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**SMALL SCALE FOOD PROCESSING  
THE IMPORTANCE OF RELATIONSHIPS IN PRODUCT DEVELOPMENT**

**ABSTRACT**

In this paper focus is on relationships in product development among small scale food processing firms. The process of product development, and how internal and external resources are combined for developing a product is analysed. It seems like the way of combining the enterprise' own resources, with knowledge resources from external counterparts (both experts and colleges) and feedback from customer make the enterprises able to develop products appreciated by customer groups. The discussion is concentrated around challenges regarding competence; how to find and increase competence both among small scale food producers and the support system. Because of long distances between firms in Norway and lack of competence in most areas connecting to product development in small scale, it might be difficult for enterprises to find appropriate partners for co-operation. Therefor the authorities should make different kind of efforts to increase the competence in the field and support firms in establishing networks and relationships for product development. Finally new challenges when small scale food processing firms expands are discussed. The paper is based on a survey including all Norwegian small scale food processing firms and three stories of product development in small scale milk processing firms. The stories are part of data gathered for a case study of small scale milk processing in Norway, which has been collected for many years in connection with different projects.

**INTRODUCTION**

The restructuration process of the Norwegian agro-food supply chain the last decades has resulted in structure rationalisation and close down plants. For local communities

this process has resulted in less business activity, reduced employment and tax income, and loss of competence related to agriculture production and distribution. This development has given rise to a discussion about how to maintain or increase the local value added in rural areas. The same discussion is going on in other European countries and other parts of the world, where the main reason is the change in agriculture support mechanisms.

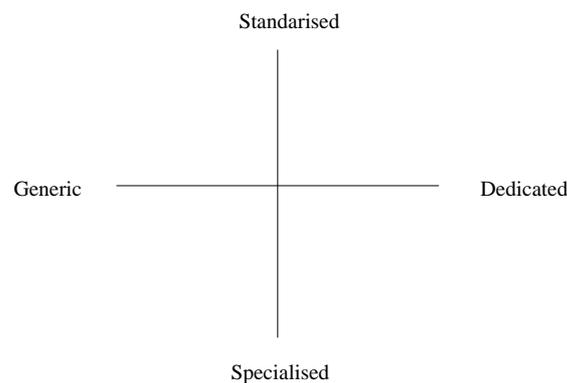
The Norwegian Government has encouraged farmers to establish small-scale food processing at the farm to increase entrepreneurship and business activity in local communities. The authorities have developed economical support systems directed toward this group of entrepreneurs, and they established the network organisation “Norsk Gårdsmat” in 1998 to support farm producers in the area of marketing and sale. This Governmental effort has contributed to the establishment of several farm processors of food products in Norway. Most of these enterprises are still young, and we are only at an early stage of research in this area. As Borch & Iveland (1998, p.106) stated: *“Much more has to be done to cope with the unique challenges of the niche producers”*.

The aim of this paper is to study how small-scale food producers develop their products successfully, and in particular study the combination of resources needed in this process. An important question is the significance of relationships with specific counterparts, and how these relationships affect the final products. The contribution of this research will be the empirical findings that hopefully give a better understanding of product development among small scale food producers and the need of support in this process.

## **THE AGRO-FOOD INDUSTRY AND SMALL SCALE FOOD PRODUCERS**

Storper (1997) has developed a model based on ideal types of patterns or world of production. He identifies four basic types of products, each associated with fundamentally different forms of markets and technology and hence defining different requirements for the co-ordination of actors in their development and production. My approach is inspired by Murdoch et al. (2000) who apply this model on the agro-food sector. The words of productions are ideal types that illustrates the likely combinations of conventions that will be found in any particular production structure. They are derived from two principal dimension of production (see Fig.1): first whether the product is “standardised” or “specialised”, and second whether it is “generic” or “dedicated”. A standardised product is usually produced *“using widely diffused production technology in which quality is so widely attainable that competition comes to be inevitably centered on price”* (Storper, 1997,109). Example includes mass-produced chickens, milk or cheese. The specialised product is made with technology and “know-how” that is not as easy to attain, so that *“the quality of the product is always an important ingredient in the competitive strategy of the firms, where in the extreme case price becomes a secondary element in competition”* (Storper, 1997, 109). On the second dimension, a generic product carries with it such well-known qualities that it can be sold directly into the market, a relatively stable and predictable market. A dedicated product on the other hand is oriented toward a very particular set of clients in a “market” which is composed of the interpersonal negotiations that prevail between locally based quality producers and their customers

(Murdoch, et al. 2000). The standardised-generic world is currently the most significant in the food sector. According to Murdoch et al. (2000) it is possible to see a change in focus where standard-generic producers turn their production process toward more dedicated consumers, and specialist producers seeking larger market through more standardised process of production. Our focus in this paper is the specialist-dedicated producer, producing quality products for niche markets.



**Figure 1. Storper's (1997) two dimensions of production.**

The growth and development of small value-adding agrifood firms, i.e. specialist-dedicated firms, is according to Murdoch et al. (2000) based largely on locality. van der Ploeg & Saccomandi (1995) describe these as endogenous development patterns because they are based mainly, but not exclusively, on locally available resources. Such resources can include for example labour, culture, processes, ecology and climate. Endogenous development can be defined as much by the process as the outcome (Ray, 1996). This endogenous development tends to reinforce local identity, in contrast to the modern commercial agriculture system where many of the inputs and benefits are external or disconnected from locality (van der Ploeg & Saccomandi, 1995).

## **INNOVATION ACROSS FIRM BOUNDARIES**

In research on small scale food processing it is found that innovation often is a collective process rather than origination from sole “innovator” (Cooke & Morgan, 1998). Successful firms benefit from being part of different network that forge synergies between actors. Studies of industrial firms confirm the importance of external collaboration with users and external sources of expertise for innovation (for example: Freeman, 1991, von Hippel, 1998, Håkansson, 1993). Dosi (1997) with background in Evolutionary Economics discuss how firms' innovative activities are based on learning from internally gained experience as well as from the experience

gained from external sources such as e.g. customers, suppliers, universities, consultants, licensors etc. Business relationships, and their function for innovation, have also been studied by researcher within the Industrial Network Approach (for example Håkansson, 1987, Håkansson, 1989, Ford et al., 1998). An important empirical finding is that *“development within a single actor (company) is formed [...] through interactions with its counterparts”* (Håkansson, 1993, p.254). Interaction takes place in relationships between firms. Also counterparts relationships might influence the focal firm's resource development process, which means that *“the development work in a company is regarded as being embedded into a network context of development works of other companies”* (Torvatn et al. 2000, p.5).

The Industrial Network Approach regards resources as heterogeneous which means that their value depends on which other resources they are combined with. This implies that there will always be a potential for changing and developing resources, or changing the way in which they are used in relation to other resources. *“The effect of heterogeneity is that knowledge and thereby learning come into focus; ...”* (Håkansson, 1993, p. 210). The firm's products are based on its existing collection of resources, and on the way in which these resources are tied together with resources controlled by a number of the firm's customers, suppliers, and other companies in the firm's business context (Torvatn et al. 2000). Relationships are the kind of assets that is difficult to reproduce and emulate for others and therefore critical for a company's performance. They are resources of a peculiar type as they cannot be controlled by any single party in isolation, but are controlled jointly by the parties involved. Relationships may therefore be the most significant resource in what makes a company capable of its unique performance (Håkansson & Snehota, 1995).

## **METHODOLOGY**

Two methods were used for gathering data, both case study research and a survey. The survey is based on a similar survey accomplished in 1997 (Borch & Iveland, 1997). A structured questionnaire including all Norwegian small scale food processing firms were used. The questionnaire was sent to 509 enterprises, where 168 returned ( i.e. 33%).

The material gathered for the case study has been collected for many years in connection with different projects. What is presented here is three stories of product development, which is just a part of the material gathered for the case studied of small scale milk processing. The data are both retrospective and real-time, and multiple sources of empirical evidence are used. The three farm dairies were visited in 1998 and personal interviews with open ended questions were asked the couple/owners running the enterprises. In one of the cases three personal interviews is made of the producer, from spring 1998 to January 2001. Additionally, personal interviews with some central actors in her network were accomplished during the autumn 2000 and winter/spring 2001. There is also accomplished personal interviews with other small scale milk processors in Norway and with actors in the regional and national support system. Also company papers, articles, papers and reports from earlier studies on small scale food processing enterprises are used as a basis for the study.

The three stories presented below were chosen because of extended co-operation in

the process of product development. It seems like these enterprises have benefited from the external resources attained in the product development process. In general it seems like these external resources from counterparts have strengthened the small scale firm's basis for survival and growth. Despite small scale milk processing it the main activity in all the three stories, I believe there are possibilities to learn something from the stories for persons engaged in product development of small scale food processing in general. When one case is conducted, "analytical generalisations" is made (Yin, 1989).

## **EMPIRICAL BASIS: SMALL SCALE FOOD PROCESSING ENTERPRISES**

First I will give a short summary of the results from the quantitative study with the emphasis on product development. Then 3 stories of product development will be presented.

### **Small-scale food processing enterprises and product development**

The 168 Norwegian small-scale food processing firms that have answer the questioner are in average seven years, e.g. established in 1994. Most of the firms are thus in a pioneer phase. 73% combine food processing with farming. The food producers are mainly very small, with an average of 1.6 full work years. For 76% of the firms the turnover for their products was in the area of 30 000 – 1 000000 NOK last year (2000).

There is a large range of different products produced by the small-scale producers. The dominating product categories are meat, dairy products, pastries & flour products, fruit & berries. According to the small-scale producer they differentiates their products by selling their products as quality food (89%) with a special taste (83%), or as traditional foods that lack artificial ingredients (82%). It is also important that the products are locally produced (70%) and home made (77%) and that the producer has knowledge of the origin of the input resources (83%). The result from the study show that the producers emphasis characteristic of the core product and the production process as to special quality and special recipes based on traditions, where the local aspect is an important part of this.

37% of the producers believe it is difficult to imitate features with their products or the competence that differentiate their product from the competitors. The main competitors are mentioned to be larger companies which produce standard products (42%), firms producing gourmet products (high price level products) (34%). 24% do not believe they have any competitors. The price level of the products is by 66% mentioned to be higher than the price of standard products from large firms.

When it comes to product development, 42.7% of the enterprises answer they are working continuously with this function. When it comes to co-operation in product development only 13% answer they co-operate in this area. Co-operation with external actors seems to be limited in most areas except in sales and marketing where 23% co-operate. Support in product and process development is gained from different geographical areas as table 1 show:

In Municipal/neighbour Municipal	36.3 %
In region	27.4 %
Outside region	14.9 %
Abroad	9.5 %

**Table 1: Assistance in product development**

Most firms attain the support needed in their local community or in the region (64%). A small part of the firms have to go abroad to attain the competence needed. Assistance in connection with process development show nearly the same results. 38% of the firms lack assistance in the area of food production. 16.5 % feel that their competence in product development is so bad it is difficult to reach or maintain the competitive position in the market.

Including new raw materials into the basis product/resource	23.4 %
New combinations of the raw materials	25.2 %
New production processes	45.3 %
Developing new products with new raw materials	42.2 %

**Table 2: In what way does new product develop?**

From table 2 we can see that product development might consist of quite different development processes. The emphasis is on new production processes and developing new products with new raw materials, which usually are very competence challenging processes.

### **Three stories of small-scale milk processing enterprises and product development**

Milk processing, like food processing at small-scale level in general, nearly disappeared in Norway before the new attention toward this kind of niche products raised in the middle of the 90-ies. Today there is a growing number of enterprises which base their activity on milk processing, both traditional- and not traditional based. An important challenge for these firms has been to find relevant competence in most areas connected to establishing and running small-scale milk processing (Kvam, 1999). In the following we will focus on the product development process.

#### **The traditional based enterprise**

This enterprise is located in the south West of Norway in a mountain area that is a popular place for tourists to visit. The goat farm is quite small with its 40 animals. This and the other goat farmers in the community have long traditions in making cheese. Still they use the time-consuming handcrafted production method that they always have done, and they are producing organic cheese. Until 1988 the community was not connected by any road so the farmers were allowed by the dairy co-operative to process their milk on their own. The local food store was behalf of the dairy co-operative allowed to sell their products. At the end of the 1980-ies the goat farmers of the community saw a new potential in developing their white cheese, i.e. to process and marketing this products as a specialised product toward a growing group of customers demanding gourmet food. Until that time the white cheese was looked to be

more a “surplus product” from the brown cheese production that already was quite famous for its quality. The producers established a formal co-operation for developing and marketing their white goat cheese to a commercial product with their local brand name.

Of the couple running the enterprise, it is the woman who is processing the milk. She is from France and has some experience in making unpasteurised cheese and butter from home. At the age of 17 she came to this community to work at their summer farm. The experience base of cheese making she got from her own work with milk processing in Norway and from the experience base of the other cheese makers in this community. When they decided to commercialise the white goat cheese there was a need for more both formal and experience based competence. Therefore, and because she had to convince the Norwegian authorities they had the competence in making unpasteurised cheese, she joined a 2 – year course in food processing at a College in France with emphasis on small scale cheese making. Additionally she has joined 3 courses in farm processing of unpasteurised cheese, and she has arranged 3 trips to France and Austria to visit farm dairies. The first trip was with a Swedish group (see the third story), the last trip was with the counterparts from her own community. During her visits to France she has established relations and network to persons with high competence in the area of making unpasteurised cheese. Since 1996 she has joined an annual meeting for all actors involved in traditional cheese making in France.

She describes the cheese making society in France and some other European countries to be very positive. People she meet share their experience, gives advises and receipts. One of her teachers told her that there were no securities in cheese making, because each person has to find his or her way of doing things. Each person attains ideas from a lot of places and mixture their own “cocktail”. She describes cheese making as a complex but not complicated process. People with just one course in cheese making are able to make cheese. The complexity of the process means that each person has to find its own balance in producing the cheese.

Despite all courses and new knowledge the goat farmers had problems with the quality of the cheese. An advisor from France was contacted and joined them in the cheese making process for one week. The producers has to add some bacteria’s when making the cheese to gain the new balance which was disturbed because of hygienic demands from the authorities.

### **The new established enterprise**

In the spring of 1996, the woman at the farm, decided to join a course in cheese making in Sweden. After about 1.5 years of trial and error processes in a small home-produced vat for cheese making, she bought a new vat from a firm in the Netherlands in the spring of 1998. From the autumn of 1998, she started regular production of pasturised cheese. Beside the cheese production the farm produces cow milk, meet and grain.

Last year (2000) they produced about 4000 kg of cheese. She spent about half of the milk production at the farm on her cheese making activity, i.e. ca 50 000 litre. Approximately 50% of her products are sold from the farm shop, the rest are mainly

sold in the region.

The first product developed was a salad cheese, i.e. a cheese made for putting into salads. It is a white cheese made from cow milk. The cheese is matured in squared moulds and then divided into smaller pieces. The oil made from sunflower mixed with Norwegian organic herbs, some imported spices, and fresh garlic is poured on the cheese. When making the salad cheese, she also gets a white mould cheese which in the same production process. When the salad cheese has to be stored for one week, the white mould cheese needs 14 days for the mould to grow out, and then it is stored for about 6 weeks to be matured. In her third product she adds some cumin into the cheese before it is put into the moulds. Apart from the cumin, this is the same product as the white mould cheese. Since last year, they have produced their own cumin at the farm. Cheese in herbs is the fourth product. This is a fresh cheese where she adds organic herbs, paprika and fresh garlic. All the four cheeses mentioned above are produced in the same production process.

When joining her first course in cheese making in the middle of Sweden, she got a basic receipt in how to make a white goat cheese. She learned a basic technique in cheese making in Sweden. From this basic knowledge she has made variations, which means that her cheeses are different from the counterpart' cheeses. When problems arise in the cheese making process, she just phones her Swedish counterparts and asks for help. The counterparts are mainly the teacher on the courses she has joined in cheese making who also has his own small-scale dairy, and another small-scale milk processor in the same area in Sweden (The Swedish well established enterprise in the third story). When she needs more knowledge in small-scale cheese making in general she makes an appointment with the teacher to join him for a day or for a course in cheese making. Astrid describes the relationships to her Swedish counterparts as personal and very good. They visit each other regularly and offer each other different kinds of services.

Two persons at the local plant of TINE Norwegian Dairy, have also been important supporters during the whole development process in production and quality questions. An advisor in product development has been an important supporter in developing receipts for how to use the cheese in different dishes. One product, a gourmet brown cheese, is made on a license production for this product developer. From this advisor she has got a basic knowledge that she use when experimenting in developing new products and dishes.

These relationships mentioned above have been and still are the most important supporters in the development process of new products. Other producers have not been able to establish such a close and fruitful relationship to these actors. She believe the reason might be that she is always very grateful when getting support and she always tries to give something back. To sustain such valuable relationships there has, according to my informant, to be some a give-and-take situation where both parties feel they get something back. For getting new product ideas and impulses, she has joined some trips visiting small scale dairies in other European countries.

Feedback from the customers is important in different ways. Based on this feedback she decided to use organic-, good quality- and safe ingredients in her products. She has also experienced that the local aspect is important, local ingredients and local

names. The picture of her farm on the etiquette, i.e. the presentation of the product is also of importance for sale. Another experience is that the quality of the products has to be reflected in the price. The price has to be at a certain level for customers to believe it is a quality product.

### **The Swedish well established enterprise**

When the interview was conducted about thirty small-scale milk-processing enterprises existed in this region, i.e. in the middle of Sweden. This concentration of micro firms processing milk is unique both in Sweden and other Nordic countries. The background for this establishment is that the regional dairy co-operative decided not to fetch and process goat milk anymore. The goat farmers had to start processing themselves or stop production of goat milk. As a result of this situation the regional authorities established a project directed towards goat farmer who wanted to start small-scale milk processing at their farm.

The Swedish enterprise is owned and run by two men. In 1998, at the time of the interview, the small firm produced about 16 different organic cheeses of pasturised cow and goat milk. Beside the two owners, the enterprise had one person employed and two persons were hired for a shorter period. Since they build the dairy in 1990, they had been member of a “new co-operative”. At the time of the interview there were 7 members of the co-operative, but there had been 17 members at the most. Each member farm has their own dairy and produces their own cheese. The distances to the other farms are from 45 to 250 kilometres.

The co-operative owns a store where cheeses from the members are brought. This cheese-store employs people to take care of the cheese and make agreement with the different food stores in the region about sales. This new co-operative has made an unique agreement with the traditional dairy co-operative in the region for transporting their cheese from the cheese-store to the different food stores in the region. Our case firm deliver about 80% of the cheese production to the store, where the rest are sold from the farm and when joining “stands”. Totally they produce about 10 ton goat cheeses and 10 ton cow cheese. The enterprise plans to build a new cow milk dairy in co-operation with three neighbour farmers where the production of cheese is supposed to reach about 65 ton.

In this summary we focus on the first cheese developed, a white goat cheese. The members of the co-operative decided to make the same cheese and they hired the man who had developed this special white goat cheese to learn them the production process. When he visited the different farms he made the cheese together with each farmer, so they in praxis learned how to make the cheese. The new co-operative got a very good response on this cheese from customers, which gave the co-operative a basis for further development. In 1998 the member enterprises produce both similar and different cheeses. They have been more and more specialised in the way that each enterprise make the kind of cheeses they have been most successful in making.

Beside the support and assistance from this hired man, they learned by doing themselves and by discussing and sharing experiences with other members of the co-operative. Our enterprise hired initially a transportable farm dairy, and during a period of two years they went through a trial-and-error process in cheese making before they

build their own dairy at the farm. All the time they made experiments for improve existing cheeses or making new kind of cheeses. They got ideas and receipts from visiting other farm-dairies on trips in Europe.

The members of the co-operative have an open dialog about how to make cheese. They discuss with each other regularly and give advises and receipts based on own experience. Despite of exchanging recipes it might not be possible for another farm dairy to succeed in making the same cheese as his counterpart. A lot of factors influence the process of cheese making. Just a small difference in one factor may give a very different cheese quality. According to my informants it is nearly not possible for two dairies to make exactly the same cheese.

Another important person in product development in general the last years has been a French advisor in cheese making. The enterprise got this contact through the French woman in “the traditional based enterprise” in story number one. This advisor has a lot of contacts with cheese makers, advisors and other persons connected to cheese making all over both in France and in the neighbour countries of France. He has visited the Swedish producers regularly since they established the contact some years ago and joined each of the co-operative members in cheese making if they felt the need. He also gives courses in cheese making when visiting Sweden and recipes on how to make different cheees. This man has also joined Swedish groups on trips to different dairies in France, Switzerland and Austria. According our Swedish informants this person has contributed a lot in product development among the co-operative members. The knowledge gained makes them able to better understand and influence the cheese making process.

## ANALYSIS

The processes of product development in the three stories are similar at many points. The process is characterised by different ways of learning, i.e. attaining knowledge and experience:

- trial and error processes on their own to gain experience, or learning by doing
- joining courses in cheese making, contact with professional advisers for advises and for joining them in the practical cheese making process, and thereby learning from others' formal knowledge and experience.
- joint learning with colleges. In two of the three cases there were a formal co-operation among cheese makers on product development. In the third case there is an informal information exchange and discussions about product development between colleges, there is no common product development process. Additionally there seems to be an extended openness and willingness to share experience and receipts among colleges in general.

In our cases it seems like all these ways of learning is going on continuously, and that all these ways of learning gives important contribution in the development of new products. Like Dosi (1997) discusses, innovative activities are based on both learning from internally gained experience and as well as from experience gained from external sources.

The case studies show that cheese making might be quite different processes

dependent of both scale of production and processing from pasteurised or unpasteurised milk. There is a need of a specialist knowledge and experience in the different processes to ensure good quality. A person with competence in cheese making from a large dairy based on pasteurised milk, is therefore not able to give specialist knowledge in small scale processing neither in pasteurised or unpasteurised processes. On the other hand, he is able to give advice more in general to the small enterprise based on pasteurised milk processing as showed in the story of “the new established enterprise”.

Visiting and discussing with colleges and joining courses in cheese making are important for getting ideas of what products to develop. Both the well established- and the new established enterprise have got ideas and receipts both from well established relationships but also from trips where visiting new colleges and joining new courses in cheese making. The Industrial Network Approach emphasizes that it is necessary with both stability and variety in relationships to enhance resource development and learning (Håkansson, 1993). Our three cases show the importance of both in the development process of their products.

Compared with results from the quantitative study of small scale food producers, the situation in the three stories seems to be quite different. Just a small part of the small scale food producers co-operates in product development. There might be different reasons for the lack of co-operation, for example they do not have/find any partners, it does not exist much competence in the field in the country, or they might be satisfied with own knowledge/experience (Borch & Iveland, 1997, Kvam, 1998). In general there is obviously still a lack of competence both formal and experience based in many areas of small scale food processing in Norway, because this is a relatively new established industry.

Relationships both for attaining product ideas and knowledge in cheese making seems to be important resources for developing new products according to the stories told. But it is the way these enterprises combine their own resource with these external knowledge resources which make them unique (Håkansson, 1993). In all the three stories the enterprises emphasize local resources and processes as the main point in differentiating their products. This is also the situation in the quantitative study. It seems like the close contact with customers, i.e. face to face contact, gives an very important feedback on factors connected to the local aspect, but also factors like the taste of the product, the design of the package, the name of the product, etc. Further it seems like the process of making a quality cheese, where the quality mirror a more “objective” criteria of quality for this specific production, is a process where only professional consultants and colleges have the ability to contribute. The feedback from customers give rise to preserve or develop other kind of quality dimensions, more “subjective criteria” often connected to locality. These factors are the one that differentiates them from conventional products produced by larger firms.

What was a bit surprising in the study of the small scale cheese makers, was the openness and willingness to share experience and receipts. The producers were not afraid that other enterprises copied their products. Each enterprise combine their own resources with the knowledge resources of their relationships and feedback from their customers. Because each enterprise has its own basic resources different from others, and each enterprise has its own network which at least partly differ from the other

enterprises, the combination of recourses in the product development process will be unique. According to the woman in “the traditional based enterprise” each firm will end up with its own “cocktail” depends on natural resources, animals, climate, traditions, experience base, customers feedback and network to external relationships for knowledge and ideas. It seems like this openness and willingness to discuss is a very important way of establishing network for learning. In continuously discussions with colleges where experience is shared all parties will increase their knowledge. These relationships seems to be important resources both in developing products and the enterprise.

## **DISCUSSION AND IMPLICATIONS**

Product development is just one of many challenges of small scale food processing enterprises in Norway (Borch & Iveland, 1997, Kvam, 1999). I have emphasised these processes because the product developed is a very important starting point and basis for further development of firms.

Management implications of the findings is the importance of continuously seeking for knowledge and ideas, establish relationships with counterparts for discussing and advises and maintain the close contact with customers. This seems to be one way of reaching and maintaining unique performance. According to the results from the quantitative survey, just 37% of the firms believe it is difficult to imitate their products. 42% of the firms have larger firms which produce standard products as their main competitors. These firms have perhaps not been able to differentiate their products in a way appreciated by customer groups, or they might not target customer groups willing to pay extra price for the products. Another reason might be that they lack sufficient competence in how to differentiate their products or network supporting them for competence in developing unique products appreciated by customers.

The farm dairies presented have, after some time, found counterparts with knowledge and experience in product development. For other small scale food processing firms in Norway this might be a challenging process. Perhaps there are no producers of their kind in the area where they are located, and there is not necessarily any specialist competence in the field in the region or perhaps in the country. They might not be as lucky (or clever) as the presented enterprises in finding and developing relationships with external partners. What should they do then?

The government should follow up the small scale food processing firms they have encouraged to get established. In the area of product development there is a need of building competence both inside the enterprises and in the support system (Kvam, 1999). There is a lack of both formal and experience based knowledge, and different efforts should be made to increase the competence. One important effort is to encourage firm to establish networks and relationships with different actors with knowledge in their field, both inside and outside the country. Another effort might be to establish an infrastructure of competence inside the country to support small scale food producers in their product development. This will make it easier for new established firms that lack competence and network in product development to initially develop quality products. But also well established firms need continuously

support from experts in their processes of product development to ensure that quality products are developed.

The three enterprises presented here make specialised products to specific consumer groups according to Figure 1 at page 4. This might not be a long lasting situation for the well established Swedish enterprise. When the interview was conducted in 1998 they planned to increase the production of cow cheese from 10 to 65 ton. This expansion means there had to be some kind of standardisation in the production process and the targeted customer groups had to increase. According to figure 1 the enterprise moves in the direction of standardised-dedicated production, which might challenge some of the qualities appreciated by their customer groups and then the main factors differentiating these niche products from mass produced products. In a case study of a successful expansion of a small scale milk processor in Wales, Murdoch et al. (2000) found it important that the firm managed to expand output without compromising with the quality dimensions of the product. The product was given an enhanced visibility by the attention paid to branding, trademark, and packaging. It was the synthesis of all these conventions that ensured the success of this firm (Murdoch, et al. 2000). To expand but still keep the local dimension of the products seems to be the new challenge for some small scale food producers. This is a process that demands new kind of competence in some field and new partners to cooperate with.

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