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# Organic food in schools and kindergartens in Trondheim. A case study report.

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Picture frontpage: Mari Greta Bårdsen:  
Organic school milk served at Berg primary school, Trondheim

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**Title:**

Organic food in schools and kindergartens in Trondheim. A case study report.

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**Sammendrag:**

Trondheim kommune vedtok i oktober 2007 å øke sitt forbruk av økologisk mat, blant annet i skoler og barnehager. I følge vedtaket skulle 20 % flere skoler og barnehager tilby økologisk mat i 2011 sammenliknet med 2007. En viktig bakgrunn for vedtaket var Trondheim sin sterke satsing på miljø og miljøbevissthet blant barn og unge, blant annet gjennom prosjektet "Grønn barneby". Trondheim var tidlig ute med sitt vedtak om økologisk forbruk, og ble derfor valgt til "case" i prosjektet "Økologisk mat til ungdommen" (iPOP). I denne rapporten har vi undersøkt bakgrunnen for kommunens vedtak om økologisk mat, og hva som er gjort for å følge opp og virkeliggjøre vedtaket. En rekke personer i kommunen og andre organisasjoner er intervjuet. Selv om vedtaket må sies å være svært beskjedent, er det mange utfordringer på veien. Utgangspunktet (hvor mye økologisk mat skoler og barnehager serverte i 2007) er ikke kjent, og dermed er eventuell framgang vanskelig å måle. Kommunen har forpliktet sin leverandør å tilby økologisk mat gjennom innkjøpsavtalen. Hensikten var å gjøre det enklere for kommunale enheter å kjøpe økologisk mat, og dermed fremme etterspørselen slik at spesielt økobønder i regionen kan få sikre leveranser og øke sin produksjon. Innkjøpsavtaler er et viktig verktøy, men de må følges opp og utvikles. Den største utfordringen for å nå øko-målet i Trondheim er å motivere aktører som kan påvirke innkjøpet av mat og få intensjonene i vedtaket forankret i hele den store organisasjonen som Trondheim kommune er. Det trengs kontinuerlig og entusiastisk innsats. Kursing av personale med ansvar for matserving er en god strategi, som Grønn barneby lenge har benyttet seg av.

**Summary:**

In October 2007, the municipality of Trondheim, Norway decided to increase the public consumption of organic food. The share of public schools and kindergartens offering organic food should be increased by 20 % within 2011, as compared to 2007. Trondheim has for several years had an ambitious aim to increase the consciousness among children and youth about environmental issues, and the project “Children’s Green City” had been an important tool in this work. The decision made it relevant for the research project “innovative Public Organic food Procurement for Youth” (iPOPY) to use Trondheim as a research case. This report describes the background for the municipal decision about organic food, and what has been done to implement it. Several employees in the municipality and other stakeholders have been interviewed. Even if the decision puts up a quite modest goal, there are several challenges to achieve it. The point of departure (how much organic food was served by kindergartens and schools in 2007) is unknown, and hence the progress is difficult to measure. In the public purchasing agreement, the municipality has obliged its appointed wholesaler to offer organic products. The intention was that the units (e.g. schools) would get easier access to organic food, and that the demand would increase, making it possible for more local farmers to convert to organic. Purchasing agreements are an important tool, but they have to be carefully designed and developed with time. The largest challenge to achieve the organic goal in Trondheim is to motivate actors who may influence the purchase of food, and to anchor the intentions in the decision in such a large organisation as the municipality is. A committed and continuous effort is required. Education and training of staff in charge of food serving in schools and kindergartens is a fruitful strategy, which has been used successfully by Children’s Green City for several years.

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## 2. Foreword

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This report describes the efforts made to increase the public consumption of organic food among young people in the city and municipality of Trondheim. As one of very few Norwegian municipalities, Trondheim already in 2007 made a political decision to increase the consumption of organic food in schools and kindergartens. This made this city an interesting case of study in the research project iPOP, “innovative Public Organic food Procurement for Youth”. Trondheim is especially relevant for the iPOP work package (WP) 2, “Policy analysis” where national and relevant local policies and instruments used in the iPOP countries (Denmark, Finland, Italy and Norway) to introduce or increase the share of organic food in public food serving outlets for youth are analyzed, and the outcome of these policies and instruments is evaluated. WP2 focuses on examination and analysis of ten cases in the four countries which all have or have had organic food products to some extent in the public food procurement for young people. The aim is to get an understanding of the policy aspects of introducing organic food, including the organizational structure and the barriers or possibilities connected to the public organic food procurement (POP). The ten cases are situated in different countries and thereby the policy analysis also shows different cultures around the POP for young people due to different national characteristics. The results of the case studies construct a research basis for policy recommendations that will be developed for relevant decision makers in touch with POP. WP2 is lead by Niels Heine Kristensen, Aalborg University and Thorkild Nielsen, Technical University of Denmark.

School milk is a common food item in Norwegian schools, and available in organic quality in Trondheim. Hence, this food product has been more closely studied, and is described in a separate section of the report, even if this goes besides the scope of the WP2 study. This part of the report is relevant for the iPOP WP3, which studies the supply chains of organic food products for school meals.

The report has been written by Mari Greta Bårdsen, student in political science at the Norwegian University of Science and Technology in Trondheim, in cooperation with Anne-Kristin Løes, Bioforsk Organic Food and Farming. Bårdsen, supervised by Løes, Nielsen and Kristensen has conducted a range of interviews with people in relevant positions in Trondheim, made reports from the interviews in Norwegian and generated a descriptive report in English which is hereby made available to interested readers. The outline of the report follows a general outline for WP2 municipal cases. Trondheim is here accompanied by an impressive bunch of cities like Copenhagen, Milano, Rome and others, where organic food for the children is also recognized as an important tool to ensure a sustainable development.

### 3. Introduction

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Trondheim municipality is an interesting case in the iPOPY project, especially because of the city council's decision on organic foods, made in October 2007 (Appendix 1). The decision states that 20% more schools, SFOs (before/after school day-care institutions, "SkoleFritidsOrdning" in Norwegian) and kindergartens should offer organic food to the children by year 2011, as compared to year 2007. The intention of this decision is to make Trondheim a leading municipality for the development, production and consumption of organic foods. To increase some kind of food consumption, one should expect that the decision specified an amount of food to achieve. However, as the consumption of organic food in schools, SFOs and kindergartens in Trondheim by 2007 was not known, this was not possible. The decision was initiated by Hilde Opoku from the Socialist Left Party as a part of this party's environmental and school policy. It was also intended to allocate money in the budgets to fund the purchasing of organic products. However, since the decision was made, the municipal economy entered into a crisis, partly due to the general financial crisis starting in 2008. Trondheim municipality is now cutting back costs on several budget posts, including planned or intended funding for organic food.

In Norway, very few schools offer the pupils any meals during school hours, and the pupils usually bring a lunchbox with food prepared at home. In the SFOs and kindergartens it is common to serve some food. The children are usually offered a cold meal which consists of bread, milk and fruit, and some days (or even every day) a hot meal as well. The SFO is only open to children in classes 1-4. Hence, for the majority of Norwegian pupils, the school meal is composed of a lunchbox brought from home, fruit from the national fruit scheme and milk from the subscription service. Because a public school meal system is not yet developed in Norway, nor in Trondheim, the parents will have to take most of the extra costs if or when schools, SFOs or kindergartens introduce more organic products. This requires that the parents are informed and motivated to do so, or alternatively, that the municipality allocates funding to cover the extra costs.

In Trondheim, the public schools and kindergartens are bound by the municipal purchase agreement, which implies that any food purchased by the institution has to be bought from the wholesalers with whom the municipality has an agreement. The private schools and kindergartens are free to choose their suppliers and hence it is considered as easier for them to be more ambitious in introducing more organic food than the public. As the appointed wholesalers increase the amount of organic food offered to municipal institutions, this situation may gradually change. The intention of the municipal purchase agreements is in fact to make it easier for the units to order organic food, and thereby get lower prices through larger accumulated purchases. This will also be a safety for the producers of organic food.

The aim of the present report is to discuss and clarify why even a quite modest goal of increased public consumption of organic foods is difficult to achieve. Such knowledge should be of interest for all people involved in similar processes in Trondheim or elsewhere.

## 4. Background

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### 4.1 Trondheim municipality

Trondheim municipality is located in the middle of Norway, in the county of Sør-Trøndelag. With its 168,257 inhabitants, Trondheim is the fourth largest city in Norway, and the regional capital city. There are large rural and agricultural areas in the county of Sør-Trøndelag, which are well suited for organic production. In 2007, this county had the highest share of organic agricultural area in Norway, 8.6% (Statistics Norway 2008). In Trondheim there are 53 municipal and 9 private primary and lower secondary schools. There are 7 public combined primary and lower secondary (classes 1-10) and 11 public lower secondary schools (classes 8-10). The children start school in August in the year they achieve the age of six. Altogether, the public schools in Trondheim had 19 150 pupils in 2008 (Norwegian Directorate for Education and Training 2008). There are 46 public and 75 private kindergartens in Trondheim (information achieved via Children's Green City). 42 of the public schools in Trondheim have an SFO service, usually located in the school building. Each school has its own way of organizing the SFO service, but the school headmaster is responsible for the SFO service and staff. Usually the children who are signed up for this service stay at the SFO from when the school-day ends, usually 14:00, until they get picked up by their parents latest at 17:00. The SFO is also open before the school starts, from 07:00 - 8:30 a.m.

### 4.2 The political organization in Trondheim

In Trondheim, the Labour Party, the Socialist Party, the Centre Party and the Environmental Party the Green comprise the majority coalition and collaborate in the highest decision-making organ, the city council. The Labour party got the most votes in the municipal election in year 2007 as well as in the foregoing municipal election which was held in 2003. (Municipal elections are arranged every 4<sup>th</sup> year). The present majority coalition has therefore been cooperating and leading the city council for two election periods. The mayor, Rita Ottervik, is from the Labour Party, which got almost 50% of the votes in 2007. The ruling parties all have environment as an important field of engagement in their policies, and have a common goal in making Trondheim an environmentally friendly city. Trondheim is considered as a radical city in Norway. No other city of similar size has had a left-wing mayor in this period. In political discussions, Trondheim is used as an example and inspiration for other cities, e.g. Oslo, to establish cooperation among left-wing parties and aim for the mayor positions at the next elections.

### 4.3 The decision on organic food

As a step towards the goal to make Trondheim an environmentally friendly city, a political decision on organic food was made in the city council on October 22, 2007 (Appendix 2). The decision states that by year 2011 as compared to year 2007, 20% more schools, kindergartens and SFOs shall offer the children organic food, and that 30% of the food made/ used in the municipal production kitchen shall be organic by year 2011. For the original proposition and decision text in Norwegian, see Appendix 1. The politician who made the proposition leading to the final decision was Hilde Opoku from the Socialist Left Party. Opoku's original proposition was however much more ambitious than the final decision. It stated that at least 30% of all food products used in the municipal production kitchen, municipal schools, kindergartens, SFOs and other municipal services where food is served, should be organic by 2009 (Appendix 1). The reason for modifying the decision was that it was considered as too



ambitious. Generally, politicians are sceptical to make decisions that are dependent of private funding, which the introduction of e.g. organic school milk would imply. Further, the point of departure (amount organic food consumed in schools, kindergartens and SFOs by 2007) was not known, which made it difficult to assess the consequences of a 30% decision.

The political decision was anchored both with the city council and the chief councillor (“rådmann” in Norwegian), and has activated two policy fields in the administration, namely the department for health and welfare, and the department for adolescence and education. The health and welfare department was activated because of the inclusion of the municipal production kitchen, which prepares the food for the municipal canteens and for the sick- and nursing-homes in Trondheim. As a part of the recent national “Økoløft” project, where the goal is to increase the production and consumption of organic food in Norwegian municipalities, Trondheim municipality received money for a full-time project leader as well as 60 000 NOK to arrange seminars for their staff focusing on organic food. Educating municipal staff in organic food and farming was already a well established tradition in Trondheim due to the efforts of Children’s Green City. Education of staff has been a part of the practical implementation of the decision on organic food.

#### 4.4 The Children’s Green City- project

In Trondheim, all public and private schools and kindergartens may take part in the Children’s Green City project. This project was originally intended as a relay where a Children’s Green City challenged another city to become a Children’s Green City. It started in 1999/ 2000, when Oslo was challenged by the NGO “Blekkulfs miljødektetiver” (environmental detectives) to become a Children’s Green City. This NGO introduced the term “Children’s Green City” (in Norwegian: “Grønn barneby”). Oslo was appointed as the first Children’s Green City in 2001. Trondheim was the third Norwegian city (after Stavanger) to be challenged, and was appointed a Children’s Green City in 2002. Trondheim is one of the cities in Norway who has used most resources to follow up on this initiative. Through the Children’s Green City (CGC) project, schools and kindergartens are encouraged to become more environmentally friendly, and to teach the children how to take care of the environment and increase their consciousness about environmental issues. The CGC project participates in an international environmental program for schools and kindergartens, by Foundation for Environmental Education (FEE) called The Eco Schools programme, where they utilize a Green Flag certification (in Norwegian: “Grønt Flagg sertifisering”). To get the Green Flag certification the schools or kindergartens must have an environmental action plan, and they must apply every year with new environmental measures and activities to maintain their Green Flag certification. So far, organic food has not been included in the Green Flag certification schemes, they are mostly about reducing energy consumption and waste production at school, e.g. by composting food residues in a school garden. Today 76 kindergartens and 26 primary and lower secondary schools in Trondheim have a Green Flag certification. The CGC concept is well imbedded in an environmental action plan for Trondheim 2003-2012 (Løes *et al.*, 2008), and as shown by the large number of certified schools, it may be characterized as a real success. In the beginning there were rather few lower secondary schools that participated in the CGC Green Flag-certification, but the situation is now changing with an increasing number of lower secondary schools participating.

The main reason why the CGC became a key actor to implement the political decision to increase the number of schools, SFOs and kindergartens that use organic food in Trondheim, was probably that the person employed as a project leader of CGC in Trondheim, Anne Grethe Glørstad, is very positive towards healthy and organic food, and well skilled in gardening, making composts etc. Since 2004, the CGC project has initiated several courses and seminars for municipal staff, and is now arranging four to six every year. The objective of the courses is to educate municipal employees in environmental subjects. The topics vary, and the target group is the personnel at kindergartens, primary and lower secondary schools. The first group

to become educated was the personnel responsible for food serving in the kindergartens. The primary reason to start here was that a person administrating one kindergarten was assisting Glørstad in the CGC project. Concurrently, the kindergartens have a tradition of serving food. The CGC project started to communicate with the municipal purchasing office in 2005, to encourage them to include organic food in the tenders and facilitate the use of organic food in the kindergartens.

## 5. Methodology

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### 5.1 Interviews

Trondheim is one of the ten municipalities who are analysed in the iPOPYP project with regard to the policy aspects linked to the introduction of organic food in schools. Similar for all cases, data were collected by conducting interviews with people holding relevant positions in the municipality as well as in private, commercial organisations. The interviews were conducted as a dialogue between the interviewer and the informant. The interviews were usually conducted in the informant's office, or in a nearby conference room. The interview questions were designed using a general interview guideline common for all case studies (Appendix 4). The interview guide was adapted to fit the present case study, and again for each interview (Appendix 3). The questions focused on strategies and goals for increasing the share of organic food in schools, SFOs and kindergartens, what was done to increase the share of organic foods, what was not done, values and objectives, challenges in the process, as well as factual descriptions. Altogether, eight interviews were conducted in the Trondheim case study. The informants were the politician who initiated the decision on organic foods, the leader in the Children's Green City project, an employee at the adolescence office, an employee at the purchasing office, the leader of a private kindergarten, the headmaster of a large school, the supplier of organic and conventional school milk, and the wholesaler of fruit and vegetables who for the time being holds the appointment with Trondheim municipality: "Odd Langdalen Frukt og Grønt Engros A/S", further called Langdalen. All interviews were conducted between April and September 2009. The interviews were recorded to be able to check details and statements when writing the interview reports, but not transcribed.

Appointments for interviews were made by telephone and e-mail. Nobody refused to be interviewed, but especially in the case of the milk supplier, TINE dairy company it was very hard to find somebody to interview. When contacted by phone, it was impossible to find the right persons to speak to concerning organic school milk. The interviewer experienced to be sent from one person to another several times. Nor did the dairy answer any e-mail-requests, and we did not succeed in getting any information or appointment for an interview before physically going to their main office at the Tunga dairy close to Trondheim and asking for help. The persons interviewed at Tunga were the operation manager and one person that worked in the sales- and marketing department. These people were helpful and well informed, but could not say much about the company's policy towards organic milk.

After each interview, thoughts and impressions gained during and after the interview were written down. Thereafter a report was written, before proceeding to the next interview.

### 5.2 Analysis

From the interviews, information was achieved about the *objectives*, *actors*, *policies*, and *current challenges*. The focus of the analysis is primarily to get an understanding of the networks around the introduction of organic food in Trondheim, and to widen the understanding of the problems and barriers which have led to a different development than the political statement incited to.

A case study of this character will serve to understand the complex process from a political statement to the actual introduction of organic food in day care centres and schools. Together with the other municipal iPOP cases, this will contribute to produce tools to understand the various challenges linked to introducing organic food in public serving systems for youth.

## 6. Objectives, actors, policies, and current challenges

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This chapter will analyse the food served in schools, kindergartens and SFOs in Trondheim, focussing on the barriers and promoters for increased organic shares.

### 6.1 The food systems in public schools, SFOs and kindergartens in Trondheim

During school hours, pupils usually consume food brought from home (lunchbox), and often the parents have signed the child up for the school milk- scheme. In that case, the parents pay for ¼ litres of milk that are distributed to the pupils in lunchtime at school. What kind of milk the child is drinking is up to the parents to decide, when signing up for the service. Totally, the dairy (TINE) offers four kinds of school milk (fat reduced organic 1.5% fat, fat reduced conventional 1,5% fat, extra low fat conventional 0,5-0.7% fat and extra low fat conventional with cocoa taste). However, the schools commonly offer less types of milk to simplify their administration. The TINE dairy started to offer organic school milk in the traditional ¼ litre- containers in Trondheim in 2004. Most schools in Trondheim also take part in the national fruit- scheme. Since August 2007, national funding has been provided so that schools with a lower secondary level (classes 8-10) and combined primary and lower secondary schools are offered free fruit and vegetables daily. In Trondheim this comprises six schools with classes 1-10 and twelve lower secondary schools (classes 8-10). Schools without a lower secondary level offer the same fruit as a subscription service where the parents pay a part of the costs. The wholesaler supplying those schools is currently BAMA, while Langdalen delivers to schools with free fruit.

Most of the public primary schools in Trondheim only offer milk and fruit, and no other food items for sale or for free. It is up to the school administration and staff to decide whether or not to implement whole meals or food items for sale for the pupils in the school. It is also the school administration and staff who are responsible for administrating and operating the system, if implemented. Most of the lower secondary schools in Trondheim have canteens, or in other ways offer some food to the pupils during the school day. New lower secondary schools are built with canteens. The pupils/ parents have to pay for the meals that are served. In Trondheim, about ten lower secondary schools have a chef cooking for the pupils. By today very little organic food is used in this serving. Trondheim municipality have planned to conduct a study on how many schools in Trondheim that offer organic food, or use organic products in cooking. However, this has yet not been done. Hence, the exact number of schools who offer organic food is unknown, but according to our informants it is very few. A study of the organic school milk conducted as an expansion of this report showed that in total, only 11 schools in Trondheim, including two private schools, offered organic milk. This is further discussed in chapter 5.8.

All SFO services in Trondheim (at 42 public schools) offer the children fruit and milk in addition to what they receive during their school lunch. At some SFOs the children bring lunchboxes, but in most SFOs the children are served a cold meal usually consisting of bread with various spreads. According to the informant from Children's Green City (CGC), 10 -15 SFOs serve a hot meal one or two times a week. Lately there have been an increasing focus on nutrition also in the SFOs, and the situation is getting better with more and healthier food today as compared to 2006. The parents pay approximately 100- 200 NOK a month per child for the food offered in the SFOs. Some organic food has been introduced in the SFOs as a

consequence of the increased focus on healthy food, supported by the courses arranged by CGC. These products are typically dried and cheap food products such as raisins, pasta, bread, oatmeal, cheese, crisp bread and canned tomatoes. It is up to each SFO in cooperation with the parents to decide how much organic food that is served.

All kindergartens in Trondheim offer the children meals during the day. In the public kindergartens the parents pay 200- 300 NOK a month per child to cover food costs. The kindergartens have gradually implemented more meals, with a focus on healthy nutrition. Many kindergartens serve porridge made from oatmeal in the morning, often made of organic oatmeal, and explain that the implementation of this extra meal have made the children more satisfied and calm. Some public kindergartens in Trondheim use organic products in their cooking like oatmeal, canned tomatoes, raisins, cheese, pasta, bread and crisp bread.

## 6.2 The municipal purchasing agreements

The information about how the purchasing agreements work was gained in the interview with an employee at the purchasing office in the municipal administration. The politician that initiated the political decision on organic food explained the background for the municipal purchasing agreements.

Municipal purchasing agreements have been used in Trondheim for many years, but especially small institutions like kindergartens were often not very loyal to this system because they found it inconvenient (Sundli 2003). In general, small municipal units like kindergartens and SFOs are often not much aware of the purchasing agreements. The purchasing office aims at strengthening the focus on and reputation of the purchasing agreements in the school and kindergarten sector. Availability of organic foods was included in the tender which was launched by Trondheim municipality in 2007. According to the informant from the purchasing office, the municipal purchasing agreements are meant to contribute to increase the organic food consumption by making the purchasing of (organic) food easier for each unit, so that the administrative part would not hamper the enthusiasm if and when units wanted to purchase organic food. It is also intended that the agreements should decrease the prices on purchased goods by purchasing larger quantities. This is also intended to work as a safety for organic producers in the region. However, the purchasing agreements do not work according to the purpose because it is difficult to get the organic products from the suppliers. Today Trondheim municipality uses TINE as supplier of dairy products, Langdalen as supplier of fruit and vegetables, Gilde NORTURA for meat, Naustvik for fish and ASKO for dry, cold food like pasta and flour. All these companies trade both conventional and organic food, but the number of organic products is very restricted as compared to the conventional.

The municipal administration wants to utilise the municipal purchasing agreements to achieve favourable prices on organic foods used in big quantities e.g. potatoes and carrots at the municipal production kitchen, which would again stimulate an increased consumption in other units e.g. schools, kindergartens and SFOs. In this way, the share of organic food used in the meals could increase significantly.

The informant at the purchasing office explained that the ambitious intentions as expressed in the city council's decision about organic food were rather distant. In practice, their task was to make sure that the suppliers could deliver organic products, and through the designing of the purchasing agreements, to facilitate that the schools and kindergartens could buy these organic products if they wanted. However, so far the demand is quite modest.

### 6.3 The kindergartens are in the leading position. Will the schools follow?

As mentioned, 10- 15 schools in Trondheim offer a hot meal to the pupils once or twice a week. However, for most schools it is usually not practically possible to serve meals due to the lack of infrastructure such as kitchens, refrigerators, ovens to heat the food, dining halls and dining equipment. Lower secondary schools do have canteens, but there is not much, if any, organic food served there. It is up to each unit (who have a canteen) to decide together with the parent council, whether the school canteen is going to offer organic food, or food made (partly) of organic ingredients. However, the SFOs and kindergartens are organized differently. Our CGC informant explained several reasons why the kindergartens in Trondheim are ahead of the schools in using organic foods. First, the kindergartens have a longer history of food culture by serving more food. Serving food is much more common in the kindergartens than in schools, this makes it easier to introduce also organic foods. Secondly, the kindergartens have been involved in environmental policies for a longer period of time, being the first institutions introduced to the Children's Green City project. Further, the schools are generally much larger institutions than kindergartens, and hence it is much harder to introduce changes.

When arranging courses for municipal staff, first from the kindergartens, it has been emphasized how and why to use organic food in cooking, and ways to use organic products without spending much extra money. This is crucial because no extra funding has been given to purchase organic foods through public budgets to schools, kindergartens or SFOs. The workers at kindergartens have been taught how to make meals from scratch, and how to plan the menus and purchases to decrease losses and lower expenses. To present arguments for organic food, the approach has been to motivate and to establish positive attitudes by focusing on the whole process from field to fork in food production and consumption. In autumn 2007 the new national guidelines for the kindergartens were introduced, where nutrition was included. Trondheim municipality responded to the new guidelines by arranging nutrition-courses for 200 employees at the kindergartens. Focus on organic food was a part of the courses, which were quite successful. In autumn 2009, food courses for employees in SFOs and schools were arranged to increase the number of SFOs who offer organic food, or at least use organic products in cooking. Glørstad at CGC stated that the experience from introducing organic foods in kindergartens is very useful to introduce organic food in schools and SFOs. It was interesting that this point of view was reflected by the interviewed headmaster at a primary school, who recognizes that the schools have a lot to learn from the kindergartens.

### 6.4 The role of the parents

The parent councils are commonly formally responsible for the school milk serving in the schools, and may be a potentially important actor to introduce more food and organic food in schools, SFOs and kindergartens. However, the leadership in these councils is unstable, and parents may have very different opinions on school food as well as on organic food. Generally, parent councils do not engage much in school food, and as an example, the national board of parent councils does not have a policy on school meals (Løes *et al.* 2008). When asked about this topic, the national board refers to a NGO working to promote school meals, which is based in Oslo. Even in a large city like Trondheim, there are no parent council on the municipal level. In general, most Norwegian school administrators would probably admit that they would have liked to see the parents being more engaged in the pupils' school life. However, this goal is hard to achieve.

## 6.5 Policies and strategies used to implement the decision

The political decision to increase the consumption of organic food in Trondheim had a broad political support among all parties in the city council, except the liberalist right Progress Party which voted against the decision. The decision was seen as a part of a larger political strategy, and as an element in especially the Socialist Left Party (SV)'s environmental and school policy. The representative initiating the decision, Hilde Opoku (SV), explained that the background was political goals both in health, environment and school policy. Opoku holds the leader position in the municipal adolescence committee, and is an active member of an environmental organization besides being a politician in the majority coalition of the city council. SV wants, on a national level, longer schooldays and to gradually implement free meals in schools. This party considers school meals to be a public responsibility, and the free fruit serving scheme for schools with a lower secondary level was initiated by this party, who in the period 2005-2009 has had the Minister of education in the national government. However, the ambitions have been lowered. When the government was re-elected in 2009, no reference was made to school meals in the government declaration, and not even the term "school fruit" was mentioned, in spite of that SV still has the educational minister (Stoltenberg 2009).

Opoku explained that she was inspired by the success that the regional university hospital (St. Olav) experienced by introducing organic food, and that she believed that the goals in the proposal she brought forward for the decision (Appendix 1, 2) was realistic. To make sure of that, Opoku had been in contact with several actors to make sure that they would support it; both environmental organizations, the municipal administration, the national government, agricultural organizations and producers in the region, as well as the chief councillor, to make sure that it was feasible on a practical level. Opoku explained that Children's Green City is a key actor in implementing the decision, and also made it possible to advocate for the proposal by arguing that instruments to implement it were already available. Further, she argued that the popularity of CGC demonstrated that the Trondheim citizens had both interest and will in this respect. Opoku presented the proposition for the city council and got a broad political support (Appendix 2). The chief councillor was positive and quickly proposed suggestions on the practical implementation. The decision in October 2007 was planned to be followed up by funding in subsequent municipal budgets. However, due to the financial crisis, this has so far not been possible. In July 2009, a debate was raised in the city council about the lack of efforts to implement the decision, referred in the Trondheim newspaper "Adresseavisen" on July 29 (Rolfsen 2009). The mayor answered that the criticism was unfair because none of the political parties had suggested funding for organic food in their budget proposals, but that the decision from 2007 was still valid and implemented e.g. via the CGC project.

## 6.6 Learning, health, climate, environment

Opoku further explained that the political decision on organic food also had an environmental implication, namely to do well for the environment and climate by supporting the organic agricultural sector in the region. The decision was intended to increase the safety for the local organic producers by increased demand for organic food, and as an incentive to inspire more producers to start organic production in the region. Thereby the municipality of Trondheim may get access to more locally produced organic food, which is better for the climate. Opoku explained that before the decision were made she had been in contact with several farmers and producers that had a desire to start organic production in the region, but who felt it was a risk because of the low and unstable demand for organic products.

According to Opoku, good quality food served in school may have a positive effect on the learning ability, and may improve the children's eating habits. Healthier eating patterns may have a positive effect on the environment in the classroom, making it easier both to teach



and learn as well as improving the children's general health condition. By focusing on nutrition and meals made from scratch with natural ingredients and preferably local food, the children will experience a new way of thinking of food, where they see it in relation to environmental conservation. Organic food in the schools will therefore have a learning- effect by setting focus on the environment.

Our informant at the adolescence office, which administrates the public schools, explained what she believed to be the most important value or objective for using organic. According to her, the municipality of Trondheim should use organic products and foods in public institutions because it is positive for the environment and the climate. She did not believe that organic food was healthier than conventional. One reason for not demanding that the food supplier Langdalen delivers organic fruit/ vegetables is because of the value of local produced food, which seems to be more important than organic. The supply of locally produced organic food is, according to this informant, too low to cover the demand. And according to the environmental prioritizing, it is better if the municipality purchases locally produced conventional fruit and vegetables, than importing organic. The best combination is of course organic, locally produced fruit and vegetables, but this is only seasonally available. Hence, Langdalen should rather deliver local conventional when local organic was not available. The political decision contains no guidelines on what the municipality prefers to purchase; locally produced food over imported, but it is obvious that most informants in Trondheim has this opinion as an inherent goal. The informant at the purchasing office explained, however, that the national law on public procurement does not approve that the municipalities prefer some producers over others, based on for instance their geographical haunt.

The leader in the private kindergarten who offered the children quite a lot organic food, explained that there were many reasons why they chose organic food: The childrens' health, the precautionary principle, the learning aspect, and to contribute to sustainable agriculture. "If we can teach the children to eat and to enjoy Norwegian traditional and local food in the kindergarten, we might not have to import as much food in the future".

## **6.7 The national free fruit scheme and organic fruit and vegetables in Trondheim**

As explained, six combined primary and lower secondary schools and 12 lower secondary schools in Trondheim are offering free fruit to serve the pupils every school day trough the national free fruit scheme. The municipality of Trondheim gets money from the national government which is meant to cover the costs of one fruit/ vegetable per pupil each school day. All schools with a lower secondary level (classes 8-10) can participate in this scheme. In schools that do not participate, or the classes that are not included in the free fruit-national scheme (in primary schools, classes 1-7) the pupils have to subscribe for the fruit. The fruit that is offered through this particular fruit scheme supplied by BAMA, whereas Langdalen via the municipal purchasing agreement supplies the fruit and vegetables to the public schools in Trondheim with a free fruit serving. The last tender competition in Trondheim was conducted in the summer of 2007, and at this point the wholesaler company Langdalen replaced the larger supplier BAMA as the supplier of fruit and vegetables to some of the public schools in Trondheim. Langdalen is generally described by people active in the food sector in Trondheim to be positive towards delivering some organic fruit/ vegetables, and has a reputation to be more positive towards organic fruit than BAMA. BAMA is the supplier of fruit to most public schools in Norway. In the tender competition, the representatives from Trondheim municipality explained to the actors/ suppliers that they were interested in more organic products, but did not specify in any way how much organic they wanted. According to our

informant at the purchasing office, Langdalen was positive towards these goals, and is now supplying organic fruit/ vegetables when it is available. However, Langdalen does not take in big quantities of organic food because there is not a continuous demand, and fruit and vegetables cannot be stored for very long. Our informant from the Langdalen company confirmed this, and even strengthened this impression by explaining that they took in organic products only when it was a specific demand for organic. Whether the fruit delivery to the schools was considered by Langdalen as being large enough to justify some organic fruit and vegetables was not clarified in the interview, but according to our CGC informant, not much of the fruit delivered to schools is organic yet. The goal that the municipality of Trondheim is working to reach through the “Økoløft” project is to replace the conventional fruit with organic once, twice or even three times a week.

This example illustrates well how an intention, such as found in the decision of the city council and implemented by the purchasing office, is gradually diluted along the chain of involved actors.

## **6.8 The school milk subscription service and the supplier of milk, TINE**

This chapter is an extension of the present report that presents information about the supply chain of organic school milk in Trondheim. This is outside the scope of policy analysis in the iPOPYP WP2, but may be of interest for other reasons.

The Norwegian dairy company TINE is the supplier of both organic and conventional school milk, and other dairy products to schools, SFOs and kindergartens in Trondheim. TINE is a big cooperative (owned by 16312 dairy farmers in Norway), and delivers milk for the school milk service all over the country. The cooperative has five divisions in different regions in Norway. The dairy at Tunga, close to Trondheim, belongs to TINE's division for the region of mid-Norway (“TINE Midt-Norge” in Norwegian). The central administration of TINE is located in Oslo, and the main strategies are designed there.

For a broader understanding of the organic milk supply to the schools in Trondheim, personnel at Tunga dairy were interviewed, and we received statistics from TINE about the sales of organic and conventional school milk.

### **6.8.1 The supply chain of organic school milk in Trondheim**

The assortment of organic products from TINE by 2009 comprised sour milk 1 litre, fat reduced milk 1 and 10 litre (bag-in-box), sour cream 1/3 litre, some varieties of cheese and yoghurt in packages adapted to home consumption, and organic milk delivered to the schools through the milk subscription service which comes only in one type; fat-reduced ¼ litres. Organic school milk is only offered to schools in mid-Norway, because the production dairy at Røros south of Trondheim is for the time being the only dairy in Norway that produces organic milk in ¼ litre containers.

TINE is following national health guidelines by only producing fat-reduced types of school milk (fat reduced organic 1.5% fat, fat reduced conventional 1,5% fat, extra low fat conventional 0,5-0.7% fat and extra low fat conventional with cocoa taste). The fat-reduced type 1.5% is most popular, and hence the organic school milk comes in this type.

Organic milk is produced by farmers in the region, picked up by TINE in a tank-truck and driven to a production dairy that demands organic milk, such as the (private) production dairy

at Røros. The TINE dairy at Tunga buys and distributes this milk, all packed and ready to deliver, from Røros (Fig. 1).

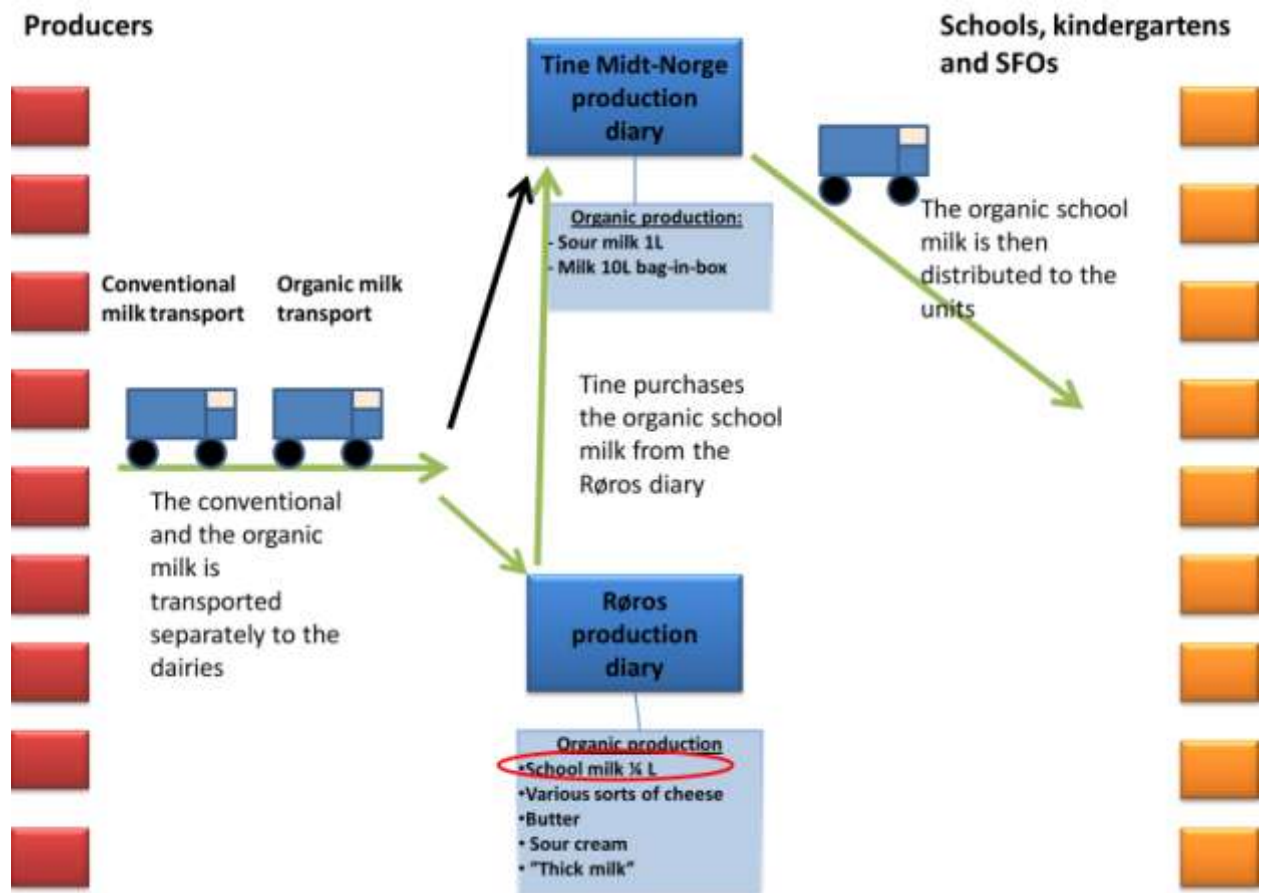


Figure 1. The supply chain of organic school milk consumed in Trondheim. The milk follows the green arrows.

### 6.8.2 Increasing premium price on organic school milk

All four types of school milk in Norway are subsidised by a purchase tax administrated by TINE. This tax implies a slight reduction in income for the milk producers, so the subsidies come from Norwegian farmers, not from the public. Between 2003 and 2007 the subsidising was differential so that all types of milk, also organic, had the same price. In the autumn of 2007 this arrangement was discontinued, and cocoa and organic milk received a premium price of 0.49 NOK per unit. By spring 2009 the premium price had increased to 1.34 NOK per unit; the current prices are 3.36 NOK per container of conventional fat reduced and extra low fat milk, and 4.70 NOK for cocoa and organic milk. Our informants in TINE explained the large premium price by that it is more expensive to produce organic milk than conventional. The premium price paid to the producers is currently 0,75 NOK per litre as compared to a basic payment of ca 4 NOK per litre. A lower supply and production of organic milk than conventional contribute to increase the internal costs of the company to handle it, and hence the market price.

### 6.8.3 Schools serving organic milk in Trondheim

Out of 62 schools in Trondheim receiving milk from TINE, only 11 offer organic (Table 1). In the first half of 2009, 5 % of the total school milk consumption in Trondheim was organic, 35% conventional fat reduced, 34 % cocoa and 26 % extra low fat milk. A total of 186 847 liters of school milk were sold in this period.

**Table 1. Schools in Trondheim offering organic milk in the spring of 2009 ranked by the total sales of organic milk and compared to other sales of school milk (1/4 liter containers) at the same schools. Values are liters of milk sold in the first half of 2009.**

School/ Milk type:	Organic	Conventional	Extra low fat	Cocoa
Berg	2503	173	0	0
Waldorf school	1670	103	813	0
Brundalen	1260	228	1283	1422
Hallset	1160	0	1885	1752
Byåsen	1098	3395	2855	4509
Solbakken	755	83	0	1422
Birralee International	143	738	333	681
Breidablikk	30	1283	1428	2190
Rye	13	618	0	978
Bratsberg	5	780	638	0

It is interesting to see the large differences between the schools. Several schools only offer two or three types of milk, probably to simplify the administration. For instance, three of these schools have chosen to avoid the cocoa milk. Hence, a simplification of administration can be an important argument to avoid the organic milk in a busy school environment. Some of the schools sell just a small quantity of organic milk, whereas five of the schools sell a notable quantity. For those wanting to increase the consumption of organic school milk in Trondheim, it will be worthwhile to study closer the strategies used at these schools to promote this product. A few schools, Berg and Hallset, seem to have replaced the conventional fat reduced with the organic. The headmaster and an employee at SFO at Berg school were asked about the reasons for the large share of organic school milk. The headmaster explained that Berg school had strived for an environmentally friendly school identity since before 2007, and that choosing organic school milk for the whole school was a logical consequence. The parents had agreed to this, and since then organic milk was dominating in this school. Concurrently, the SFO offered as much organic food as they could get hold of. The SFO employee stated that the school's principle with respect to food was to prioritize quality: "We do not save costs on food here". Berg school is located in a wealthy part of the city, which may contribute to explain the parent's positive attitude towards this topic.

The demand for organic milk at schools and SFOs is not very high, and the dairies have enough supply and production capacity to produce much more organic milk for the schools and SFOs. An important question is how the parents can be motivated to prefer the organic milk for their children, with the large premium price. If very few pupils order organic milk, it may also be a social challenge to buy that kind of milk, because children generally do not like to stand out. According to our informants in TINE, this company does not market any type of milk over another. Further, there is a strict limitation to the marketing that can be targeted at schools. The TINE informants also explained that they could not spend many resources on marketing or informing about organic school milk because this product did not bring much income. In the other end of the supply chain, people complain that TINE does not market their organic products at all. They do not even inform that such products are available - you have to ask about it. As a person at the SFO at Berg primary school puts it: "With TINE, you have to find out yourself what is available as organic products". In line with this, the headmaster at

Charlottenlund primary school said that she was not aware that TINE could in fact deliver organic milk (10 litres bag in box) to the school, and said that it was difficult for the units to get information about TINE's organic products. Hence, some information activity from TINE towards schools and SFOs seems appropriate, especially because the region of mid-Norway is now the only district where organic school milk is offered. If this stops, it will be very hard to establish a new offer. TINE may then argue that they have tried to sell organic school milk, but nobody wants it. However, as shown by our material, the marketing has been absent and the price development has been destructive. For Norway as a whole, sales of organic school milk dropped from 146 484 litres in 2006 to 50 673 in 2008.

#### *6.8.4 The municipal administration in relation to organic school milk*

As the decision on organic food in Trondheim suggests, the goal is to get more schools, kindergartens and SFOs to include organic food products in the food service that they offer the pupils and children. To organize this in Trondheim, where the schools in fact do not offer the pupils very much food at all, it would be a good idea to get more schools to offer organic milk, and maybe even to decide that all fat reduced milk served in schools, SFOs and kindergartens in Trondheim shall be organic. However, such a decision would imply extra costs for all parents wanting their children to have milk in school. Our informant at the municipal purchasing office explained that they had checked that TINE could in fact deliver organic school milk to all schools in Trondheim; the rest is up to the parents because of the way the purchasing of organic school milk is organized. The municipal administration also clarified the goals on increasing the amount of organic products for the suppliers at the latest tender competition (2007), but did not make any forms of demands (for instance shares of organic) at that time. This was partly due to that the political decision on organic foods was not yet made by the city council when the tender call was launched.

Answering the question on how to increase to number of schools kindergartens and SFOs offering organic food, the informant from the school administration explained that she thinks that it is mainly a top-down process, where the municipal administration has to be more clear and instructive towards the units about their goals. She suggested that the municipal administration could set up some formal demands or requirements for instance by introducing organic food as a paragraph in the written agreements between the headmasters at public schools and the municipality. She also highlights the importance of CGC, and their influence trough the Green flag-certification. At the same time she thinks the purchasing agreements are important, but the administration must improve their skills on negotiating about organic products. The politician that initiated the decision says that she thinks it is of great importance that there is enthusiasm at each unit for introducing more organic food, and it is up to the municipal administration to facilitate that the units have the opportunity to introduce organic food. The proposal from the municipal school administration about the leader agreements seems to be an interesting way of such facilitation.

This discussion shows that the actors have different expectations towards who is going to take responsibility in the introduction of organic products. The schools expect the municipality to do something, whereas the politician expects the schools to be involved. There seems to be a lack of organisational support towards the ambitious goals of introducing organic food. Obviously, it is not enough to expect the schools to become engaged. There has to be some initiatives, building of networks etc. to ensure an interest from the schools.

### **6.9 A school case: Charlottenlund primary school**

Based on a proposal from the Children's Green City informant, we chose as our informant representing the public schools in Trondheim the headmaster of Charlottenlund primary

school. Charlottenlund is one of the largest public primary schools in Trondheim with 625 pupils. The school also has a SFO institution in the school building, which is the largest SFO in Trondheim. The CGC informant thought it would be a good idea to interview the headmaster of this particular school because she participates in the group that is negotiating about food through the municipal purchasing agreements. Charlottenlund primary school does not participate in the national free fruit scheme, because of the “lack” of lower secondary classes (8-10). The parents order fruit/ vegetables to the pupils via the supplier BAMA, which has a well developed national distribution system for school fruit. BAMA aims at serving 20% organic fruit by offering one organic fruit per week (Skolefrukt, 2008).

The meals offered for pupils at Charlottenlund are served mainly through the SFO service, during school hours the pupils consume food brought from home, milk from the milk scheme and fruit from the fruit scheme. The headmaster explained that they use some organic foods at the school (through the SFO service), but do not offer the pupils whole organic meals. It is mostly fruit and vegetables, independent from the fruit scheme, that are organic; “because that is what we can get (from the company)” as the headmaster puts it. This confirms the experiences at the Berg SFO described above (chapter 5.8.3). According to our CGC informant, this is the typical situation at schools that are using some organic food. Further, the headmaster explains that there are not any particular conventional foods that are replaced with organic at the school, because the school is such a big unit that the supply of one particular organic product is not always stable enough (especially fruit and vegetables) to supply them. However, they seek to purchase organic when it is possible, i.e. available through the purchasing agreements and not too expensive, this depends on the fruit/vegetable- type and the season. When being such a large unit, it is of importance to be flexible. Another typical feature of this school is that the school administration was not aware that TINE can deliver organic milk in 10 litre containers for the milk dispenser at the SFO service, and therefore has not considered ordering organic milk through the SFO. During school hours the pupils are offered conventional fat reduced milk or cocoa milk in ¼ litres. At the SFO the administration has a focus on healthy nutrition, and has replaced all the food containing sugar with healthy alternatives. There is a lot of food served at Charlottenlund SFO, and 250 children consume food there every weekday, so the headmaster explained that it is important that the food is healthy and that they have an optional diet for the children with allergies or food intolerance.

The Charlottenlund primary school headmaster regarded the municipal goal on increasing the production and consumption on organic food as positive. However, she highlighted that the price always will be of importance when units are purchasing foods.

## 6.10 The parents -reactions and involvement

As mentioned, there is no municipal (common) parent council for the public schools in Trondheim. To get an impression of the parents’ involvement with respect to organic school food, the current and former leader of the parents’ council at Charlottenlund were interviewed. The present leader was not aware of the school’s goals about organic food, and expressed no interest in increasing the share of organic. The subject of organic food had in fact not been up for discussion at all, as long as our informant had participated in the FAU organization (about one year). The former leader explained that the general subject of school lunch had been discussed several times during her time in the council; however, organic food was never mentioned. She explained that the parents think it is of importance that the children get healthy and enough food through the SFO. The organization of the lunch breaks during school hours is another topic that the parents find important.

At schools that offer the pupils at least some organic foods, such as Charlottenlund, the parents are usually not aware of this. Today there are, as far as we know, no schools in Trondheim that offer the pupils organic meals, or have replaced many particular foods with

organic in the SFOs service. If that was the case it would perhaps be easier for the units to inform the parents about their commitment towards using organic food. By today there is still not much to report to the parents. The schools that use some organic products still cannot give the parents any forms of guarantee that they are using organic products, because they have to take what is offered to them via the purchasing agreements, and organic products (fruit) are not always available, depending much on the season. If they could give some guarantees it would probably be easier to inform the parents. However, even our informant from a private kindergarten who used quite a lot organic food said that they had not informed the parents about the organic food offer. The kindergarten leader said that they probably could, and should, promote it better.

The school administration is focusing on informing the parents that they serve the pupils healthy and nutritional food, not necessarily organic. If kindergartens, schools and SFOs are introducing more organic products, the cost for the parents will increase. Are the parents ready and willing to take the extra cost? In the SFOs the parents decide how much they are willing to pay for the food, and therefore also decide if they are willing to pay for the implementation of more organic food.

The lack of a public free meal service for the children implies that nutrition and food at Norwegian schools is still a private matter. The informant at the purchasing office explained that it is really up to the parents to decide whether there is going to be more organic food at schools. Again, we find different expectations towards responsibility and action from the different actors. However, the parents are a large, scattered, dynamic and very heterogeneous group to organize. Hence, significant efforts from their side to support the introduction of organic food are (yet) not realistic to expect.

## 7. Challenges faced

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### 7.1 Infrastructure and lunch system

The lack of infrastructure required to serve school meals, as well as lack of staff, tradition and knowledge hampers the introduction of all food serving in Norwegian schools, including organic food. In the kindergartens and SFOs the situation is much better, but an alarming trend is that in recent years, new kindergartens have been built without cooking facilities to save costs. This is a good example of how various political goals counteract each other. Trondheim municipality seeks to increase the share of organic food in schools via the municipal purchasing agreements, and by motivating and educating the staff in the units via the CGC project. They could consider e.g. a political decision that all school milk should be organic. In the schools with a free fruit-scheme the municipality may influence the share of organic fruit, but this is to some extent dependent on a personal engagement from the persons designing the calls for tenders and the negotiating with the suppliers. In 2007, no specific demands for shares of organic fruit were included in the calls.

### 7.2 Public funding

After the financial crisis in 2008, Trondheim municipality considered to cut down on the school fruit service, e.g. that only half of the schools will get free fruit or that the pupils will get fruit only 1-2 times a week. Such a solution will decrease the possibility for increasing the share of organic fruit/ vegetables significantly.

The politician, Ms. Opoku, recognised during the interview the challenges that the crisis would imply for the introduction of organic food, but at the same time highlighted that the financial crisis may in fact make it even more important for Trondheim to invest in environmental issues, and that a political discussion over priorities will follow. The fact that the units have not received any extra funding to purchase organic food hampers the process. However, the increasing amounts of organic foods in kindergartens show that the education in sustainable nutrition including organic food arranged by the CGC project has been quite successful.

The informant at the purchasing office criticised that the politicians made a political decision which is dependent on funding from the citizens (the parents), since no public funding was allocated to implement the decision. The headmaster at Charlottenlund primary school explained that they were very positive to the idea of using a lot organic food, but that they always had to consider the price when purchasing food. If the price for the SFO service, which is already quite expensive as compared to e.g. the kindergartens, was to be much more expensive, it would not promote equality. And if the food in the school canteens was to get more expensive, the canteen would easier loose the competition to the benefit of the shops near the school. It would probably be easier to introduce more organic if the parents were well informed about organic food. The private kindergartens can, and often do, increase the monthly fee when introducing more organic foods. In the private kindergarten at Bakklandet where the leader was one of our informants, the parents pay 550 NOK a month per child for the food. In most public kindergartens the average cost is about 200- 300 NOK a month per child.



### 7.3 Pro's and con's of municipal purchase agreements

In Norway, organic products are mostly available via conventional producers and wholesalers due to the still immature development of the organic market.

Our informant from Bakklundet kindergarten explained that they had not had any specific problems in replacing much of the conventional food with organic. Being a private institution, the kindergarten could establish a personal network with local producers and choose between several local organic producers when purchasing. In this way they can be more flexible in what they purchase, and therefore can get fresh vegetables at a cheap price. It is also, for this particular unit, positive to be a private institution in the way that the kindergarten is free to be more ambitious in ordering organic. She also thinks that they have access to more fresh fruit and vegetables when they stand outside of the municipal purchasing agreements, because they do not have to settle with what is offered from the appointed supplier. The kindergarten leader referred that she had met several leaders from public kindergartens who became very excited and enthusiastic during the seminars on organic food arranged by CGC, but also upset because they do not have the opportunity to order more organic food than what is offered to them through the municipal agreements. The municipal purchasing agreements have a reputation on being stiff and making it difficult for the units to influence the purchases, even if they are intended to facilitate the purchase administration with local municipal units as well as with the suppliers. The agreements are also intended to decrease the prices of organic products, and to increase the predictability for the organic producers.

Another possible problem linked to purchasing fruit and vegetables through the municipal agreements are that the supplier may have to buy and store large quantities. This is a special problem for fresh fruit and vegetables, and especially so for organic products because the demand for organic fruit and vegetables is not as continuous as the demand for conventional fruit and vegetables. Hence, they are often not that fresh when delivered. This can cause some negative reactions, when a unit is finally buying organic but the fruit does not have a fresh appearance; people will get the impression that the organic fruit/ vegetables are not that attractive. Both the informant at the purchasing office and the informant at the adolescence office mentioned that the organic fruit often looked less appetizing, and it was more difficult to get the children to eat the fruit because of that. The headmaster of the Charlottenlund school confirmed this opinion and said that the quality of the organic fruit was sometimes poorer than the conventional. However, the leader of the private kindergarten said that she never had experienced specific problems on the quality of organic fruits. This might be due to the different suppliers, but it may also be argued that this disagreement may be an example of reputation construction, where various actors transfer their personal opinions and experiences mixed with what they have heard from other actors, composing a possibly more negatively reputation of organic fruit and vegetables than is in fact the case. Trying a new and more expensive product is a vulnerable process; one negative experience may cause a long-lived negative attitude.

The informant at the fruit supplier and wholesaler Langdalen explained that the demand for organic fruit and vegetables is not very high, and in practice they often wait until there is a demand for organic products before ordering them. Once again we find a pattern of people pushing a responsibility away and over to somebody else. To change a situation, somebody has to play an active role. The Langdalen informant estimated that it is about ten units in Trondheim (kindergartens, schools, SFOs) that order solely organic fruit and vegetables from them. He explained that Langdalen had considered sending out information to the units if they take in quantities of organic fruit, but that is would be too risky in case they could not meet the demand for the products. Hence, they had not yet tried this. In fact, this leaves the municipality with an insoluble situation: The wholesaler of fruit and vegetables is worried about the low demand for organic products, but at the same time they worry that they

cannot meet the demand if they seek to increase it. The problem is uncertainty both when it comes to delivery from the producers, and to an unstable demand. Purchasing of organic products requires some planning and coordination, both because each producer does not always produce each product in big quantities which implies that the wholesaler needs to purchase the same products from more than one producer, and of course that fruit and vegetables are season- dependent. At the same time, the municipality is more interested in promoting *local* fruit and vegetables than organic in general.

The organic farmers have established an organization unit to better coordinate the purchases from the municipality and other actors. The informant from Langdalen meant that the organization of the organic producers in Mid-Norway was somewhat poor, and that this made it more difficult for Langdalen to purchase organic products. But the informant also recognized that the problems with the organization could in fact be because the organization unit was established quite recently, and that this situation may improve.

There have been some problems for the municipality to find local producers of organic food that can deliver and produce big enough quantities. Some units find it difficult to purchase organic food because of the lack of information offered about the products from the supplier. For instance, several units are not aware that TINE can in fact deliver organic milk according to their needs, as in the case of Charlottenlund primary school. It is also said by several informants that TINE does not have a very positive attitude towards delivering organic products. The informant from the purchasing office could tell that she actually had been called naive in a personal discussion with a person working at TINE, for believing that the municipality of Trondheim could in fact introduce more organic products. Others explained that TINE has not always been very cooperative when it comes to the deliverance of organic products. The leader in the private kindergarten explained that she thinks that TINE is such a big concern that they do not “care about” little units such as them. She explains further that she found it strange that TINE before 2007 did not bother to inform that the price on the organic and conventional school milk was the same, because TINE could likely have sold a lot more organic products if they had informed efficiently about this.

This discussion demonstrates the need for communication and network development among the actors in the supply chain for organic school food. Resources for meeting each other and getting inspired could be useful.

#### **7.4 Lack of political effectiveness?**

On June 29<sup>th</sup> 2009, an article was published in Trondheim’s local newspaper, “Adresseavisen”. The article stated that the issue of organic food in Trondheim is again actualised, after a debate in the city council where several politicians from different parties expressed their disappointment towards the lack of political effectiveness since the decision on organic foods was made. The decision states that it would be allocated funds through the budgets for the purchasing of organic food. This has yet not happened, and according to the article, none of the parties did include funding for purchasing organic food in their alternative budget proposals. We did not succeed in getting any answer why this had not been prioritized, e.g. by SV, the party initiating the decision.

Our informants from the municipal administration explained that the time limit in the political decision on reaching 20% more kindergartens and SFOs who use organic food by 2011 (compared to 2007) has been postponed, so the goal on 20% more schools, kindergartens and SFOs who use organic food is now to be reached by year 2012. According to the CGC informant this is because the municipality applied to participate in the “Økoløft” project, and hence the practical implementation of the decision started later than planned. We did not succeed in getting information from the initiators on who decided this and whether a formal decision on postponing the goal was ever made.

The revised decision on increasing the amount of organic food in schools, kindergartens and SFOs in Trondheim is not very ambitious. Considering that very few schools, kindergartens and SFOs were using organic food in 2007, it should not demand much effort to achieve an increase of 20% in the number of units using organic by 2012. However, as no good definition of organic food consumption in a school is available, any progress will not be easy to measure. The informant from the adolescence office explained that the decision was first meant to apply only for the production kitchen, and that schools, kindergartens and SFOs were applied later. The fact that Opoku was inspired by the St. Olav hospital's production kitchen is visible in the decision, and the decision is not necessarily well-adjusted to the present situation in the schools in Trondheim, who in fact do not offer the pupils much food at all. The decision does not specify whether the goals apply e.g. to the school canteens, the food financed by the parents, or only the public fruit scheme. If the production kitchen made all the food that was served in the schools, SFOs and kindergartens, and had the funding to purchase organic, it would probably be easier to increase the share of organic food in schools and kindergartens. Such a solution has been practiced for several years in public schools in Copenhagen. However, due to lack of infrastructure and traditions, and that the food is not free, the food serving has not yet achieved any high degree of popularity there (He and Mikkelsen, 2009).

When our informant at the adolescence office were asked whether she thought that the goal regarding the schools in the political decision was realistic, she explained that it would depend on the prices on the organic products, since it is the parents who will take most of the costs. She highlighted however that the health and welfare department had better chances reaching the goals regarding the production kitchen, because here there the municipality had a better opportunity to manage the process. However, this depends on public funding to purchase organic food. A phone call to the production kitchen made it clear that they do not use any organic food yet, and further that this kitchen only delivers food to one SFO and one kindergarten. They have not received any funding for purchasing organic foods.

## 8. Final comments and conclusion

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The purpose of this study of the municipality of Trondheim was to describe the efforts made to increase the share of organic food in schools, kindergartens and SFOs, and by interviewing relevant actors involved, to get an impression on how the situation is today. The political decision made by the city council to increase the share of organic food in schools, kindergartens and SFOs made Trondheim an interesting case to study, because the goals and description of the measures to reach them gave us something to evaluate the present situation up against. In the municipality of Trondheim there are many actors who promote environmental issues and environmental policy, and the parties in the city council have a vision of making Trondheim a leading municipality in Norway when it comes to implementing environmental politics. The political decision on increasing the number of schools, kindergartens and SFOs who serve the children organic food have formalized and operationalized the goal of increasing the consumption of organic food in Trondheim, and is meant to have positive effects on both health and environment. The Children's Green City project has been one of the most important actors when it comes to both the implementation of the political decision on organic food, as well as being an inspiring force, working towards the personnel at the units on a basic level, and thereby supporting the top-down approach that the decision constitutes.

The municipal purchasing agreements are meant to make the purchasing process easier for the units, so that the administrative part should not hamper the process when the personnel at the units wanted to increase the share of organic. At the same time these agreements were meant to work as a safety for the producers, and reduce the prices on the organic food. However, the personnel sometimes perceive the municipal purchasing agreements as being bureaucratic and inflexible, especially if the school or kindergarten personnel are inspired to use more organic food, for example after they have attended a seminar arranged by Children's Green City.

During the study of Trondheim it became clearer that despite the decision and positive goals on organic food, the situation in the municipality today is not especially positive with respect to organic food in schools, SFOs and kindergartens. There are several explanations as to why the process of getting more schools etc. to serve organic food is very slow in Trondheim. First, there are not many schools that have a food offer; there is not a public free lunch system at the municipal schools. If the schools do have a food offer, the food is bought and paid for by the parents, but in practice the parents still do not have much to say on what specific types of food that are offered. The city council could in principle decide for example that all the school milk in the municipality of Trondheim should be organic, or that a certain percentage of the fruit offered through the free fruit scheme should be organic. The first solution would probably clash with people's demand to freely decide what product they want when they pay for it themselves. The second would demand additional funding.

The fruit and vegetable wholesaler in the municipality is positive towards delivering organic fruit/vegetables, but sees it as a problem that by today the demand for organic fruit/vegetables is quite unstable, and that the organization of the producers does not work perfectly. So if the demand was to increase, the wholesaler needs to be certain that the producers can deliver enough and at the right time. This situation illustrates an immature market, where demand and supply do not balance well. Increased communication, both from the wholesaler towards the local customers, between the producers and between the producers' organization and the wholesaler, could develop the market. However, such activities are dependent on at least a few actors' enthusiasm.

The milk supplier seems to be little engaged in selling the organic milk. The information to the local costumers is scarce, the company is not easy to access, the premium price is very high and even if the company pays a significant premium price for organic milk to the producers, they do not seem to bother too much to increase the share of organic milk that is processed and sold as organic. This situation illustrates again that people's commitment and enthusiasm is required. A product does not sell itself just because it is organic. The sales body should be just as keen to sell organic products as they are to sell conventional products. As is also valid for school parents, the owners of the milk company are a heterogeneous group, with both organic and conventional producers. Fear of provoking conflicts between supporters and opponents of organic food and farming may be an important reason for not advocating more loudly about organic school milk. As school milk is a very well established product in Norwegian schools, turning this into organic could be a very efficient way of increasing the organic consumption. It is interesting to note that the behaviour of the TINE company is very similar to the behaviour of the Arla dairy company some years ago in Denmark. Today, Arla has changed their strategy and is actively promoting the organic products, however in a much more mature Danish organic market.

In conclusion, this report has demonstrated the complexity of the current food serving systems in the Norwegian school and day-care sector, and the difficulties relatively large municipalities like Trondheim may face if they want to increase the amount of organic food consumed in this sector. The challenges are many, and even if the goal is modest, it seems to be difficult to achieve. A special characteristic of the Trondheim case is that the background was a positive experience in converting a significant part of the food consumed in local hospital to organic. Even if a local positive experience is clearly inspiring and useful, the transfer to a completely different sector (schools and day-care) is challenging, and could have been better planned. Several actors presented statements and reflections that make it relevant to use the term *translating* the political statement to a complex reality. Various actors presented different translations, contributing to the rather destructive, but probably quite typical, pattern of actors who for various reasons do not take (enough) responsibility in building up a new area that the politicians have asked for. Also the 'myth' which is very present in this case, that the parents have to pay and hence have to demand organic before it can become a reality, explains why very little is happening in Trondheim to increase the organic food serving in schools and day-care centres.

On the positive side, linking the serving of organic food with everyday life in schools, SFOs and kindergartens may be utilised for many purposes, to increase pupils' health and well-being, environmental awareness etc. The approach of teaching personnel, and motivating schools by a certification system that must be annually renewed, is a good example of an activity that is not too extensive, but in the long run may contribute to change our society because it is about making people aware and conscious about environment, health and sustainability.

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# Appendix 1. The proposal to increase the consumption of organic food in the municipality of Trondheim.

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Available at <http://trondheim.kommune.no/content.ap?thisId=1117621006> (in Norwegian).

## **Fra Hilde Opoku (SV): Utsatt fra møte 29.03.2007: Økologisk mat Ved Trondheims storkjøkken, skoler og barnehager**

IndEcol rapporten, som annen nyere forskning, fastslår at moderne menneskelig aktivitet bidrar til den ekstremt raske klima forandringen våre barn vokser opp med.

Herunder er moderne jordbruksforvaltning og matproduksjon en viktig kilde til klima utslipp er direkte koblet sammen med klimaet. Ved å legge om til økologiske produksjonsformer reduseres de globale klima utslippene fra landbruket, samtidig som lokal forurensning til jord og vann reduseres. Flere undersøkelser konkludere også med direkte helsegevinst fra økologiske produkter. Den indirekte helsegevinsten gjennom bedre klima og miljø er uomtvistelig.

I utlandet er det stor variasjon i utbredelse av økologisk landbruk. I Sverige og Danmark samt flere andre EU-land er over 10% av landbruksarealet nå økologisk. Mange land har målsetting om minimum 20% økologisk areal innen få år. I Norge har vi en målsetting om 10% økologisk landbruksareal innen 2010. Men foreløpig er bare ca 3,9 % av jordbruksarealet økologisk eller under omlegging, og ca 5% av alle gårdsbruk driver økologisk/er under omlegging. Produksjonen av økologisk melk utgjorde i 2004 ca 1,2% av den totale melkeproduksjonen i Norge.

For å få flere bønder til å legge om driften sin fra industrielt til økologisk jordbruk, må etterspørselen etter økologiske produkter økes og stabiliseres. Når en stor kunde etterspør økologisk mat, vil dette være en drivkraft for produsenter og leverandører til å utvikle produksjon og logistikk i forhold til de kravene som stilles.

St. Olavs har bidratt til dette gjennom et samarbeidsprosjektet mellom St. Olavs Hospital, Bioforsk Økologisk, TRØKK, Midtnorsk Økoring For helse, glede, daglig brød...

St. Olavs. Økologisk mat i sykehus er et verdikjedeprojekt rettet mot bruk av økologisk mat i storhusholdninger. I løpet av en fireårsperiode skal kjøkkenet ved St. Olavs Hospital HF i Trondheim gradvis ta i bruk mer økologisk mat. Tiltak i prosjektet er rettet mot de ulike leddene i verdikjeden, inkludert opplæring av hele kjøkkenpersonalet. Kunnskap som utvikles i prosjektet om innføring av økologisk mat, vil være en kompetansebase ved at kurs og formidlingsmaterieill kan brukes overfor andre storhusholdninger.

Det er anslått at målet om at 30 % av maten til pasientene ved St. Olavs skulle være økologisk ved utgangen av 2006 er nådd. Det er ikke hele retter som er økologiske. De har gått på varegrupper, slik at flere av basismatvarene som potet og lettmeik er 100 % økologisk.

Trondheim kommune har et bevist fokus på mat og helse i sine skoler, barnehager og storkjøkken produksjon. En styrking av denne innsatsen vil være å målrettet gå innfor en økning av andelen økologiske produkter i mat som selges/servers i kommunalregi.

Skal klimaregnskapet nyte godt av omleggingen er det også en viktig premis at produksjonen foregår lokalt, der det er mulig.

Sør-Trøndelag Bondelag er svært positive til at offentlige storkjøkken bidrar til dette og gjennom det gjøre økologiske varer mer kjent ute blant folk. Bondelaget vil også støtte Trondheim kommune i en økning av omfanget av økologisk mat og vil i så stor grad som mulig bidra til at dette kan realiseres gjennom lokal produksjon.

**Spørsmål til Ordføreren:**

Hvordan stiller Ordføreren seg til en forpliktende målsetting om økologisk mat i Trondheim kommune sitt storkjøkken, kantiner, skoler og barnehager?

**Forslag til vedtak:**

Trondheims storkjøkken skal i løpet av 2009 ha et minimum av 30% økologisk produserte produkter i sin fremstilling.

Tilsvarende krav stilles til skoler/SFO, barnehager, andre kjøkken og kantiner som drives i kommunens service tilbud, og i bedrifter hvor kommunen er hovedaksjonær.

Rådmannen bes utarbeide en omstillings og opptrappingsplan for bruk av økologiske produkter, herunder kortreist-mat og tilpasset sammensetning av produktene, i kommunens mattilbud i samarbeid med relevante aktører. Planen skal ta sikte på en ytterligere økning i prosentandelen av økologiske produkter som benyttes kommunalt også etter 2009.

Omstillingen sees i sammenheng med kommunens øvrige satsning på klimagassreduksjoner, miljøforbedring, helse og ernæring.

Utsatt til 24.05.2007



## Appendix 2. The decision to increase the consumption of organic food in the municipality of Trondheim.

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(in Norwegian)

Vedtak om Økologisk mat 22.10.2007:

### Oppsummering / konklusjon

Rådmannen vil anbefale at andelen økologisk mat som tilberedes ved kommunens Produksjons-kjøkken skal utgjøre 30 prosent i 2011 og at 20 % flere barnehager, SFO og skoler i Trondheim tilbyr økologisk frukt og grønnsaker / mat i 2011, sammenlignet med 2007. Rådmannen har søkt Kommunal- og regionaldepartementet (KRD) og Landbruks- og matdepartementet

(LMD) om prosjektmidler, slik at Trondheim kan bli foregangskommune for utvikling av produksjon og forbruk av økologiske matvarer. Formannskapet ber rådmannen om å innarbeide økte merkostnader ved kjøp av økologiske produkter i årlige budsjettforslag.

Signert Kommunaldirektør Tor Åm og Rådgiver Eirik Roos  
(Forslagsstiller SV ved Hilde Opoku)

Til: Bystyret

Fra: Rådmannen

Dato: Bystyrets møte 29/3 2007.

Tema: Interpellasjon fra Hilde Opoku, SV om Økologisk mat ved Trondheim kommunes storkjøkken, skoler og barnehager.

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### Spørsmål:

Hvordan stiller Ordføreren seg til en forpliktende målsetting om økologisk mat i Trondheim kommune sitt storkjøkken, kantiner, skoler og barnehager?

### Svar:

#### Gevinst for helse og miljø

Moderne jordbruksforvaltning og matproduksjon er en viktig kilde til klima-utslipp.

Ved å legge om til økologiske produksjonsformer reduseres de globale klima-utslippene fra landbruket, samtidig som lokal forurensning til jord og vann reduseres. Flere undersøkelser konkluderer også med helsegevinst ved inntak av økologiske produkter. I en oppsummeringsartikkel i "Helsenytt for alle" av førsteamanuensis Gerd Holmboe - Ottesen, ernæringsforsker ved institutt for allmenmedisin, UiO konkluderes det med følgende;

*"Økologisk mat er trolig sunnere enn mat som er dyrket på den konvensjonelle måten.*

*Nye studier har vist at frukt og grønnsaker som har vært dyrket økologisk, inneholder mer antioksidanter enn andre matvekster. Animalske produkter basert på økologisk produksjon har mer fettløselige vitaminer og omega - 3 - fettsyrer"*

### Utbredelse

I utlandet er det stor variasjon i utbredelse av økologisk landbruk;

I Sverige og Danmark samt flere andre EU-land er over 10% av landbruksarealet nå økologisk. Mange land har målsetting om minimum 20% økologisk areal innen få år.

I Norge har vi en målsetting om 10% økologisk landbruksareal innen 2010. Men foreløpig er bare ca 3,9 % av jordbruksarealet økologisk eller under omlegging, og ca 5% av alle gårdsbruk driver økologisk/er under omlegging. Produksjonen av økologisk melk utgjorde i 2004 ca 1,2% av den totale melkeproduksjonen i Norge.

Trondheim kommune som landbruksmyndighet arbeider for å stimulere lokale produsenter til økologisk produksjon, også med hensyn til det store og voksende marked Trondheim utgjør.

De barnehagene og skolene som er registrert med Grønt Flagg, ønsker å tilby økologisk mat på enheten. Økologisk mat har også vært tema på nettverkssamlinger for disse enhetene. De mest brukte økologiske matvarene innenfor skole/ barnehage/ SFO i dag er frukt og grønnsaker, melk, mel, havregryn og noe brød.

En begrensende faktor kan være lagerplass på den enkelte enhet. Frukt og grønt som er produsert økologisk kan ha dårligere holdbarhet enn konvensjonelt produserte varer.

Produksjonskjøkkenet har så langt ikke brukt økologisk produsert mat av økonomiske hensyn.

### **Merutgifter**

Opplysninger som er innhentet fra St. Olavs Hospital viser at økologiske matvarer er ca. 7 % dyrere enn matvarer produsert på konvensjonell måte. I de nærmeste årene vil det ikke være mulig å gå fullt og helt over til økologisk mat, men St. Olavs Hospital mener at de kan nå en målsetting på 30 % innen kort tid.

Dersom det kommunale Produksjonskjøkkenet skal basere 30 % av matproduksjonen på økologisk mat, vil det medføre en merkostnad på ca.500.000,- årlig. I tillegg påløper engangskostnader til opplæring av ansatte på ca.100.000,- kroner.

Om barnehager og skole/SFO skal gå over til økologisk mat, så vil det også få konsekvenser for kostprisen.

### **Tilgjengelighet**

Fra skoler og barnehager rapporteres det at tilgjengelighet til økologiske produkter kan være et problem i dag. Frukt, grønt og melkeprodukter kan skaffes, mens det er lite utvalg i brødvarer.

Trondheim kommune og Helse Midt-Norge har gått sammen om å forhandle om nye innkjøpsavtaler på mat. Her etterspørres bl.a pris på økologiske og konvensjonelle matvarer.

### **Oppsummering / konklusjon**

Rådmannen er enig i at det ut fra miljømessige og helsemessige grunner er fornuftig å stimulere til økologisk produksjon av mat. Det er også ønskelig at kommunen serverer slik mat der det er mulig, praktisk og økonomisk.

Før kommunen forplikter seg på en bestemt andel av matproduksjonen som skal bestå av økologiske råvarer, bør kostnader og tilgang på råvarer utredes nærmere. Rådmannen kan legge fram en sak om dette til formannskapet høsten 2007

Tor Åm

Björg Jacobsen

Odd Skarsbø

Kommunaldirektør

Rådgiver

Enhetsleder, produksjonskjøkkenet

## Appendix 3. The interview questions used in Trondheim

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(in Norwegian)

Faktiske beskrivelser fra “casene”. Hvordan er situasjonen i Trondheim kommune i dag, og hva er målet?

Når ble beslutningen (vedtaket) om å bruke økologisk mat i skoler, SFO og barnehager vedtatt, og hvordan startet den praktiske gjennomføringen av vedtaket?

Hva slags matvarer serveres til elevene gratis, for salg eller som abonnementsordning, i de offentlige grunnskolene i Trondheim i skoletida?

Hvor mange av SFO’ene tilbyr mat, før og/eller etter skoletid, og er det noen bruk av økologiske matvarer ved noen av disse?

Hva slags matvarer/måltider serveres til elevene gratis, for salg eller som abonnementsordning, i de offentlige grunnskolene i Trondheim som en del av SFO?

Hva slags matvarer/måltider serveres til barna gratis, for salg eller som abonnementsordning, i de kommunale barnehagene i Trondheim?

Hvor mange skoler i Trondheim tilbyr/selger måltider på skolen (kantiner, varme måltider) utover skolemilk og frukt, uavhengig av SFO? Serverer noen av disse skolene økologisk mat?

Hvor mange skoler i Trondheim tilbyr studentene økologiske matvarer (melk og/eller frukt) i dag?

Hvem leverer disse matvarene? (Langdalen frukt, TINE melk, andre?)  
(Hvem er de rette personene å snakke med av disse aktørene, tips?)

Hvilke konvensjonelle matvarer i skoler, barnehager og SFO er byttet ut med tilsvarende økologiske varer siden 2007, og hvorfor akkurat disse varene?

Hvor mye økologisk mat brukes i dag av Produksjonskjøkkenet i Trondheim kommune?  
Hvilke institusjoner/kantiner/andre serveringssteder får tilgang til mat med økologiske ingredienser/økologiske måltider?

**Hvorfor innføre økologisk mat:**

Hva er målet for bruk av økologisk mat i Trondheim kommune?

Hvorfor har Trondheim kommune et mål om å servere økologisk mat i barnehager, skoler og SFO? Hva er den konkrete målsetningen (med deres egne ord, den kan dessuten være noe endret siden vedtaket ble gjort)

Vil man øke ambisjonsnivået når første mål er nådd? (Husk at målet i seg selv ikke er særlig ambisiøst)

Hvor mange prosent økologisk mat sikter Trondheim mot utover 2011?

Hvilke verdier legges til grunn for disse målene om å tilby mer økologisk mat til unge i skoler og barnehager?

På de skolene som tilbyr elevene økologisk mat (frukt og/eller melk), hva er målene med dette tilbudet?

Er de læringsmessige, er målet et bærekraftig landbruk, eller er det for å påvirke aktørens (barnas/elevens) matkultur eller helse?

Hvilke forventninger har man til store aktører som TINE/ Langdalen i forhold til å legge om (deler av) sine leveranser til økologiske meieriprodukter/frukt?

Inneholder det politiske vedtaket noen føringer om å kommunisere med eller påvirke slike aktører?

Hva mener du bør være målet for slike aktører med tanke på leveranse av økologisk mat?

Har man foretatt noen form for opplæring i Trondheim kommune av folk med ansvar for matserving i skoler, SFO og barnehager? Hva har i så fall opplæringen gått ut på?

### **Aktører**

Hva er intervjuobjektet sin rolle i prosessen med å øke andelen av skoler og barnehager med økologisk mattilbud? Hva kan han/hun gjøre for å bidra til at målet nås? Hva er allerede gjort/i gang?

Hvilke aktører er nødvendige for en gjennomføring av vedtaket?

Hvilke politikkområder/ ansvarsområder/ sektorer i kommunen er aktivert for å støtte/gjennomføre vedtaket?

Hvilke aktører er det ønskelig å trekke inn for å øke tilbudet av økologisk mat i Trondheim kommune generelt/ytterligere?

Hvordan stiller foreldre og elever seg til innføringen av økologisk mat i skoler/barnehager/SFO?

Hvordan er holdningene blant skolepersonalet?

### **“Policies” - Hva er gjort?**

Vil målet (20 % flere skoler, SFO og barnehager som serverer økologisk mat i 2011 i fht 2007) bli nådd i løpet av den gitte tidsrammen?

I vedtaket bes rådmannen om å innarbeide økte kostnader for kjøp av økologisk mat til bruk i Produksjonskjøkkenet i årlige budsjettforslag. Hvordan har dette arbeidet gått? Har det blitt avsatt noen midler til innkjøp av økologisk mat?

Koster det mer for kommunen og/eller elevene/barna/foreldrene når skoler/SFO/barnehager går over til økologisk mat? Hvordan finansieres i så fall de ekstra utgiftene? Er det gjennom økt foreldrebetaling, eller via offentlige budsjetter? Dekker det statlige tilskuddet til skolefrukt kommunens utgifter til frukt på skoler med U-trinn?

Hvilke målsetninger har Trondheim kommune når det gjelder å tilby økologisk mat gjennom offentlige institusjoner?

Hvordan ser Trondheim kommune for seg skolematordningen om noen år? Har kommunen noen mål i forhold til å innføre et større mattilbud til elevene enn det nåværende med hovedsakelig frukt og melk? Hvordan ser man for seg organiseringen av dette?

Er det i så fall tatt med mål om å bruke økologisk mat aktivt i serveringstilbudet? Hva med råvarer til undervisning i skolekjøkken?

### **Utfordringer ved innføringen av økologisk mat.**

Hvilke problemer har meldt seg ved innføringen av økologisk mat i skoler og (spesielt i) barnehager, og ved driften av dette systemet?

Hvilke nyttige erfaringer kan hentes fra innføringen av økologisk mat i barnehager?

Har man opplevd problemer med leveranser/tilbud om økologiske matvarer?  
Har man opplevd problemer fra spesielle aktører?

Er etterspørselen etter økologiske produkter høy nok?

Er det problemer knyttet til: Finansiering av ordningen? Kvalitet på produktene? Leveranser? Motvilje hos noen av aktørene?

### **Avsluttende kommentarer**

## Appendix 4. The general interview guide in WP2, iPOPY

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### Policy report (one for each municipality)

1. Introduction
2. Description (factual) from the cases
  - a. When did the system start (use of organic foods)?
  - b. Scope: general municipal information, how many students and schools use the system (percentage), organic percentages and aim, other municipal users of organic foods, etc.
  - c. Internal local or municipal organisation
  - d. Organisation of the meal system (private/public, preparation, transport etc.
3. *Objectives*
  - a. Values and aims for the lunch meal system.
  - b. What are the general objectives of lunch meal systems?
    - i. Health, sustainability, ability to learn, food culture etc
  - c. Formal and informal political goals for the most relevant actors or decision makers.
4. *Actors*
  - a. Major actors, promoters and decision makers involved and their roles, e.g. companies, organisations, students, parents and teachers, persons e.g. ministers, mayors, administration, NGO's etc.).
  - b. Which policy fields and policies are activated (environmental, agricultural, educational, consumer health and protection, food safety, etc) in order to support POPY?
  - c. Which actors and actor groups are influencing or deciding strategies and policies for POP and Public food procurement for youth?
5. *Policies (formal and informal)*
  - a. Policies for the lunch meal systems, and their economic sources on the most relevant organisational levels.
    - i. How lunch meal systems are financed (incl. staff salaries)?
      1. Share paid by parents/municipal
      2. Are the cost visible (transparent)
  - b. Public debates and main controversies e.g. are (organic) school meals discussed from a health related point of view, from an environmental consideration, as a service to the pupils and their parents, as a way of achieving a better learning environment with calmer pupils etc.
  - c. Identify whether the organic meal system is organized within authorities, public institutions, administrative units/departments, markets, research, community, NGOs etc.
6. *Current challenges (specific for introduction of organic foods)*
  - a. Characteristic problems that schools deal with during the implementation and operating of lunch meal systems?
  - b. Challenges (nutritional challenges, quality problems, distribution, absence of a school meal culture, willingness to pay, etc
  - c. How to anchor the projects?
7. *Final comments*



## The iPOPYP project

The aim of the project “innovative Public Organic food Procurement for Youth - iPOPYP” (<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 cooperative effort between Norway, Denmark, Finland and Italy (2007-2010). German researchers are also participating, funded by the Research Council of Norway. The iPOPYP-project (2007-2010) is one out of eight transnational pilot projects funded by the CORE Organic funding body network within the context of the European Research Area.

More at [www.coreorganic.org](http://www.coreorganic.org)

### Project contributors:

**Norway:** Bioforsk Organic Food and Farming and SIFO, National Institute for Consumer Research

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## Other iPOPYP discussion papers in the Bioforsk report series:

*Bocchi, S, Spigarolo, R., Marcomini, N., Sarti, V. Bioforsk Report, Vol. 3 No. 42 2008, iPOPYP discussion paper 3/2008, Organic and conventional public food procurement for youth in Italy.*

*Hansen, S.R., Schmidt, H.W., Nielsen, T., Kristensen, N.H. Bioforsk Report Vol. 3 No. 40 2008, iPOPYP disc. paper 3/2008, Organic and conventional public food procurement for youth in Denmark.*

*Løes, A.K., Koesling, M., Roos, G., Birkeland, L., Solemdal, L. Bioforsk Report Vol. 3 No. 43 2008, iPOPYP d. paper 4/2008, Organic and conventional public food, procurement for youth in Norway.*

*Mikkola, M. Bioforsk Report Vol. 3 No. 41 2008, iPOPYP discussion paper 2/2008, Organic and conventional public food procurement for youth in Finland.*

*Nölting, B., Strassner, C., Løes, A.K. Bioforsk Report, Vol. 4 No.7 2009, iPOPYP discussion paper 1/2009, Constellations of public organic food procurement for youth.*

*He, C., Mikkelsen B.E. Bioforsk Report Vol. 4 No 66 2009, iPOPYP discussion paper 2/2009, Organic school meals in three Danish municipalities.*

*Nielsen, T., Nölting, B., Kristensen, N.H., Løes, A.K. Bioforsk Report Vol. 4 No 145 2009, iPOPYP discussion paper 3/2009, A comparative study of the implementation of organic food in school meal systems in four European countries.*

### All publications can be downloaded from the website:

[www.ipopy.coreportal.org](http://www.ipopy.coreportal.org) and <http://www.orgprints.org/> (enter “iPOPYP” as keyword)