantaa with 190 000 inhabitants, form the Helsinki Metropolitan Area, a concentration of about one million people. The smallest municipalities may have only about 120 - 250 inhabitants. This unequal structure becomes visible in economic and many other resources of municipalities, which are, in any case obliged to provide a broad range of services for their population. The municipalities run hospitals, health care centres, primary and secondary level schools and polytechnics, libraries and art centres, land use planning, road construction, water-, wastewater and waste management plans, and plans for nature protection and develop overall and sectoral municipal policies. (Suomen kuntaliitto 2008).

Municipalities are big employers. There are altogether 422 000 persons working in municipalities, which makes every fifth Finn a municipal worker or clerk. Further, four of five persons working in municipalities belong to social, health or educational sector. Altogether there are more than 5000 different vocational or professional titles in municipalities. Four of five municipalities employ no more than 500 persons; the largest employer is the city of Helsinki, which has 36 000 employees in municipal positions. (Suomen kuntaliitto 2008).

Municipalities offer for pupils in basic education (classes 1-9) free textbooks, warm meal with bread, salad and milk or juice, health care like vaccines and dental care. Additional tuition is organised for those who need more support for their learning. For pupils living at longer distances from school, the municipalities pay for free ride to the school; this option is especially used in rural areas. In secondary schools (age 16-18) these 'free support elements' are there for students, who need, however, to pay themselves for their textbooks. (Suomen kuntaliitto 2008).

2.2 Number of schools

The number of schools in Finland is presented by statistics of Finnish National Board of Education (www.oph.fi), presenting extensive data with 2006 as the last statistical year. The overall number of schools was 3491 in primary education (basic education) including 87 private schools (provided public funding), 26 state schools (for mainly disabled pupils) and 3374 municipal schools and 4 schools by joint municipalities. There were altogether 561 400 pupils, of whom in municipal schools 541 220, in state schools 6 890, and in private schools 13 290. The municipal primary education schools represent the largest share of schools and pupils. Also private schools are mostly publicly funded, and the 'private' means mostly particular cultural or religious orientation, which, however, is basically in alignment with national Core Curriculum. (Finnish National Board of Education 2008).

There were altogether 547 schools for upper secondary education for matriculation examination in upper secondary schools. Of these, 44 were private schools, 10 state schools, 480 municipal schools and 13 schools by joint municipalities. These schools had altogether 113 980 students, of whom in municipal schools 101 630, in state schools 2 510 and in private schools 9 840. Again the municipal sector represents the largest share of schools and students. (Finnish National Board of Education 2008).

Obviously the number of schools in primary and secondary education varies according to the number of inhabitants in municipalities. The tables of the number of schools per region and municipality make it

clear, that the Helsinki Metropolitan Area with some provincial urban centres makes the largest share of schools, pupils and students. The overall size of the national primary education cohort was nearly 561 400 and in upper secondary education for matriculation nearly 114 000, altogether about 675 400 young people in the sphere of 'general education'. (Finnish National Board of Education 2008)

There are additionally a number schools for vocational education and different special educations; in vocational education there were altogether 161 300 students (estimate for 2007) and in vocational 'demonstration' and 'apprenticeship training' education there were 125 500 students (estimate for 2007), altogether nearly 287 000 young people. Usually the general education line on secondary education level is more popular than the vocational education; however, on the vocational education a matriculation examination may also be accomplished. In universities of applied sciences 30 700 new students (of 75 800 applicants) started their educational path, and in universities this number was 22 300 (of 69 000 applicants). (Finnish National Board of Education 2008).

2.3 School meal system

The school meals of Finnish schools have generally a rather similar selection of dishes in their menus. The meals to be served are warm, and follow the 'plate model', whereby 1/4 of the plate area is used to serve food of high protein content like meat or fish. This is combined with food of high carbohydrate content like potatoes or pasta covering approximately 1/4 of the plate, and the rest 2/4 of the plate is dedicated to vegetables. The same proportions are present if the food should be a soup or casserole. Low-fat or non-fat milk is served with the meal due to calcium demand, and bread is normally eaten with butter or spread containing polyunsaturated vegetable oils. Salt content of the food is also paid attention to, as the excessive salt in food is considered unhealthy. The plate model of national nutrition recommendations is used as an example (Finnish Nutrition Recommendations 1999). The meals represent normal home cooked food, and usually are prepared according to menue designed to cycle at about 6 weeks intervals, with the exceptions of harvest, season and festive occasions. All schools serve also food for different diets, like celiac disease and lactose intolerance, and a doctor's statement is required for this. The special diets have increased for instance the use of milk products with hydrolysed lactose, increasing also costs of catering. Vegetarian and vegan food is also served, but vegan food is prepared and served only on parents consent, because the parents are held responsible for the nutrition of young people. (Urho and Hasunen 2004).

There are central or preparation kitchens in practically all municipalities, and they feed satellite kitchens with either hot or chilled food, to be heated on spot. The packing of hot food is a busy phase for central kitchens, and instead of this operation many kitchens would like to use chilling systems. That would also give flexibility for the organisation of the work. The facilities are normally property of municipalities, and changes to be made in equipment or rooms require acceptance of municipal boards. Contract caterers pay rent, and basically the dishes belong to the caterers. The largest share of caterers is municipal, which means that they have a municipal office with public pension scheme and a rather safe position. The new trend has been to change over to contract catering, and lower the 'fixed' municipal costs by 'freeing' the municipalities from personnel.

The kitchen infrastructure varies by age, so that modern buildings do not have large storage facilities or 'peeling rooms', but rely on industrially pre-processed ingredients. The old buildings do have larger storages but often without practical routes for transportation or enough chilling equipments, and suffer for lack of space in the cooking area. This is why modernization projects are continuously done on the sector.

The kitchen personnel has education so that kitchen and catering managers (managers of a sector like health and social sector or educational sector, with several kitchens) have a polytechnic degree and their work is often supported by a university degree nutritionist based in local hospital. Also veterinarians specialising in environmental and food hygiene offer guidance for professional kitchens. The cooks may have a vocational degree, and may be specialised to prepare different diets like lactose free, P/N low diets and energy restricted diets. The average age of managers and workers is rather high and the work is heavy, busy and responsible.

The public catering system has long traditions and is basically trusted in Finland. Pupils' and students' perceptions and preferences are taken into account in menu planning, and new dishes are tried and old ones may disappear so that menus change yearly. However, there are parents who would like the public sector to serve more 'quality food'. There have been some parents' associations where the parents have collected money to support the service their children are actually entitled to, but these examples are exceptions. Similarly, there have been cases where parents have proposed the establishment of an organic day-care centre or school to municipalities; in some cases these proposals have gained support. Wider agreement about the quality of food at school meals cannot be said to exist but the issue is often seen as a controversial question. However, equality in nutrition is considered an important corner stone of the system and solutions for problems are looked for locally.

2.4 Organic or partly organic school meal systems

As far as is known, there are no totally organic school meal systems running on continuous basis in Finland. The organic or partly organic school meal systems show very variable patterns all over Finland, depending on municipality, school level and context, time as well as active stakeholders. Organic ingredients are also closely connected with local food, which has relatively strong political support in Finland. To make the variation in the use of organic and local organic food more understandable, the variation is characterised as patterns named according to typical features.

2.4.1 The invisible embedded use of local and/or organic food

The 'invisible' use of local and/or organic food takes place as habitual business relations between local suppliers and kitchen as well as catering managers in municipal central kitchens, and sometimes in satellite kitchens which may serve fruits and sandwiches bought from local sources. There are cases whereby the kitchen manager has changed, but the supplier delivers the products 'like before' and is actually more attached to the site in terms of business than the persons running the service. The quality of local and/or organic produce is perceived as excellent, but the use is not necessarily advertised to customers like pupils, patients or nursing home inhabitants. However, the use of local and/or organic food is normally known to municipal accountants and board members. Typical products are peeled potatoes, carrots, onions, rutabagas, cucumbers, berries, rhubarb, eggs, fish and meat as well as organic milk, bread and pies (Mikkola 2008, Seppänen et al. 2006, Sarkkinen et al. 2006, Isoniemi et al. 2006). Additionally, the catering managers may support the development of local businesses by offering product development, regular purchases and developing of one-stop shopping for producers (Mikkola and Bergström 2007). The customers are contented with the food, and are concerned mainly about the use of domestic food, without further details. Often the ingredients are used as such, like milk, or as part of meals, resulting in partially local and/or organic meals. The practice leans on traditional and evolving business contacts with local producers and processors, who approach kitchen and catering managers. These business contacts may offer social connections and interaction in everyday work, co-operation in product development and food safety for catering managers. Additionally, many of them see to the economic viability of rural areas. (Mikkola and Bergström 2007, Mikkola 2008, Paananen and Forsman 2003, Lähiruokatyöryhmän loppuraportti 2000).

2.4.2 The site and time specific visible use of local and/or organic food

The second pattern of use of local and/or organic food means for municipalities increasing the visibility of organic and local food. A large number of municipalities organise organic or local organic meal days or weeks, whereby the whole meal or nearly all the ingredients are organic or local and organic (Mikkola and Bergström 2007). The practice is feasible for central kitchens, which organise the meal preparation well beforehand, adapting menus to available ingredients. If the municipalities are large, the consumption of organic meat may cover all available organic meat in Finland for the particular week, which means clearly extra planning by catering managers and supply chain representatives, mainly wholesalers or meat industry. This practice is seen by municipal managers as representing

sustainable development and environmentally friendly activities, and is used as conscious way to visibly orientate public services towards sustainability.

2.4.3 The dedicated visible use of local and/or organic food

The third pattern of use of local and/or organic food is to dedicate an institutional site like a school or day-care centre to the use of this kind of food. Their names often indicate the environmental and sustainability orientation: the word eco is often connected in various ways with the particular official name. There are in very many municipalities all over Finland units, which procure organic food for meal preparation and servicing of organic fruits and vegetables as snacks (mellanmål). These units are not able to procure all-organic ingredients, which mean that the meals are only partly organic. The units requesting organic ingredients have often background in religious or ideological thinking, like camping centres and 'confirmation schools' of Lutheran congregations and Christian and Steiner schools and day-care centres.

2.4.4 The labelled use of local and/or organic food

The fourth pattern of using local and/or organic food is to communicate of this use to customers by different labels. There are at least three different more or less formal certification schemes involved in this communication: the Finfood certificate of the use of domestic food (Hyvää Suomesta ravintolat 2008), the Nordic Swan labelling scheme for restaurants (Swan labelling of restaurants 2006) and the 'Steps to Organic' -educational and promotional program (Portaat luomuun 2008).

Within the Finfood certificate scheme 'Good Food from Finland' the restaurants can label either all the meals they serve or only particular meals with this label. Particular attention is payed to milk, meat and eggs and products made of these ingredients. There are about 20 restaurants using this labelling at the moment (Hyvää Suomesta ravintolat 2008).

The Nordic Swan labelling scheme (Swan labelling of restaurants 2006) can be used for communication of environmentally friendly meal services by restaurants and catering units. The label is awarded when local and/or organic food is used by a restaurant or catering unit in terms of volume of main ingredients. As a matter of fact, the local food is defined as regional, which is food supplied within the radius of 500 km; this distance is chosen in order to regard serving units located in sparsely populated areas, where also food processors are scarce. There are also other demands in the scheme, concerning the use detergents, other chemicals, transportation and energy. The labelling scheme is developed in about three year cycles in Finland by Finnish Standards Association (SFS, www.sfs.fi) in co-operation with other Nordic Swan labelling authorities, as well as industrial partners like restaurants, hotels and promotional organisations.

The use of local and/or organic food by public catering has also been promoted by vocational education and communication scheme offered by EkoCentria (formerly Luomukeittiökeskus), funded by the Ministry of Agriculture and Forestry. EkoCentria has developed the program Portaat luomuun ('Steps to Organic' or 'Organic step by step'), which offers free education and a diploma ('semi-formal' certificate) communicating the use of organic food in catering operations. The daily use of at least two ingredients yields the first step, four ingredients the second step and plenty of organic ingredients the third step. The catering establishments awarded the diploma were slightly more than 200 in 3.5.2007 according to Luomukeittiökeskus. This labelling scheme has been considered by caterers as a more feasible option than the official organic catering certification by Evira (The Finnish Food Safety Authority), since the Portaat Luomuun education is free and auditing procedures are less formal.

2.4.5 The science based evolving use of local and/or organic food

The science based evolving use of local and/or organic food takes place when catering organisations and separate units start to procure and purchase organic food on the basis of scientific evidence about sustainability, whereby they orientate towards sustainability consciously and on the level of their

organisations (Mikkola and Bergström 2007, Mikkola 2008). This development is going on in some large public catering organisations, whereby the caterers have been introduced the idea of catering for sustainability. The impact is possibly remarkable, since these large organisations have large number of customers, inducing the increase in the so far rather stable demand of organic food. These organisational examples are also of importance, since the most difficult sites for increasing the use of organic food have been the large catering organisations under public funding; if this 'barrier' is overcome, their use of organic food may effectively fight against the common understanding of organic food as an impractical and expensive product option. These large organisations are also nationally visible, and may offer an organisational model for other catering organisations as well. Additionally, the interest in organic food can be seen to rest on scientific basis, whereby both nutrition, environment and social well-being of food chain actors are taken into account. This approach is needed in developing a 'stronghold' for local and/or organic food, understood to be more sustainable than just any food on the world market. The view demands more scientific evidence but is also able to forward developmental pressure towards the organic and local food supply chains. However, this approach may meet significant time and cost constraints, which need to be overcome in order to make progress with the use of organic food.

3 Organisation and objectives of different types of lunch meal systems for youth

3.1 Most disseminated lunch systems

There are in Finland 17 399 professional central kitchens, of which 5002 were public. In day-care centres there were 1029 professional central kitchens and in basic and secondary education there were altogether about 2329 professional central kitchens. The number of these decreased between 3-10% in 2007/2006 (ACNielsen 2007), when centralisation proceeds and kitchens are merged. The trend has been going on for several years and still continues. The total number of professional kitchens is bigger when also satellite kitchens are included; they normally serve hot food or heat the chilled food up. The total number of professional kitchens was in day-care centres 3030, and in basic and secondary education 3885 kitchens totally (ACNielsen 2007). Also the total numbers of kitchens decreased by few percents 2007/2006, when day-care centres and schools were merged into larger ones.

The school meal system is organised basically in three ways; first, public catering may operate within the municipal budget as a net budget unit, which does not seek after profits and the possible deficit is paid by tax income. Normally this is not accepted by municipal bodies and therefore public catering units follow tight budget limits. Second, public catering may operate as a municipal business unit, which seeks to create profits according to aims set by the municipality, and the profit is delivered for the municipality to be used according to ways decided by particular decision making bodies. Third, public catering may operate as a commercial company, seeking for profits and delivering them to shareholders as dividends. In all cases the catering premises and very often facilities are owned by the municipality, and rent is collected for their use if catering operator is not a net budget unit. In this case, however, municipalities pay for reconstruction and new equipment, whereas in the cases of municipal business unit and commercial company the costs are recovered by the operators and additionally the changes need permission by municipal technical sector. The premises and facilities have become an issue due to old buildings and equipment, and municipalities may look for other companies' budgets to cover the costs. The net units are stable and may represent the traditional municipal service operators. Municipal business units, however, compete for their service position with commercial companies and are not necessarily awarded the contracts, which are done with commercial companies if these should be cheaper or normally, "economically most advantageous". The catering contracts may be very detailed, including particular guidelines for operations and menus, special conditions for accidents and responsibilities of parties as well as price limits and negative sanctions if meals are not served in time or quality does not comply with the original contract.

When municipalities call for tenders for catering services, the catering operators continue the chain by calling for tenders for meal ingredients. In this tender competition, the larger units, joint municipalities or catering chains have the advantage of buying big lots of food at cheaper prices than their smaller competitors. The slow decrease in the number of municipal central kitchens and the increase of satellite kitchens offers evidence about concentration (ACNielsen 2007). The municipal mergers as well lead to larger procurement units; as the top of concentration attempts a suggestion was presented, that all Finnish municipalities could join under one procurement unit at least concerning certain products in order to decrease their prices for municipalities. These procurement practices lead the catering organisations to use large wholesalers, with guaranteed deliveries. On the contrary, smaller units have the 'liberty' to buy from smaller suppliers, which are local, and offer organic or otherwise interesting products. These catering units may again operate as part of large municipal organisations but their location makes their deliveries difficult in one way or another; they may also be small or committed to different kinds of trade; they may have particular customers who favour 'different kinds of food'. The wholesalers usually keep track that the contracts are fulfilled by the buyings of the catering organisations; additionally they support their buyers with ABC-lists, helping

in following costs and choosing products. The suppliers are awarded contracts every second or third year, and the calls for tenders are published in official EU Journal if above the threshold limit. The catering organisations normally try to limit the high costs for transportation by taking maximum deliveries considering their storage capacity.

The public catering operations' core processes are listed as information and marketing, contract processes with clients and suppliers, operation planning processes, meal production processes, internal follow-up and invoicing as well as feedback, and finally follow-up and evaluation processes. All these processes include extensive data, best collected, used and stored in electronic form. These core processes have several support processes, like accountancy, personnel management, document management, premises management and procurement process. (Sivonen and Työppönen 2006). All the processes run continuously and demand expertise in catering. Particular evaluation processes concern situation and development in economic performance, customer satisfaction, nutrition recommendations, in-house control, occupational safety, gender equality, labour regulations and possibly performance of trainees working in catering. Additionally, there are often developmental projects focussing on particular areas in catering. Most of these areas are under control of catering manager, assisted by cooks, waitresses, cleaners, suppliers, secretaries, procurers, nutritionists and veterinarians.

The public catering processes rely increasingly on IT support systems in menu planning, calculation of nutrition values, in purchasing and procuring as well as following and evaluating economic and efficiency processes. In some hospitals the documentation takes place on the level of individual meals. The system increases the amount of data and makes industrial processes more controllable and comparable. On the other hand, there are also always data and information, views and opinions which are not smoothly recorded by IT support systems, but remain fuzzy and unknown, and offer potential for further development.

3.2 Values and aims for school lunch system

The basic values can be 'read' from the historical descriptions, concerning both work place and school meal systems. These are still highly valid even today in that the historical features have 'survived', although their expressions may have transformed to some extent when the general and more or less evenly distributed affluence has increased in the Finnish society since the 1970'. This concerns especially the aim of good nutrition, offering lateral support for factory, construction, office or school work, and this is the same for both genders. The social orientation for support by meals to those who did not have the means to pay for food started little by little during the 1940' to be replaced by the consideration that all the citizens have equal right for the same support from the public sphere. The ground may have been in the negatively felt visibility of being supported; those who paid less or nothing at all, were identified and 'known' by others to be poor. The school meal system was started by well-off ladies, who expressed social responsibility in the beginning of 20th century. This responsibility was later, particularly by left oriented parties, expanded to concern actually all citizens as payers and all citizens as receivers, who were in this way made equal particularly through public services. This may explain why currently school meals in Finland may not generally be accepted to exhibit 'elitist' features and they seem to stick to some - if not quite home cooked - but anyway local and institutionally idiosyncratic and rather modest qualities. The important characteristic, though, is the scientifically oriented way to perceive food, which became historically visible by using doctors and later nutritionists as menu developers and experts in nutrition questions. Particularly the nutrition, hygiene and public health, as scientific conceptualisations, have been attractive grounds and aims in public catering, as they have been identified as efficient helpers in health and well-being problems so far.

However, the nutritional problems of today are a challenge for public catering in Finnish schools as elsewhere in the Finnish society. The problems stress the way the schools try to use the meals as vehicles for nutrition but also health, cultural and economic education. One catering organisation has put two meal options, of equal amount of money, on display in the entrance hall in front of the dining

hall. The pupils and students see side by side the meal of the day, be it chicken and rice, meat soup, Swedish meat balls and potatoes or spinach pancakes with ham sandwich and salads, and a bottle of Coca-cola, French fries and a hamburger; think for your self, which one is better for you, the Stilleben seems to say. Maybe some pupils and students do; in the same municipality, they also made changes in the Youth Club where previously coke, chocolate bars and buns were served. The new offerings include pies, juices, sandwiches, yoghurt and fruits. However, more often than not the changes go on slowly and it normally takes a few years time, maybe ten years, before a thorough change occurs. The basic ethos of public catering is for healthy and wholesome food; around this axis there is also concern about sustainability, mainly as local and regional employment and livelihoods in rural areas (Sivonen and Työppönen 2006, Mikkola 2008).

A more troublesome feature in this big pattern is that the catering managers are ambiguous about the qualities of domestic, imported, local and organic food. They cannot always make a difference between these types of foods, and the reason may be that since Finland has had relatively few 'food scares and scandals', professionals tend to think that domestic conventional food is nearly equal or without particular difference to organic food. Additionally, the qualities of local small scale production and organic produce are rather close, which tends to blur these types of food in terms of quality difference. Finally, local food has also other positive sides to it, for instance the lack of additional complications like needing to be registered as an organic kitchen. On the other hand, also beef from other continents may have its positive aspects - the cattle is free ranging, pure and the trade supports important industry for developing countries. The 'professional memory' reaches far back in hygienic questions, and if these are without blame, the most important condition for catering managers is satisfied. The environment is often seen as environmental hygiene and the environment as such remains on the background; however, transportation is something which is negatively perceived by all professionals, and is seen to be minimised if possible. The big picture actually follows rather well the ideas of sustainability, except that the 'blurred' qualities of foods from different production methods would need more clarification. (Mikkola 2008).

3.3 Actors, roles, and relations within school meal systems

The primary actors planning the school meal system are the catering managers who have a supervising role towards the operations of individual kitchen managers. In large organisations, there may be several or tens of individual kitchens, even hundreds of them; this is especially the case in large municipal business units and commercial catering chains. The larger the organisation, the more there are specialised actors in menu planning, nutrition therapy, procurement, marketing, cost analysis and hygiene controls etc. These activities are normally bound to follow organisational strategies, and form a complex web of interaction. A typical feature, however, in small and large as well as public and commercial organisations is their hierarchical way of dealing with practical tasks. This also renders personnel responsible for their tasks as well as gives them the possibility to develop their expertise. On the other hand, individual catering managers may feel themselves too independent, without room for manoeuvres of their own. The cost sensitivity is another area where public and commercial organisations stand on the same line, and both need to cut costs. Both sides also complain that the sector is undervalued by politicians making the decisions, and suggesting as a regular 'developmental idea' to increase the efficiency and cut the costs of public catering. The sector's professions may also be relatively less paid than other municipal sectors, making it difficult to recruit new personnel particularly to performing tasks. Here also the education is often missing, and the responsibility of supervising personnel is even more emphasised.

The role of parents is rather detached concerning the school meal system; on the one hand they rely on the equal and nutritionally well balanced diet and free lunches, but on the other hand they may feel that young people do not like very much the food they are offered at school and also realise they cannot do very much to help the situation. In some rare instances local parents associations have collected financial support for procurement of ingredients. In general, the meal patterns at homes are idiosyncratic and separate from school meals, but municipalities also publish their menus for current week or two weeks, in order to help the families to build up their menus in 'co-operative' ways. If

there is for instance fish offered at school, the central meal ingredient at home might consist of some other ingredient, perhaps more approved by the young people. The parents normally go shopping for food on the average 2-4 times a week in the evening, after the work day. The parents often go together, particularly during the weekends, or either one of parents is the shopper, according to work schedule, shuttle bus or train routes and location patterns of the retail outlets when using car. The meals are cooked in similar fashion; either together or the one available for the task will do it. In addition to women taking care of household tasks the participation of men has been steadily increasing. However, household tasks also include the transportation of young people to their hobbies in the evening; the question is rather about the meaningful sharing of the tasks between those family members available for doing them. The problem of young people not liking the meals offered for them in general is well known to parents, who may also think that school meals are not 'worse' than the meals they are cooking and serving to their children themselves. This may refer to a more common problem concerning the relation of young people and food today.

3.4 The costs of school meal systems

The Finnish school meal system is geared to efficiency, equality, high nutrition standards and healthy and wholesome food, as expressed by agrifood professional language. The area is well organised, but the pressures of today are visible; the appreciated services are not particularly well paid, the work is heavy and timing is very strict, the cost limits are continuously discussed and the meal services are the targets for savings of municipal funding. This is seen when the costs are compared between municipalities; in the cheap end the meal may cost 1.50 Euros and in the expensive end 10.00 Euros per day per pupil during 2006 (www.oph.fi). In Helsinki, the meal did cost 1.82 and in Espoo 2.18. In a very small municipality the price was more than 6 Euros, but the food may not necessarily be very different. Some schools in rural areas use sometimes berries, fish and mushrooms picked up by pupils and students as meal ingredients. These meals may have extraordinary quality, but they represent rather a rarity than an average case. The average price per meal per day was 2.36 Euros, and this includes all costs like ingredients, electricity and water, salaries, cleaning, premises, investments and so on. The extensive variation is caused by variability in the sizes of catering and procurement units, salaries, distances and facilities among other things. (Finnish Board of Education 2008).

4 Catering units co-operating in iPOPY-study

4.1 School catering units

Two basic education schools, located in different urban districts, with less than 600 pupils are included in the study. The meal system of both schools is organised by a large catering organisation, which operates as a municipal business unit. The education bureau of the city calls for tenders for catering, cleaning and maintenance services; the present owners of awarded contracts may change during the study period and the relation with the catering personnel cannot be seen as stable. One of the schools uses no organic food, but the other one does, mainly organic milk products and cereals. Otherwise they follow the same cycling menus with same seasonal and festive exceptions. One of the schools is a Green Flag school and may be used as a practical example about environmental education for other schools' catering personnel of the large catering unit. The teaching personnel in both schools are interested in participating in the study and support ESD.

4.2 Congregation catering units

Congregations in Finland, as tax collecting communities, belong to the sphere of public procurement. The congregations run extensive educational activities when they organise 'confirmation schools' for young people at the age of about 15-16. The congregation participating in the study has nearly 180 000 adult members, representing 76 % of the local population, and nearly 2500 young persons took part in congregation activities in 2006. The young people are in the summertime in recreational centres, located in either rural areas, Lapland or in near by cities. Congregations have been using local and organic food for long time, due to their connections with spiritual movements like Taize or Emmaus. The catering organisation within congregation is a net budget unit, and for young people they serve meals five times a day. The congregation has participated in environmental projects and holds a certificate for that. Unlike the large catering organisation in the schools, this catering unit is rather small. The congregation is interested to extend their education into food system and practice sustainability in concrete ways by organic meals.

4.3 Hospital catering units

The large hospital catering unit is a municipal business unit, the profit of which will be used to benefit activities on the wards and in medical research. The catering unit is governed by joint municipalities, which makes the administration complex but expands the medical and catering activities. The unit serves patients, personnel and students, and additionally organises nutrition consultation services and participates in medical research. The unit has more than 20 individual hospitals to be served, and one of hospitals has catering unit run by commercial catering company. Some wards in the hospitals have been using organic food, to be added to the main course part of the meal on the ward. The catering manager and the ward catering managers look for the study to clarify the meaning of organic food for the patients and as a way to orientate the activities towards sustainability.

5 Reflections on compiling the national report

5.1 Justification of information

The information in this report is based partly on literature, of which main part is in Finnish. The organic agriculture has been to some extent researched by MTT Agrifood Finland and Department of Economics at the Faculty of Agriculture and Forestry, University of Helsinki. The research has concentrated more in primary production and consumer markets than on the use of organic food on the catering sector. The literature pertaining to the question also includes local food, which comes together with organic food, of course as a separate entity. However, the literature about public catering is mainly based on surveys and there are less case studies dealing with processes and qualitative insights into the sector. Part of the claims presented in this report are based on authors' cultural understanding and knowledge about catering sector, developed through the years as teacher in vocational and polytechnic education as well as customized training for companies and later research work. The statements of this report can be seen to represent the state of the art of knowing catering, since the recent interviews hardly brought new ideas or views to the fore, except that the Green Flag campaign has had some success within educational world. The use of organic food is embedded as part of activities in the Green Flag environmental education, whereby organic food is introduced as a part of a wider framework of Education for Sustainable Development (ESD), which makes organic food a more attractive option for many; it becomes part of the future oriented whole. The Steps to Organic promotion may have had more success in other spheres than the municipal basic education; there are religious and 'worldview' based day-care centres and course centres in the 'Steps' kitchens, as well as independent commercial catering companies also. Some vocational institutes and universities of applied sciences are also included. These cases represent at the moment the forerunners, which will hopefully become mainstream in the nearby future.

5.2 Status and accessibility of information

The official registers by Finnish National Board of Education, Association of Finnish Municipalities and commercial free information like ACNielsen can be seen to be very trustworthy and reliable. The catering sector is basically 'a moving target', as are schools as well, since the individuals at schools move to new locations, firms close down and start again, and public organisations like municipal business units may not be awarded contracts and even municipalities, with their catering services, merge into larger ones. Additionally, the small unit working for public catering in the Association of Finnish Municipalities does not exist any more, since the sector is seen as competitive, independent and 'mature' and not in need for more developmental support by central municipal organisation. The lack of this previously functioning unit makes all additional data, statistics and more particular information unavailable. The municipalities do neither make available their procurement data for food as a particular statistical object, but the figures need to be collected from municipalities. The catering organisations seldom collect consciously statistics of their use of local or organic food to be published, but this information is to be 'refined' from their sources, which are in practice confidential due to competitive character of the sector. The public caterers have an organisation of their own, on professional basis, and universities of applied sciences educate catering managers. These organisations produce studies about catering, mainly based on particular companies and sites, which are often restaurants or restaurant chains. Parts of these studies are confidential. The information given here, based on Finnish research literature of MTT Agrifood Research Finland, professional reports, contacts with sector representatives and author's own experiences of the sector as a teacher and a researcher, is seen rather trustworthy. However, the fragmented character of knowledge makes it difficult to draw

a very clear picture; this report represents the effort for clarification but the informational lines are necessarily a bit fuzzy.

One additional difficulty in writing this report was that the existing literature is mainly addressed to Finnish audience and the language barrier is evident when idiosyncratic organisational terms have no corresponding terms in English or these are not informed by common dictionaries. The Finnish web pages can be accessed easily, and some tables can be understood even without or with some language support even if they are in Finnish. However, the English texts in the web are not meant for research purposes but to help the foreign visitor or customer of for instance the Board of Education to seek out educational information s/he may need as a foreigner. The Finnish material of interest is mainly developed for educational or planning purposes for Finnish municipal and state officials and is not intended to 'open up' the catering sector for food system researchers. The aim in this research project is to publish more information in English and to develop deeper understanding of the catering sector with international co-operation.

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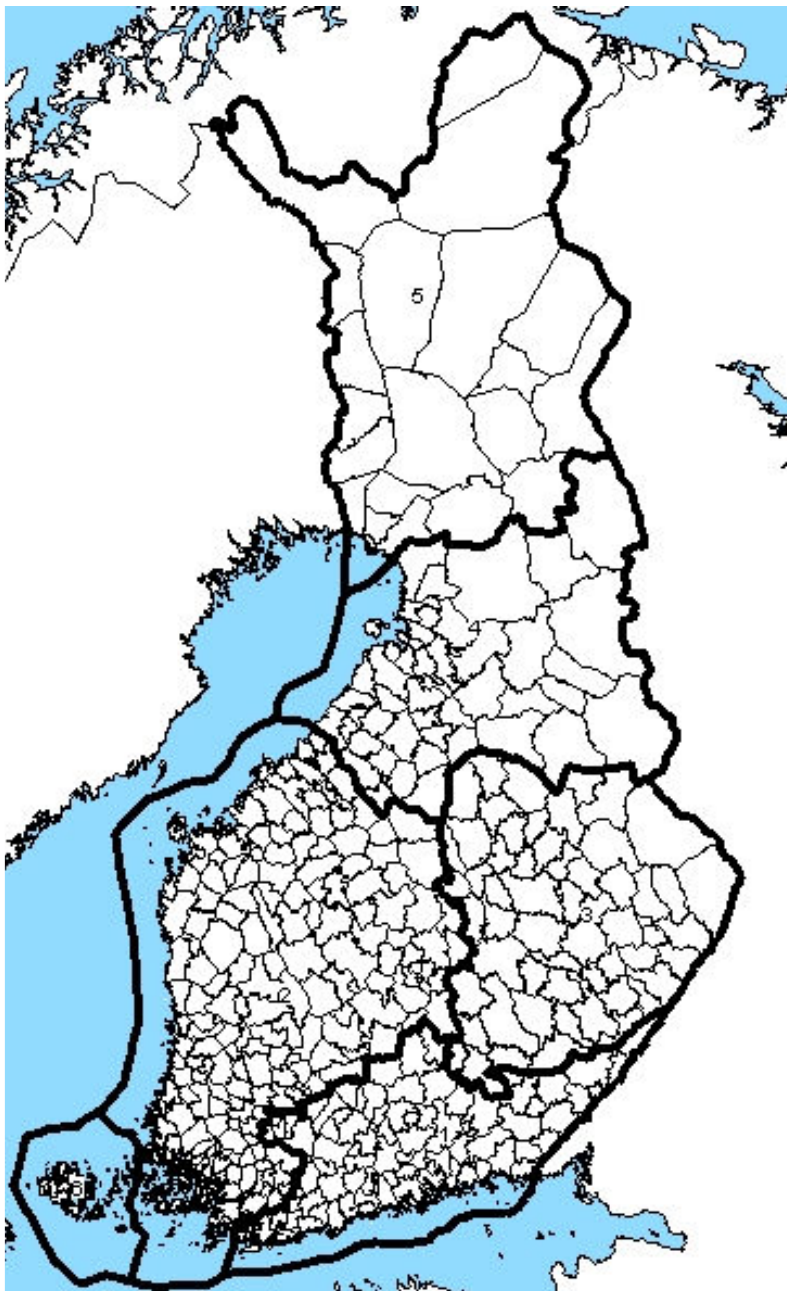
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7 Appendices

Summary over appendices

No	Subject
7.1	The provinces and municipalities in Finland
7.2	The Education System in Finland

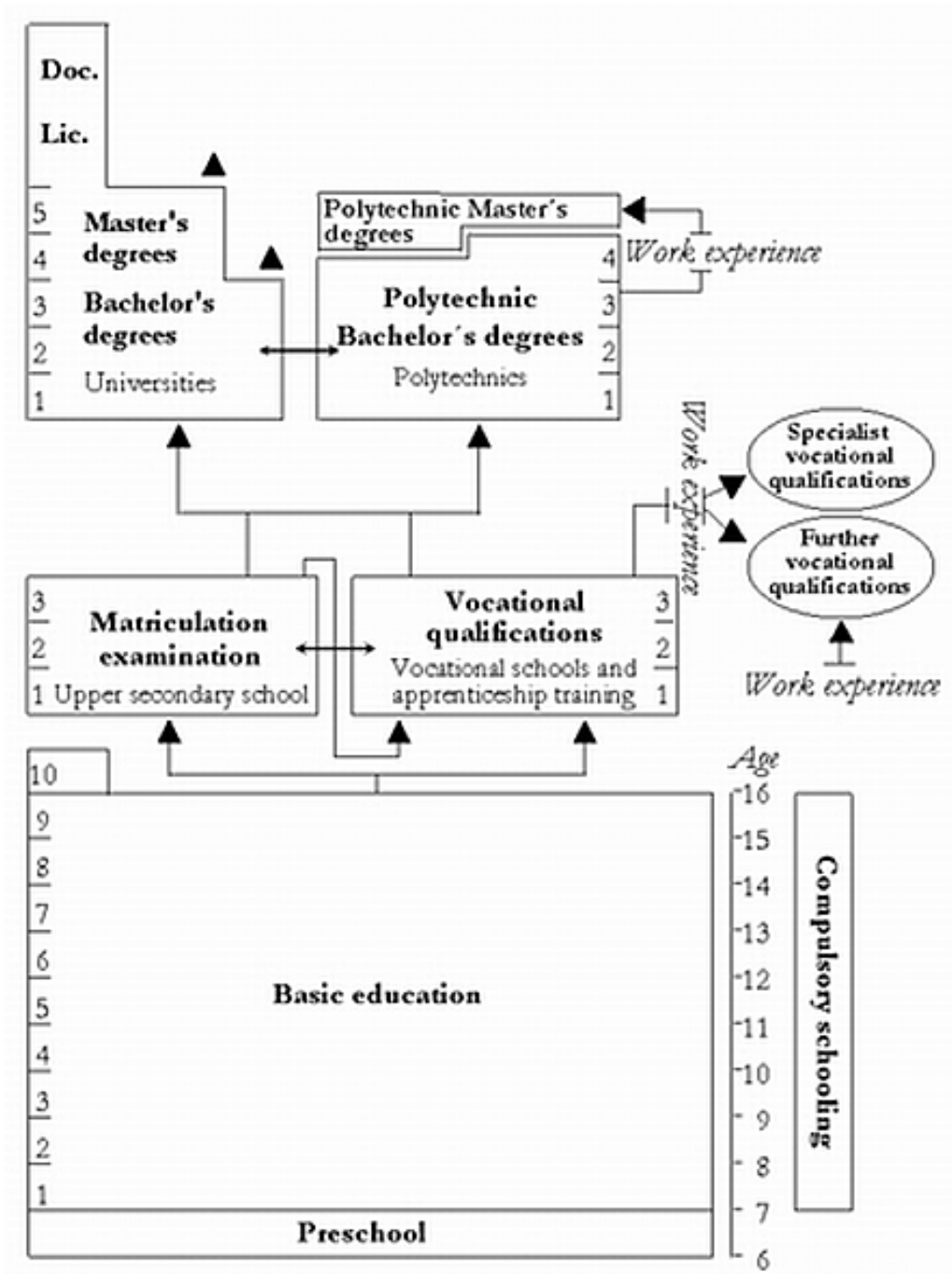
7.1 The provinces and municipalities in Finland



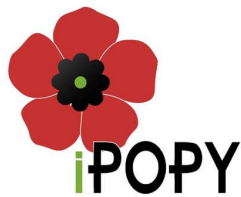
Source: <http://www3.intermin.fi/Aluejaot/Aluejaot>

7.2 The Education System in Finland

Education System Chart



Source: <http://www.oph.fi/english/SubPage.asp?path=447,4699>



The iPOPY project

The aim of the project “innovative Public Organic food Procurement for Youth - iPOPY” (<http://www.ipopy.coreportal.org/>) is to study how increased consumption of organic food may be achieved by the implementation of strategies and instruments used for public procurement of organic food in serving outlets for young people. Supply chain management, procedures for certification of serving outlets, stakeholders' perceptions and participation as well as the potential of organic food in relation to health and obesity risks will be analysed. The research project is a cooperation between Norway, Denmark, Finland and Italy. German researchers also participate, funded by the Research Council of Norway. iPOPY is one of totally eight projects that were funded through a joint call of the ERA net CORE Organic in November, 2006. More at www.coreorganic.org.

Project manager: Løes, Anne-Kristin, Organic Food and Farming Division, Tingvoll, Norway

Project contributors:

Norway: Organic Food and Farming Division and SIFO, National Institute for Consumer Research;

Germany: OEGS - The Organic Food Service Consultancy and Center for Technology and Society, Technical University Berlin;

Denmark: DTU, Technical University and DTU, National Food Institute;

Finland: University of Helsinki, Ruralia Institute; **Italy:** State University of Milano, Dep. of crop science and ProBER (Association of organic and biodynamic producers of the administrative region Emilia Romagna).

iPOPY Publications:

All publications can be downloaded from the website:

<http://www.ipopy.coreportal.org/>