LCM for food supply in public policy – public procurement of food for schools

Niels Heine Kristensen^{1,2}, Mette Weinreich Hansen¹ and Thorkild Nielsen¹

- Aalborg University, Copenhagen, Department of Development and Planning, Lautrupvang 2, DK-2750 Ballerup
- 2) nhk@plan.aau.dk

Abstract The purpose of the ERA-Net project "iPOPY" was to obtain knowledge on barriers for implementing sustainable food in the supply chain for public institution. The case of school meals was chosen for detailled studies. Especially the public procurement of organic food supply chains have been studied. The study was carried out in Denmark, Finland, Italy an Norway. The economic turnover in this sector are counted in billion euros.

The study identified a number of institutional, regulatory, economic, ideological and marked based barriers. The analysis of the collected data documents that many italian provinces and municipalities have succeded in implemeting a relatively high share of sustainable, local and fair trade produced food in the supply chain for school meals, with user payment. In Finland there is a national policy of free school meals for all school children, but Finland have no policy and almost no practices on using sustainable food in school meal provision. In Norway and Denmark the municipalities have sustainable for public procurement, but as school lunch primarily are packed lunch brought from home, sustainable school meal are not well implemented.

The conclusion of the study is that procurement policies on sustainability is possible in the framework of public governance but not always in public-private networks. The methodologies and supply chain management instruments are not yet awailable for embedding sustainable food in public procurement and practices. The implementation of such supply chain policies has to be well tailored for being effective.

1 Introduction

The introduction of organic food offers new dimensions to school meals, and schools offer new dimensions to organic food; when tackled properly. In this paper we will present findings from the iPOPY research project that is funded by the ERA-Net, CORE-Organic-I funding body network¹. It is based on studies of school food policies in ten municipalities (four in Denmark, two in Finland, three in Italy and one in Norway). This article will focus on one case in each country. Educational institutions in several countries are regarded as key carriers of cultural values, which is an important dimension in the examination of school food systems. Therefore local, regional, national and international decision makers get involved in school policies. Agendas raised in modern society are also often addressing the school setting where the health and obesity discussions are two recent examples. The food consumed at schools therefore also has a more symbolic meaning than merely the material and nutritional dimension. This comes to expression in for example the public health aspects of solving obesity challenges which in several countries have pointed at a 'whole

¹ http://ipopy.coreportal.org/

school approach' (Morgan & Sonnino, 2008) in order to implement the nutritional and diet related aspects of eating into for example the teaching curricula and thereby ensuring a more embedded approach than merely serving food to the pupils.

In this article the object of attention will be on the political and administrative level in four municipalities, and not directly the practice at the schools. These decision-making institutions have only had fragmented research attention in the school meal literature (Morgan and Sonnino, 2008), all though the decisions made by these actors constructs important frameworks for the space for action regarding school meals. Also the framed decisions taken outside the single schools on a higher political level exposes a certain understanding and a certain governance perspective although not always explicit. With an empirical basis we will identify networks involved in organic school meal projects at different stages and discuss the role of the institutions around the political and administrative level regarding the promotion of organic food in schools. The research will present a comparative study of four municipalities in four countries. As the results will show the common goal in all four countries of promoting organic food in school meals have very different success. The main theoretical approach will focus on governance network dynamics (Sørensen & Torfing 2007). In order to look at the role of the network actors the new-institutional understanding of interaction between actors as the focus for analysis of institutionalization is used as a frame for analysis (Scott 1995, Sørensen & Torfing 2007). The governmentality aspects of power (Foucault 2009) will also be of interest in this context since it offers a frame of explanation to the development of different networks of school meals in the four cases. A system approach is combined with a view on the cultural and normative aspects of a school meal system (March & Olsen 1995 - from Mckee 2010). The main focus is thus to identify how politicians and administrations together in an interacting network plays a central role in the process of defining and structuring the actual outcome of changing school lunches to be more organic.

The real life implementation of the organic school food is of course dependent of many other actors besides the administrative and municipal level which are the school administration, the kitchen staff, the teachers, the parents and the pupils to mention the most important. Regardless of their important roles they will however act as the context in this article.

Seen from the outside, introduction of organic food may seem to be a simple replacement act where conventional food products are replaced by similar organic products. Deeper insight in the conversion processes shows more complex challenges, which is addressed in several conversion projects in Denmark since the 1990'ies (Kristensen et al 2007). It is well described that for example semi-manufactured food and large shares of meat are something, which has to be changed on the menus in order to keep a realistic budget. This often requires new competencies in the kitchens. At the same time a positive attitude towards the conversion at all levels are crucial. Our study show that the four countries included in our analysis has different cultural and governmental backgrounds and therefore offers quite different interpretations of what a school meal means. This study also identifies some central actors playing important roles for the development of suitable governance networks for the implementation of organic school meals.

To analyse the strategies of central actors for organic school food in the four countries we have selected four cases where in-depth studies have been conducted. The four cases show a varied picture of many different aspects affecting

the conversion. The differences are not only related to organizational or technological changes, but also related to understandings, aims and objectives in cultural contexts. The results of the case study analysis shows a complexity in implementing organic food in existing school food aims, in embedding and implementing school food policies into a daily school context. The variety of the governance networks and regimes amongst the four municipalities has been analyzed in relation to strategies and success, covering both structural and actor related findings.

2 Theoretical and methodological background

The daily meal for school children is a subject that has a considerable public attention in many countries these years. Especially the upcoming obesity and overweight problems among children has caught attention (references). The discussions are often related to the considerations of how to secure pupils a healthy, genuine and tasty meal and whether this is best done by home packed lunches or by serving a meal at school. The concept of "a proper meal" tends to become an obligatory passage point (Callon 1986; Latour 1987) or the common expression or expectation for all school meals, which also qualifies to bridge to other agendas such as food culture, tackling poor or no lunch for school children etc. (Morgan & Sonino 2008). In recent years also locality of the food has been added this attention. On the national level, different policies, cultures and traditions determine the frame for developing school food systems as we will see in this study of the four different municipalities.

The background for implementing organic food in the school food systems is entirely different and e.g. dependent on the national context. In the following we will give a brief summary of this context in the case countries in order to contextualize the results from the single cases.

The difference in the embedded food traditions and cultures in the four countries of case studies are obvious when looking at each county. This means that food related consumption, institutions and markets are quite heterogeneous and dynamic. These differences are also reflected in the school food systems. Whereas school food services are relatively widely embedded in the school systems in Finland and Italy, the Danish and Norwegian school food is predominantly defined by the packed lunch brought from home (Johansson et al 2009, Hansen et al 2010). When it comes to organic, the pattern is different. Here the focus on organic production and consumption is in focus both among politicians, produces and consumers especially in Denmark and Italy, while Finland despite of explicit political goals of increased organic production and consumption, does not have the same level of production and consumption in practice (Mikkola 2008). Norway has some quite ambitious national goals of the share of organic production and consumption, but the actual consumption is as in Finland, quite low (Loes et al 2008).

In *Italy*, the full warm meal system is well established. The operational management of the school meal procurement is decentralized and organized at the local municipal level, and therefore there is a great variation between municipalities of which there are more than 800 throughout Italy (Bocchi et al 2008). In *Finland*, the warm meal system is also well established and has a long history just as in *Italy*, but the school meal system is much more centralized (Mikkola 2008) Important decisions about the regulatory framework such as nutritional recommendations, in-house food safety control, or mandatory vocational curriculum for the employees are taken at the national level. In general, *Finland* can be

characterized as having a scientific management approach, where *Italy* in a cultural context tends to have strong elements of an artisan approach with dinner ladies at each school cooking most of the food from the ground, although variation can be seen.

In *Denmark*, the additional food and meal system is negotiated at the moment; rather many local initiatives try to extend the school food procurement into the direction of full warm meals especially in the bigger cities whereas the countryside still is characterized by lunch boxes brought from home (Nielsen et al., 2009; Hansen et al 2008). In *Norway*, the lunch box culture is the dominating and food procurement is mainly restricted to milk and fruit schemes (Løes et al 2008). A few urban Norwegian schools carry extended (including hot) meal systems and again some of these have organic products included.

The four cases in this article represents an Italian case describing one of the ambitious regions in Northern Italy in terms of organic school food in a whole school approach, a Danish case describing an ambiguous political vision of organic school meals for pupil in the capital and the challenges of this vision in relation to a lunch-package culture and a free choice ideology, the Finnish case shows an atypical story of a way to develop the top-down state controlled system and a Norwegian case describing the big challenges of a government vision of organic school meals in a municipality when it comes to realizing it without extra resources or competencies.

The four qualitative case studies in four selected municipalities in four European countries all have experience with organic school food. The interviews has along with comprehensive literature studies of national reports and statistics, has been the main methodological basis for the gathering of data for the study. The interviews were carried out as individual face-to-face interviews, and telephone interviews simultaneously in the four cases. Data from these case studies have been supplemented with data from four national data reports that have been conducted by all national partners in the iPOPY project, mapping and analyzing the state-of-art of organic school food schemes in Denmark, Finland, Italy and Norway and reported in Nielsen et al 2009. The informants have been key persons in the political municipal level strategic departments and in central administrations in municipalities and for Italy also in the Regions. They were identified by a snowballing methodology where pre-knowledge of the cases initiated the contact, and the first interview person identified other key actors in the municipality. Most interviews were face-to-face but some of the interviews with politicians were by phone. The phone interviews have been documented through notes taken during the interview.

When studying the POP policies in different school food systems in different municipalities it is obvious that there are different structures and contexts, but also different actors and processes when it comes to the visions and implementation of these into reality. The policy approach to the embedding of organic food in school meal schemes is based on an analytical understanding of the actor roles in transforming systems.

3 Results and discussion

3.1 Case findings

The study has uncovered some major characteristics in the different school meal systems, and differences in the way organic foods have been handled in the four municipalities. A short introduction to the four cases will highlight the differences and similarities:

Denmark: The Danish case is the capital of Denmark – Copenhagen. Here the organic school food has been on the agenda for some years. Politically is has been a priority for the municipality to promote organic food. Since 200X the 'Meal-house' has been an important actor together with the childrens administration in the reorganization of organic school meals at all school in Copenhagen. The challenges for the schools and the administration today is connected to a quite low market share in a traditional 'lunch package culture'. On many schools there are no separate facilities for eating the food in school, which means that many pupils eat their lunch en the classrooms.

Norway: In Norway the case is a large municipality approximately 400 kilometres north of the capital Oslo. The organic school meal context starts with a political vision. The vision expresses a wish to copy an organic food programme into the schools in the municipality. The challenge of this vision turns out to be very big and the project has to be downsized dramatically. Today there are only milk and fruit schemes in the schools and here the organic share is quite modest. Some of the problems are connected to the lack of competencies in the administrative systems in terms of the conversion strategy and practice. The person who gets the responsibility for driving the process has a personal interest in organic food but does not have the professional competencies. Besides the economic limitations makes it very difficult to act because the facilities that has to be prioritized is quite expensive. A third barrier for the vision of organic school food in a Norwegian municipality is the lack of sufficient supply. The organic production and consumption in Norway in general are quite limited and the suppliers are few. Besides the biggest dairy for example is not very focused on their organic product line, which makes it quite hard to find these products on the market. Another area described in the case is the fruit and vegetable suppliers who are not able to get the organic local produce in sufficient amounts.

Italiy: The Italian case is the most developed in terms of organic school food since Italy has a national legislation promoting organic food in the school and they have a long tradition for school meals in the primary – and lower secondary schools.

Finland: The Finnish case shows a rare exception in the Finnish systems because it is a story of a small municipality where the organic food actually has been introduced to largely the same price as the former food. The price focus is quite high in Finland and therefore it is difficult for many schools to put focus on organic food. In the specific case it is clear that the role of the person interviewed is crucial for the development since he has been able to convince the 'system' that this as worth trying.

As in Italy Finland has a long tradition for school food and in Finland it is tax-financed. This on the one hand means that no one has to pay directly for the school meals and on the other hand that the management is controlled quite hard top-down and therefore difficult to change.

3.2 Key actors and strategies involved

In each case there have been some actors in the school food networks that have been playing important roles for the promotion or limitation of the organic food at schools. The driving actors have been able to act inside the political and administrative system in a successful way and have been supported in different ways by the networks. A strong political support is seen in cases in Denmark, Norway and Italy where there has been a political aim or a formal legislation supporting the conversion to organic school food. In Finland the case study shows a more actor dependent story that has been able to convince the price oriented municipal administrative system to try organic despite a preliminary resistance.

The role of the price of the meal

The major actors in the school meal cases are confronted with and involved in many aspects related to school food that is market issues, regulatory issues and civil society issues. In most European countries education is tax financed, but in our study we find that when introducing food service systems to public schools, an economic public controversy is introduced to the schools. Finland is one of the exceptions here. This controversy is especially found where user payment is practiced, in Italy and Denmark but also relevant for the Norwegian milk and fruit schemes. The controversy is related to the relation between the price and the quality. One of the elements in this is related to the fact that if the food is too expensive the sale will drop. If the quality in the other hand is too low, or the food is not popular among the pupils, the sale will also drop. In Denmark there is an expectation that the price per meal cannot be above $3 \in$ if a certain level of sale is to be expected. In Italy, the user payment has quite different expressions since Italy has chosen to fix the price on $2 \in$. Currently, It has to pay $3 \in$ for each meal just in order to cover the food expenses. In Finland school food is an integrated part of being in school and the expenses are covered by the through the national tax-system of the municipality. The costs in Finland are very low compared to Italy (around $2.50 \in$). And there is a general focus on cost reduction, which makes the introduction of organic school food more challenging.

The regulatory issue shows some differences in the way that the systems are organized. In Italy and especially in Finland there is a top-down approach towards the implementation of school meals. This means that the state level for Finland and the municipal and regional levels for Italy have the major decision-making power. In Denmark and Norway to some extent, there is at the same time a political aim of healthy school meals for all pupils, but also an ideology of the free choice for everyone, which makes the decision-making power more diffuse and decentralized. This combined with the strong culture of lunch packages makes it difficult to introduce the meals at the schools. Interestingly these differences also relate to some different reactions at the civil society actor level, that is parents and other civil society actor groups related to school meals. At the school level, the roles of the school head masters and teachers are generally defined via a top-down hierarchy in Italy and Finland and here there is not room for a reaction from school employees or pupils. In the Norwegian and Danish cases, on the other hand, these actors can play a very important positive or negative role regarding the implementation and support to the system.

The differences between the systems may also be explained through the civil society actors' commitment. In Italy and Finland there is an expectation from the parents that their children will get a proper meal at school,

In the Finnish case there are almost no parental voices in relation to for example the quality or to the organic share of products. Most parents seem to be satisfied with the possibility of their children getting a warm meal at the school, and it seems as if parents generally support the system.

In Denmark and Norway there are some private organizations and some politicians supporting the introduction of school food, and also a quite lively debate about food for children. This may be connected to the less embedded school food systems in these countries which makes debate more obvious and maybe more necessary. An exception though is the Norwegian organization for all Norwegian parents of school children. They have not expressed any public opinion about school meals. This confirms the overall picture of Norway as a country where the lunch package still is most dominating and accepted cultural norm. However, this organization is generally not a very active civil actor in the Norwegian society. Pupils' parents is a rapidly changing group with highly diverse opinions and it is a challenging task to act on behalf of such a group of people, in spite of the many interests they should have in common.

3.3 Governance-network actors in the four cases

The four cases in this article show both common development tracks and differences due to different things. It is already described that the structural differences in the four countries means that the possible developments are to some extend given by these structural frames. It is for example difficult to make a strategic focus on serving school meals to all children in countries like Denmark and Norway due to the fact that there is a lack of facilities to cook and serve the food. It will require a large investments from the states to change the lunch-package tradition in these two countries. On the other hand the structures are not able to explain all about the differences in the four cases. Here the actor roles in acting in the structural frames are in focus. For Finland this means that the case description shows a profile where the organic share of products are much higher than in most of the rest of the country due to one man in the administration being able to argue the organic share higher if it just has an economic focus as well. In Denmark the Copenhagen case also indicates that the lunch package structures can be challenged if there is a political will and economic instruments to do it. In Norway the intentions of doing the same met challenges in the institutional capacity and the lack of competencies related to organic food systems made the decision hard to reach in the practical life. In the former description of the context it seems as if the two top-down managed systems in Italy and Finland naturally are the most embedded systems. Especially in Finland there is a very articulated, law-based and institutionalized system with the major focus on nutrition and scientific management aligning a so called 'plate-model' for the content of the school meals (Tikkanen 2009). The school food is free in the sense that it is paid by the public school budget. The price focus is kept via public tenders, and quite important as for example organic food is almost absent. The primary focus in general is on cost reduction, which leaves the room for manoeuvre quite small regarding organic products. FI is an example of a system where cost reduction and organic has been combined due to the work of one man (a fire soul). In Italy there is a quite complex system of regulatory units on the four levels: state, province, region and municipality. There are differences from place to place how much the school food is prioritized, but on the regional level as in some regions of Northern Italy, organic and local food is important issues and much creativity has been in place to assure the organic and local food is served to pupils.

On the other hand the involvement of parents and other civil actors are seemingly more reduced in these countries. Organic food can therefore be characterized as relatively weak embedded in the Finnish cases, whereas in Italy the indications of embeddedness is established through manifest laws and regulations – which all though seem weak implemented on the some regulatory levels (and without sanction), on the distribution of the economy (support), on the share of organic products and on the regional origin.

We find that if the degree of embeddedness of the systems is connected to the lack of public support on one or more of these indicators of embeddedness, or to whether the local public decision makers may prefer some other priorities than what is stated from the higher political and regulatory levels. The embeddedness of organic food in schools in the Norwegian case is weak at the regulatory level. But in all the cases studied there has been a political aim both nationally and locally in relation to organic school food, hence when it comes to the practical actions it has been very hard to fulfil these statement due to different aspects – among others the lack of key-actors to carry the message and unresolved economic aspects has played an important role.

In relation to the aspect of embeddedness of the systems it is clear that the more formalized, politically prioritized and economically supported systems, the more embedded systems, in terms of how many children use them and how developed the structures are around the food (canteen facilities etc.). On the other hand these top-down regulated systems may lose the civil embeddedness (legitimacy) and the parents may feel decoupled from the decisions. In that sense the systems may become socially disembedded. In the less well developed school food systems in the Norwegian and Danish cases, the initiatives that are taken to introduce organic food in schools and school meals in general are suffering from a lack of regulatory embeddedness as well as other types of embeddedness. Structures to support a school food system such as kitchens and canteen facilities and personnel is generally not available, and there is a lack of economical support. On the other hand the involvement of the civil actors may be easier because the systems are yet so immature due to this lack of regulatory embeddedness.

4 Conclusions

The case studies in four European countries shows interesting potentials and challenges of different content when it comes to converting from conventional to organic school food or introducing organic school meals in schools. From the study it is obvious that both structural and actor related actions are important in the development of from the idea of introducing organic until it is either realized or has to be left again. Also the cultural background of different societies plays an important role in the context of how organic school meals is met. One overall conclusion from the study is the importance of strong networks and institutions around the organic school food and in addition also the importance of 'firesouls' fighting for the organic food in a system where the room for manoeuvre are narrow.

It is clear from the studies in this part of the iPOPY project that the complexity of school food systems, where different municipalities have various approaches, and many actors are involved, that a fruitful discussion to address obesity and

health problems among children should build on some analytical understanding of the many different aspects and cultural meanings of a given area, in this case the school meals.

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