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# "Marketing Sustainable Agriculture: An analysis of the potential role of new food supply chains in sustainable rural development"

## SUS-CHAIN

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# Biomelk Vlaanderen

**Case study report**

By
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VREDESEILANDEN

# 1. INTRODUCTION

The dairy sector is very important in Belgium and even more important in the northern region, Flanders. Half of the acreage is used for dairy production and 22 % (9560 in 2003) of the farmers have dairy production, most of them full time farmers.
Organic dairy production is very marginal in Flanders: only 25 farmers have an organic label for dairy production. The number of organic dairy farmers more than doubled in 1999, because a Walloon dairy started a collection round for organic milk in Flanders. Unfortunately, this did not last long and after two years the collection round was stopped. This was the starting point of Biomelk Vlaanderen. The farmers decided to found a cooperative dairy to collect organic milk in the Flemish region. In a very short period of time, they managed to found the cooperative with all Flemish organic dairy producers. This was and is crucial in maintaining organic dairy production in the region. The cooperative counted on a fast growth, but this never happened because organic dairy production did not grow in the region between 2000 and 2005. This is a very important factor in the performance and the further development of the initiative.

Biomelk Vlaanderen is an interesting case study for Suschain for it is considered an example for the whole organic sector mainly because all producers stick together and unite in one strategy. One of the main weaknesses in other organic production sectors in Flanders is fragmentation of the offer and the lack of a collective marketing strategy.

Biomelk Vlaanderen until now did not fulfil the high expectations but it started in difficult conditions and still is a very young initiative. It is therefor a bit too early and maybe also a bit unfair to assess its performance on different levels. We hope that with this case study we can also contribute to the further development of the cooperative and help it to overcome some problems and to improve its performance on different levels.

We would like to thank the producers and experts that have contributed to this case study for their willingness to spend time on this and to provide us with information.

# 2. CONTEXT:

## 2.1. Structure and indications of the conventional chain

The Belgian dairy sector is one of the most regulated and structured agricultural sectors, as will be described in the following paragraphs. The traditional structure of the food supply chain in this sector is given in figure 1.

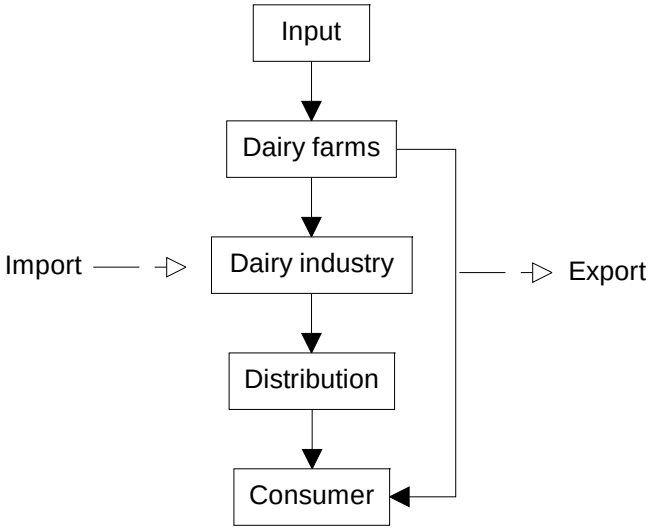



**Figure 1. Structure of the dairy supply chain** (Source: Bedrijfskolom Melk,2001)

The inputs needed in dairy production are feed, machinery and material and veterinary services. As these elements are also inputs for other agricultural sectors (e.g. beef and pork production), it is almost impossible to estimate their economic importance for dairy production alone.

In 2003, the National Institute for Statistics counted 559.423 dairy cows in Belgium[1]. In 2003 there were 16.571 Belgian dairy farms with an average quota of 188.600 litres; 58 % of the farmers live in Flanders, 42 % in Wallonia.[2] In Flanders, dairy is considered the most important agricultural production sector, especially as far as land use is concerned. More than half of the Flemish agricultural area is used for pasture, meadows and fodder production, mainly for dairy cows.
Most farmers (14.573) sell their milk to the dairy industry and it concerns an average amount of 203.350 litres per year. 32.7 % of the producers have a quota lower than 100.000 litres, they represent only 9.4 % of milk production; 9.6 % of the producers have a quota of more than 400.000 litres, counting for 26.6 % of production. This group is increasing every year. The average per farm is lower in Wallonia than in Flanders, although the difference between the regions is decreasing.
The average price in 2003 was 28.34 euro for 100 litres (for 38 gram fat/litre) and is determined by the level of fat and proteins. In reality the gap between the observed percentage and the official reference percentage increased in 2003 to 4.19 gram fat per litre.[3]

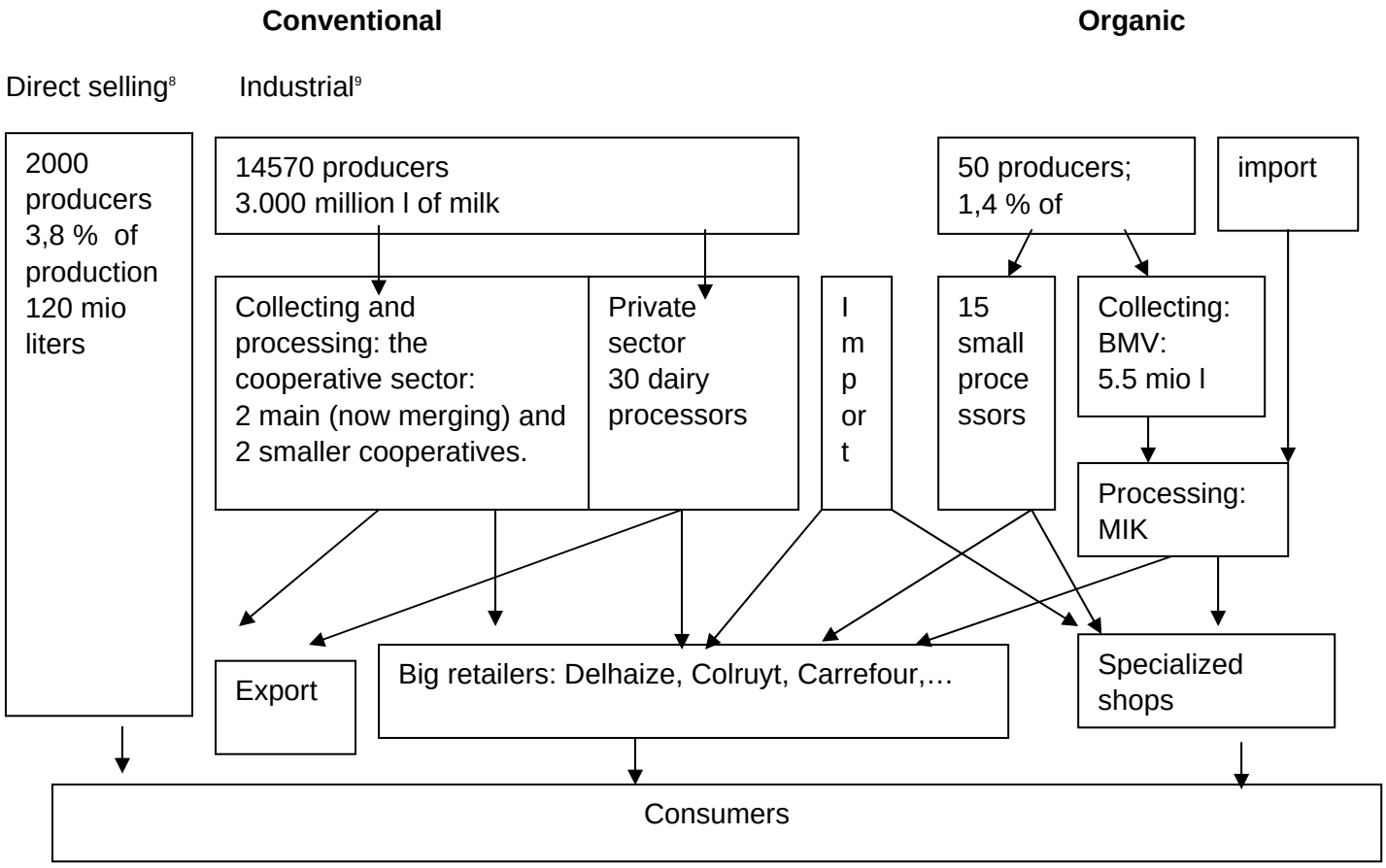
[1] NIS (2004). Landbouwtelling 2003.
[2] BCZ. Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie.
[3] BCZ. Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie.

The dairy industry consists of the production dairy products and the production of ice cream, NACE 15.510 and 15.520 respectively. In 2001, some 7.200 people worked in this sector of which 75% in the production of dairy products[4], the turnover of the processing industry is 3366 mio euro[5].

The dairy industry is dominated by large cooperatives: 67 % of the collection and processing of the milk is organised by cooperatives, 34 % by the private sector. Two major cooperatives are merging in January 2005 and then have 30 % of the collection and processing of the milk in Belgium. This new group will have 70 % of the cheese production and 75 % of the ice cream and cream production in Belgium.[6]

Belgian imports more dairy products than it exports. In 2003 import of dairy products increased with 5.5 % to 1.7 mio tons of dairy products for a total value of 2012 billion euro. Export decreased with 0.5 % to 1.59 million tons for a total value of 1.79 billion euro, 85 % of the export is to EU countries, the import is also from EU countries. The negative export balance is due to a negative balance for cheese, milk and cream and whey.[7]

**Description of the chain (figures 2003)**




[4] CRB (2002b). Verslag van de werkgelegenheid in de voedingsindustrie in 2001.
[5] BCZ. Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie.
[6] Veys. Presentation on Belgomilk on a seminar on October 27th 2004
[7] BCZ. Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie.
[8] Ministerie van de Vlaamse Gemeenschap Administratie Land- en Tuinbouw (2004). Landbouwbeleidsrapport 2003.
[9] BCZ. Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie.

## 2.2. Institutions, organisational forms and governance

The Belgian dairy sector is traditionally characterized by a far-reaching regulation that is influenced by the European legislation and the implication of quota. The Belgian quota counts for ca. 3.310.431 tons of which only 3.6 % is sold or processed at the farm. This national quota is divided in personal quota per farmer and if he surpasses this amount, a charge (115% of the basic price) must be paid. The transfer of quota is very limited and is organized by a National Quota Fund.

Legislation in this sector is mainly based on the European Directive 92/46/EEG that lays down the health rules for the production and placing on the market of raw milk, heat-treated milk and milk-based products. The resulting national legislation has three main pillars: animal health, recognition of the actors in the chain and quality of the milk. The Federal Agency for the safety of the food chain is responsible for the control of the farms. For determination of the milk quality, six parameters are defined: the amount of germs and cells, the amount of residues from antibiotics and antiseptics, the freezing point and the visible purity. Although the government is normally responsible for the determination of the quality, this was consigned to recognized committees for the milk quality. If the parameters cross the references, penalty points are given and each penalty point leads to price deduction of 0,62 euro per 100 litres. The sales and production of milk and derived products on the farm is described in a more recent law.[10]

## 2.3. Dynamism in the sector

The dairy sector has in Belgium a bit the role of pioneer and so it's important to study this sector, because occurring trends are often copied in other sectors.

The most recent evolution is the start of the 'Integral Quality Management for milk'-initiative in 2000. This is a quality and food safety assurance system for both milk production and milk transport and it's controlled by an independent accredited organism. In the near future, prescriptions for the dairy industry and distribution will be elaborated to certify the entire chain. At the start of the initiative, the farmers who applied got a once-only premium and a higher price. The objectives were very clear: the initiators wanted to reach 80% of the Belgian dairy farmers. In Flanders, this was achieved, but the Walloon farmers are more suspicious and not as enthusiast. At this moment, the bigger dairy companies see IQM as a conformity certificate necessary to deliver the milk. This can create problems for non-participating farmers as they will in the future hardly find any outlet for their milk.

## 2.4. Consumption trends:

Consumption of dairy products is decreasing in Belgium, especially as far as consumption milk and butter is concerned. Consumption per capita is 107.12 litres per year.[11] There is a general trend towards more convenience and more differentiated products such as different kind of "milk drinks".

Organic products make up 1 % of the consumption of dairy products. This is less than other product groups where organic accounts for 2 % of the consumption.[12]

Belgian consumers are not very concerned about the origin of their food although a study form the University of Leuven showed that 6 out of 10 Flemish consumers think that we should by more products from local origin. 37 % think that their supermarket should source locally even if this is more expensive and 50 % of the respondents are prepared to pay a premium of 5 to 10 eurocents for guaranteed Belgian milk.[13]

[10] Vuylsteke et al (2003). Effecten van normering op bedrijfsorganisatie en –structuur in de landbouw. Academia Press.
[11] BCZ. Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie.
[12] GFK Panel Services Benelux 2004.
[13] Vandemersch, Mathijs (2004). Consumer willingness to pay for domestic milk. Working paper 2004/78

# 3. OBJECTIVES AND STATE OF THE ART

## 3.1. Introduction:

Biomelk Vlaanderen is a farmer's cooperative founded in 2002 by 25 organic dairy farmers of the Flemish region. The cooperative only organises a collection round for the organic milk in the region. The milk is afterwards sold to local organic processors. The cooperative is entirely run by its members (farmers). It is a recent initiative and that means that until now there have not been major changes within the organisation. The cooperative has mainly been trying to get organised, to find an organic outlet for the milk and to attract new members.

## 3.2. Background on general objectives:

Until 1999 there was almost no organic milk production in Flanders, because the organic milk was not collected separately. When in 1999 a Walloon dairy (Biomilk) started collecting organic milk in Flanders, this immediately led to an important increase in production. In 2001 Biomilk announced that it would stop the collection round in Flanders and thus induced a big crisis amongst the organic dairy producers.
The producers decided that they had to act as a group and that they had to take things into their own hands in order to avoid new failures like Biomilk. They had to act very quickly because the collection round was ended almost immediately, so they did not have a lot of time to consider different possibilities and to discuss thoroughly on the organisation.

The general objective of the initiative was to have an outlet for organic milk with a price premium for the producers.

## 3.3. The organisation of Biomelk Vlaanderen:

Biomelk Vlaanderen is a farmer's cooperative. All organic dairy farmers have shares according to the amount of milk they produce.
The cooperative buys the milk from the farmers and sells it to processors. There are no fix contracts with the processors although they have an agreement with some processors to buy their milk regularly. To collect the milk, they hire a transportation firm. All the work is done by farmers: marketing the milk, administration, bookkeeping and quality management.

# 4. THE STORY OF BIOMELK VLAANDEREN CVBA

## 4.1. The necessity to form a group of producers:

Until 1999 there were only a few organic milk producers in Flanders. There was no collection round for organic milk, so the few farmers that produced organically, were selling in the conventional chain or were processing on the farm. In Wallonia, the other Belgian region, there had been an organic milk collection for 10 years. In 1997 Blivo, an expertise centre for the organic production, held a round table with five dairies and organic milk producers or producers wanting to convert to organic production, in order to get a solution for the farmers. The only interested dairy was Biomilk NV whose owner and manager already had a history in the organic sector (wholesale business of organic vegetables). In April 1999 Biomilk NV from Vielsalm starts to collect organic milk in Flanders. Biomilk offered the farmers a five year contract with a guaranteed price (20-25 % above the price for conventional milk). This created a boost in production with 70 %. Fifteen Flemish farmers converted their farm to organic production. The manager of Biomilk was very committed. He personally went to visit farmers that wanted to

convert to organic farming and he even refunded the farmers half of the costs of their conversion plans if they were professionally managed. Unfortunately, he did not have enough capital to expand the business and he attracted an investor from the conventional dairy sector. This investor very soon decided to rationalize and the collection round in Flanders was the obvious victim of this.

As far as the processing industry is concerned, there were two major processors in Flanders that produced organic dairy products, but they did not collect organic milk. The biggest one, Pur Natur MIK NV got 60 % of the milk in Wallonia, 40 % in Germany.

The organic farmers had a five year contract with Biomilk Vielsalm. In November 2001, Biomilk NV announced that the collection of organic milk in Flanders would be stopped, because it was too expensive. The Flemish farmers delivering milk to Biomilk NV formed a suppliers group that met twice a year to discuss mostly practical issues. Now they met to discuss the problem with the dairy. Biomilk NV threatened with a failure if the farmers would insist on fulfilling the contract or insist on a long transition period. So the producers decided to accept to end the contract and get paid fully for all the milk they had supplied. In return, the collection of the milk was stopped at the first of January. When the contract with Biomilk was ended there was a lot of stress among the farmers, some wanted to return to their former dairy, but in the end they all agreed that they wanted to go on as a group and to take things into their own hands.

There was one consultant very involved in the whole process. He worked for an organic expertise and advice centre (Blivo). He had been involved in the negotiations with different dairies in 1999 and the farmers turned to him for advice when Biomilk ended its collection round. He played a very crucial part in the decision to stick together as a group and participated in negotiations with dairies and processors.

Milestone: the decision to act as a group and to find a collective outlet for their organic milk.

## 4.2. Founding of the cooperative:

After the announcement that the collecting round would be stopped, there was a great deal of panic amongst the farmers. Quite a few of them were still in their conversion period and had never even been paid the organic price premium that Biomilk had promised. Some farmers immediately switched back to their former dairy for fear of losing money if they continued to sell to Biomilk. The suppliers group immediately took action and made contacts with different dairies in Flanders, Wallonia and even the Netherlands.
The group started negotiations with one of the biggest cooperative dairies in the region (Belgomilk) to take over the collection round of organic milk. The cooperative seemed prepared to do so, in January 2002 Belgomilk started collecting the organic milk and negotiations were already pretty advanced. In the end the cooperative refused to accept the organic farmer group as a special entity within their structures. This was unacceptable for the organic farmers group and so they decided to found a new cooperative and apply for a licence to collect the milk themselves. The cooperative should not imply high investments and should be able to function with a minimum on capital. This could be realised because they did not invest in infrastructure but decided to make agreements with existing market parties and because the members did all the work themselves.
The objective of the cooperative was to guarantee the collection of the organic milk, to guarantee a good price for the milk and to guarantee regular payment to the farmers.

All this was realised in a very short period of time: the problem arose in November 2001, the cooperative was founded in February 2002 and started to collect the milk in the same month. The solution came near when they found an outlet for the milk. First they reached an agreement with a conventional dairy (Olympia) to take all the milk that could not be sold organically. This agreement was reached quickly thanks to the existing competition between this dairy and the bigger cooperative one. Then they reached an agreement with one of the

main organic processors (MIK, that until then bought milk from Biomilk in Vielsalm) to buy a substantial part of their organic milk.
That they were operational so fast was also because they continued to work with the same transporters that collected the milk before for Biomilk NV.
In the process, there was only one farmer that pulled out, because of former negative experiences with farmers cooperatives.
The farmers had a few meetings in this period and a lot of negotiation and consultation was done by phone.

During this process, some “bigger” farmers did a lot of work and most of the talking. Smaller farmers feared that their interests would not be well represented.
The discussions among the founders mainly concerned the quality-quantity issue and the fear of smaller farmers (or producers with a small quota) that they would not be serviced if it got too expensive. This resulted in a guarantee that all organic milk would be collected and that there would be no premium price for bigger quantities. Premiums would only be granted according to quality.

The advisor again played an important role in this phase. He was a facilitator in their meetings, he assisted them in negotiations with processors and he helped them to define internal rules and ways of functioning. He also played an important role in the decision to stay independent from the big cooperatives: he strongly believed that they had to do it themselves and he was very convincing towards most of the farmers.

During the process, there have been some contacts with the Ministry of Agriculture. They were sympathetic, but they could not do a lot except making suggestions. The advisor was paid in this period through a project “chain development organic agriculture” funded by the Flemish Department of Agriculture. The project had been decided before and started in this period. Part of the money was used to facilitate the process of cooperation of the organic dairy farmers. The Flemish Minister of Agriculture and the Department of Agriculture were also willing to grant them support for starting cooperatives (with EU rural development money), but the regulation on this issue was not ready at the time. They tried to introduce it backdate, but this was rejected by the European Commission and so BMV never received it.

Milestone: founding of the cooperative with the following objectives:
- guarantee a decent milk price
- collect the milk from all organic farmers
- be independent
- put a face on the produce towards the consumer: it is more sustainable if they market the produce themselves to the consumer than if they are dependent on others.

## 4.3. Starting functioning as a cooperative:

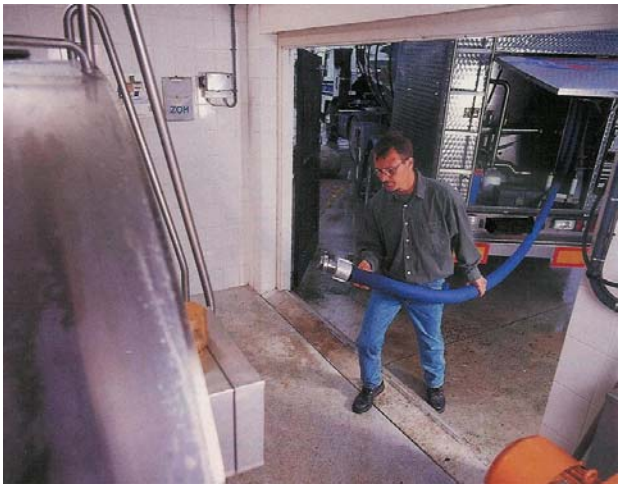
Biomelk Vlaanderen was started by 23 organic milk producers from the Flemish region. All but one organic milk producers in Flanders founded BMV. Most of them had only very recently converted to organic agriculture. All of them were man, most of them married. The farmers are aged between 30 and 60 years, with an average of 42 which is much younger than the average age of farmers in Flanders. They live all over the region; the extremes are 250 km apart. The farms differed in type and size: some were very mixed farms with only a small quota (50.000 l); others are specialised milk producers with up to 450.000 l quota. Some farms also processed milk on the farm and for some this is even more important than the dairy.

The executive of the cooperative is composed of 5 farmers or farmers’ wives that run the cooperative on a day by day basis. They meet when necessary. They have the following tasks:
- One of the wives does the administration: she collects all the figures and calculates the price that the farmers get; she does the quota administration, bookkeeping, etc.

- One person is in charge of marketing and external relations. He acts as spokesperson for the cooperative.
- one person is in charge of finances
- One person in charge of technical problems.

They get paid for their work. The women in charge of the administration gets a fixed fee, the others get paid in proportion to the organic turnover.

The cooperative does not guarantee a fixed price to the producers. The price depends on the amount of milk sold organically and on the costs of the cooperative. The price is per month calculated as following: what is sold – costs = price at producers.
The price they get from the processors for organic milk is linked to the price for conventional milk: conventional price + 0.05 to 0.07 euro per litre. They claim it is not possible to sell at a fixed price, because the competitors from abroad do not work with a fixed price.



The biggest cost of the cooperative is the collection round: they drive 500 km/day for about 25.000 litre of milk; this is 2 km per 100 l of milk. To make this more effective the number of farmers producing organically should at least double. Since they already collect everywhere in the region, this would only save costs per litre.

The cooperative buys the milk from the farmers and sells it on to processors.
With the processors they have no written contracts and no agreements on fixed amounts of milk. They can supply up to 30.000 litre a day, but seldom do so. They make a planning from week to week. What is not sold organically is sold conventionally to Olympia that took a commitment to buy all the surplus milk. They have one main client: Pur Natur MIK NV, which produces drinking milk, yoghurts and white cheese that accounts for 60 % of the turnover. MIK needs skimmed milk and does not have a skimmer, so BMV hoes to contract another dairy for skimming. One of the main problems is that they have insufficient outlet for the organic cream, which accounts for a serious loss of income.
MIK still buys a considerable amount of milk abroad. In fact, their basic needs are covered with imported milk and they use BMV as a flexible supplier for the extra milk they need from day to day. The amounts fluctuate a lot from day to day and they have to be able to supply milk on short notice.

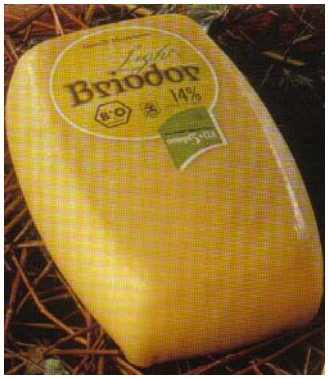
Milestone: first collection of organic milk on behalf of BMV in February 2002.

## 4.4. Expanding?

After the founding of the cooperative, BMV received a small grant from the Ministry of the Flemish Community, department of Agriculture, to develop their marketing strategies. This was used to explore the market for organic milk, to explore the possibilities to market products under own label (cheese, butter, milk…). The market research was done by two board members (farmers). They found additional outlets for their milk through other processors such as Passendale (cheese) and Ysco (ice-cream). These are not fixed but rather occasional outlets and there are no written contracts and no agreements on quantities, but it helped to increase the amount of milk sold organically from 30 % in the very beginning to 75 to 80 % in 2004.

BMV wanted to develop and sell products under an own brand. They got a proposal from an artisan cheese producer to make cheese for them. They developed a brand (Briodor) and started producing cheese of the Gouda type. They had contacts with an organic wholesaler and

a big retailer to sell the cheese, but neither of these was willing to do so, because the quality of the cheese was too unstable and because of the very competitive market of this specific type of cheese. The farmer in charge of marketing then decided to contract out the marketing on the cheese to “Avolac”, a marketing company for a few brands of Belgian cheese (taken over by Belgomilk/BZU in 2004). In fact by doing so, the cooperative lost control on the marketing and pricing of their cheese.
BMV also started producing butter on its own account, but they had difficulties selling this and so it was stopped again. Since they have difficulties selling their cream, this remains an option for the cooperative and the farmers keep looking for market opportunities.


The turnover of BMV is largely dependant on MIK (35 %). The second dairy, Passendale, accounts for 15-20 % of the turnover, 5 % is realised with the Briodor cheese, 15 tot 20 % is Olympia (conventional) and the rest are smaller outlets.
MIK and Passendale both sell to all kind of retailers, including supermarkets and export; Briodor cheese is mainly sold on the farms of the members and through cheese shops in Belgium.

BMV also has contacts with a small Dutch organic dairy and there are vague plans for closer cooperation.

In 2005 a new marketing project for organic milk has started with subventions from the Department of Agriculture. The project is carried out by Belbior, the professional organisation of organic farmers, and will try to develop a marketing platform for the whole organic milk sector in Flanders and to improve cooperation between producers, processors and retailers. BMV is an important partner in this project since the cooperative collects most of the organic milk in Flanders. In this project new possibilities might emerge to develop organic dairy products linked to the Flemish territory.

## 4.5. The Network:

| Actor | Dixon classification | Geographical scope | Role in the network | Stage | Goal |
|---|---|---|---|---|---|
| 23 organic milk producers | Producer (milk) | Local | Founders Producers | Problematisation | To be able to continue to sell their milk organically |
| Advisor | | regional | Facilitating | Problematisation | To help the producers reach their goal. |
| Belgomilk | producer | national | Possible partner for the farmers | problematisation | To get a share of the organic sector |
| Transporters | | regional | Transporting the milk | Enrolment | Earn a living with transportation. |
| Pur Natur MIK NV | Producer (dairy products) | national | Main customer: processing the milk and selling the dairy products | Enrolment | To sell dairy produce "made in Belgium". |
| Kaasmakerij Passendale | Producer (cheese) | national | Customer: cheese making | Mobilisation | To sell cheese |
| Olympia | Producer (dairy) | national | Important back-up buyer of the milk | Enrolment | To grow (and better compete with the bigger cooperatives) |
| Damse kaasmakerij | Producer (cheese) | local | Processing cheese for Biomelk Vlaanderen | Mobilisation | To use their infrastructure more efficiently. |
| Avelac | wholesaler | internations | Selling the cheese for BMV | Mobilisation | Have a greater variety of cheeses to offer |
| Ministry of the Flemish Community – Agricultural Department | | regional | Financial support | mobilisation | Maintain organic production in the region. |

# 5. PROFILE AND PERFORMANCE OF THE CHAIN AFTER THE INITIATIVE:

## 5.1. Introduction:

Biomelk Vlaanderen is a recently created initiative and it is probably a bit too soon to assess its performance on different levels. However, the founders of the cooperative expected it to grow rapidly, as organic milk production was rapidly growing in the years before. Until now, there was no growth since there were no dairy farmers converting to organic production. In this chapter we will focus on the possible reasons why it did not grow and on the consequences for its sustainability performance. We will compare BMV with the conventional dairy market in Flanders, with a small artisan cheese making cooperative in Flanders (Hinkelspel) and with a cooperative organic dairy in Germany (Upländer Bauernmolkerei).

## 5.2. No scaling up of the initiative:

### 5.2.1. Standstill in organic production:

For scaling up, Biomelk Vlaanderen depends entirely on growth of production, because it already collects all the organic milk that is produced in Flanders. The cooperative does not wish to expand to other regions because of the costs involved in collecting the milk. The cooperative does not grow because the organic production does not grow. This is a general trend in Belgium: since 2002 organic production slightly decreases. There are different reasons for this: there is a standstill in organic consumption, a lack of coherent government support for the organic sector and a competitive disadvantage for the Belgian organic producers.

**Standstill in organic consumption:**

Right before the start of Biomelk Vlaanderen, there had been a boost in organic consumption as a result of the dioxin crisis and other smaller food quality crises. In these years the local organic production was also growing, because farmers expected the market to grow fast. However, the effect of the food crises proved to be very limited in time and from 2002 consumption did not grow anymore until 2005, when it started increasing again.
Since 2002 there also has been a negative atmosphere around organic agriculture, e.g. also in the press. Given this and given the general uncertain situation in agriculture, producers are not easily motivated for organic production.

**Lack of government support:**

In Flanders there is financial support for organic farmers and for project supporting organic agriculture, but there is al lack of continuity and long term perspectives in this regard, some general rules and regulations have a specific negative impact on organic farming and most of all there is al lack of advocacy for organic agriculture.

Financial support:
There is financial support for individual organic farmers. There are conversion subsidies, but without guarantee of continuity and with late payments. Since a lack of fluid assets is one of the main problems for dairy farmers converting to organic production, these conversion subsidies are of great importance, but then they have to be paid during the conversion period, which was not always the case.
There is also some support for research and marketing. There has been a chain management project, that also somewhat supported the organic milk chain, but this was stopped after two years at the end of 2004. A new project on the creation of a marketing platform for organic milk has been approved for 2005-2006. All financial support for organic agriculture is co financed by the EU (rural development funds).

Hinderance by rules and regulations:
Flanders has a complicated nutrients policy called MAP (Manure Action Plan) that does not take into account the specific situation of organic farmers. When farmers start producing organically, there is often a decrease in production per cow. In order to complete their quota, they would need more cows, but this is not possible because the MAP imposes a standstill of livestock on the farms.
Organic farms do not use chemicals, but are not allowed to use more organic fertilizer. As a result there is sometimes a fallback in field production, due to lower levels of fertilizer and manure.[14]

Advocacy:
The Flemish government does not make a clear policy choice to support organic agriculture. In the former government the minister of agriculture was from the green (ecological) party and she strongly supported organic agriculture, without being able to implement a strong and coherent policy. Organic was too much identified with the green party and for most farmers this was rather negative than positive. When the Flemish government changed in 2004, there was a setback in support. From then onwards there is a lack of coherent policy to promote and support organic agriculture.

**Competitive disadvantage:**

Development of the local organic production has also been hampered by the high standards used for the Belgian label. The label is a private one, owned by the different actors in the organic sector (producers, processors, retailers). The standards, especially in animal production are higher than the European standards and than the ones in neighbouring countries. The producers are in favour of these higher standards, but then they would like to reserve the label for local products. However the national label is also used for imported products, produced according to the standards of other national labels. This leads to a competitive disadvantage for the Belgian producers. This problem has been put forward for discussion by the farmers within the label organisation. For obvious reasons processors and retailers want to continue to use the label for imported product and until now there is no solution to the problem.
Another aspect that influences strongly the competitive position of the Flemish dairy farmers, are the high land prices. Farmers are often forced to by the land that they are using at prices that are so high that it is impossible to earn back the investment. Organic farmers are specifically vulnerable, because they need more land and they can not afford to loose land that has been converted to organic.

### 5.2.2. Uncertainty about price:

Apart from external reasons, there are also internal reasons for the fact that Biomelk Vlaanderen does not grow. If producers were guaranteed a decent price over a longer period, they might more easily be convinced to produce organically. But until now, the price that the cooperative pays is linked to the price of the conventional milk and depends on the amount of milk that they can sell on the organic market. They get for their organic milk a price premium of 5 euro and 2 euro quality premium per 100 litres. The price paid to the farmer is lower, because the costs for collecting the milk have to be deducted and because only 75 % (on average) of the milk is sold organically. The price paid to producers thus fluctuates every month and the premium that the producers get for their organic milk is too low. It just pays for the extra costs of organic production but it does not offer any prospects to make a farm more profitable.
That they cannot pay a better price, is the result of the decision not to invest in processing capacity, their competitive disadvantage and their limited negotiation capacity. Public support in the initial phase might have helped them to build these capacities or to hire external advice on these issues, but the received almost no financial public support.

[14] VAC, (2005). Naar een duurzame melkveehouderij.

**No investment in processing capacity:**

The farmers decided to act as one group in order to have more market power and more control on where their milk is be sold and on the commercial strategy. They wanted to realise this with a minimum of capital. Since they found no existing dairy that was prepared to accept their conditions, they decided to create their own dairy. They had a huge time pressure, because the collection of the milk stopped almost immediately after the announcement, so there was very little time to carefully consider all alternatives. The farmers were not willing to take high risks and did not have the means to invest in the new cooperative. So they decided that the wanted to start without investments. The cooperative organises the collection of the milk and sells the milk to processors.

**Limited negotiation capacity:**

From the very start, the cooperative managed to establish a steady relationship with an important Flemish organic processor (Pur Natur), but it did not succeed in negotiating a price independently from conventional milk or fixed quantities per week. The farmers negotiated with the processor, but they lacked the capacity and skills to do so to their full benefit. In fact they had a lot of negotiation power, but they took no advantage of it. The cooperative collects all the local milk and thus has a monopoly on Flemish organic milk. The processor really wanted this


licity was partly based on local arguments and because it needed a supply for peak demand. The farmers involved were not used to were not willing to jeopardise an agreement in order to get a better ure of the milk that had to be sold immediately and therefore took icial in the short term, but that may have had a negative effect on their

**Box 1: Hinkelspel: a small processor can guarantee a high price:**

A small Flemish initiative proves that a close cooperation between processer and farmer, leads to benefits for both and to a better price for farmers.

Hinkelspel CVBA is a small cheesemaking cooperative. The cooperative is owned by the workers and some interested consumers. It started in 1983 with 30.000 liter of milk. In 2004 they process 700.000 liter of milk and they have a bigger potential in the market, but a limited processing capacity for the moment. They produce raw milk cheese, since 1999 with an organic label. They started with a Gouda type of cheese but broadened their assortment in the following years and developed some very specific types of cheese like “Dulses” (cheese with seaweed), Pas de Rouge (red crust cheese) and Pas de Bleu (blue cheese). The cheese is sold in their own shop, through specialised cheese shops, to wholesalers and some (like the Dulses) through supermarkets.

Hinkelspel processes the milk from two organic dairy farmers. The farmers are a member of the cooperative, so that they have some impact on the decisions. To the cooperative it is very important to have a strong relation with the farmers. For raw milk cheese production, the quality of the milk is very important, so they have to trust the farmers completely. Therefor they choose to pay the highest possible price to the farmers they work with. The price of the milk is negotiated between the cooperative and the farmers, based on transparancy of production costs on both sides. It is independent from the price of conventional milk of from the price elsewhere. Hinkelspel pays a basic price and a premium for the amount of fat and protein. The basic price in 2004 was 0.45 EUR, that is 15 to 20 % higher than what Biomelk Vlaanderen is able to pay.

**Box 2: Upländer Bauernmolkerei: gradually increasing the producer's price:**

The Upländer Bauernmolkerei is also a farmers cooperative. It started even smaller than Biomelk Vlaanderen, but it did invest in a processing unit and it applied a long term strategy. They managed to grow considerably and to pay a decent price to their producers.

The Upländer Bauernmolkerei was created as a farmers cooperative in 1996. With the help of the local authorities and the region, they took over an existing processing structure in Willingen. From the very beginning, the cooperative had a managing director, the same that is still running the dairy now. In the beginning, 18 farmers supplied 1 million litres of organic milk per year to the cooperative. In 2004 this had grown to 80 farmers and 15 million litres of milk. Most of the farmers that joined the cooperative were already producing organically, but supplied to another dairy. The dairy still processes an amount of conventional milk in order to fully use the infrastructure. This amount is decreasing.

In their first six months of functioning they were not able to pay an organic premium. They asked their members to invest in the cooperative by giving up their organic premium. Gradually, they were able to pay higher prices. The director says that for a long time they were a bad payer, but that the aim always was to achieve a better price for the farmers, and that they have now reached that goal. In 2004 they are among the best paying dairies.

In 2005 they introduced a new way of paying a better price to the producer "erzeugnerfairmilch": the consumer can choose to pay a price premium (5 cent) that goes directly to the local producers. The reactions of the consumers were very supportive an the local sales of the milk increased.


**Lack of public support for the cooperative:**

The cooperative received some support in the initial phase, but it was for a very short period and a very small amount. During the preparation process, the farmers had an advisor working with them in order to get organised. This advisor got paid for the time he spent on the cooperative through the organic chain management project that just started at that time.

In the next months the cooperative received a grant for a marketing project. The subsidy was used to collect data on the organic market, to look for new outlets for organic milk and to try to expand the cooperative by convincing farmers to start producing organically. The concrete results were some new contacts with processors and the take-off of the production of cheese and butter. They also made a flyer and a website but without having a clear marketing strategy or a clear idea for whom and with what purpose this was created.

The project was carried out by the farmers and one could question this decision. Maybe the results would have been better if the money had been spent on involving external advisors on organic marketing.

**Box 3: Strong networking and public support for Upländer dairy:**
When the producer's group wanted to take over the Upländer dairy, they could count on the support from the local and regional authorities. The municipality of Willingen bought the premises, with the help of the region and leased it out to the farmer's cooperative. After 12 years, the cooperative took over the loan and became owner of the premises.
There was support from the federal government for the creation of jobs in the region.
There were al lot of investments needed. This was partly payed by bank loans and farmer's investments, but the cooperative also got support from a regional environmental organisation that created a fund to attract private persons as investors. 300.000 euro was collected this way, at an interest rate of 4.5 %.
Furtheron the cooperative had access to legal advice and consultancy in project management and marketing.
The dairy continues to work closely together with the local authoraties and other institutions in the region. It created a museum and is building an educational garden. They have a lot of visitors, including many schoolchildren.

### 5.2.3. Performance of the core case as compared to the satellite cases:

The two satellite cases both managed to grow:

- Upländer dairy started with 1 mio litres of organic milk in 1996 and increased that amount to 15 mio litres in 2005.
- Hinkelspel started with 34.000 litres of milk in 1983 and processed 1 mio litres of organic milk in 2004. Initially 3 people were working partners in the cooperative, in 2004, there were 8 persons working in the cooperative.

Biomelk Vlaanderen did not manage to scale up, whereas both the satellite cases did, but the starting conditions have been very different and decisive in this.
The starting up phase of the Upländer Bauernmolkerei was very comparable to Biomelk Vlaanderen, but there are some major differences that explain the difference in effects:

- Upländer got important public support from the local authority in the initial phase and this gave them a good starting position.
- They could start without a price premium to producers and gradually improve their commercial performance. Biomelk was not able to do so, since it started in a period that milk prices were already decreasing, while organic standards were more demanding and the conventional price did not cover the organic production costs.
- Upländer had an opportunity to take over a processing unit that would otherwise disappear. In Flanders, all small dairies had disappeared by the time Biomelk got started.
- Upländer could benefit from a growing market for organic products when it started. Biomelk got started when there was a standstill in production and consumption (at least in Belgium).
- Biomelk can not grow because they already unite all organic milk producers and there are no new producers, Upländer could also grow because farmers changed dairies.

The other satellite case, Hinkelspel, also grew significantly, but still remains a small scale initiative. It did not get any public support in the initial phase but it started very small, grew slowly and had the time to develop a market alongside with the increase in production. Biomelk had from the start an important amount of milk and had to find a market for all that milk in a very short period of time. This seriously limited the options at that time. It was impossible to

create new niche products and find an outlet for them in such a short time. The cooperative tried to do that afterwards, but without doing any market research. Its choice of products depended more on available processors than on market opportunities and this resulted in products that are hard to sell (butter and gouda cheese). When it got started, the market of organic dairy products was almost saturated with local or imported products and a new product always has difficulties to penetrate the market if it has to compete with similar products that are longer on the market.

## 5.3. Commercial performance and marketing:

### 5.3.1. Unfavourable market conditions:

The organic milk of BMV is sold on the national market of organic dairy products. On that market there are other Belgian organic products and a lot of import. The market can be considered as a competitive market for mass products with little or no differentiation.
The organic dairy consumption is 1.07 litres per capita or 0.99 % of total dairy consumption (2003) and it has not been growing in the last 4 years.[15] The sector combines two disadvantages: organic consumption stagnates since 2002 and dairy consumption in general decreases, for conventional as well as for organic products. As far as organic consumption is concerned, the decrease in consumption seems to have stopped in 2004; in the first months of 2005 there was a slight increase in organic consumption.
Consumer prices of organic dairy products are 18 to 45 % higher than conventional dairy products (depending on the product). Belgian production concerns mainly yoghourt (25 % higher) and cheese (45 % higher).[16]
Competition in the market is strong, especially from imported products with strong and old brands (from the Netherlands and Germany). Imported yoghourt has the same price; imported organic cheese tends to be cheaper.
BMV sells raw milk to processors, but in that market also, the Flemish organic milk has to compete with foreign suppliers of organic milk who can deliver larger quantities of milk at a lower price.

There is also competition from the conventional sector. The dairy sector has a good image and claims to produce in an environmentally sound way. It developed a quality assurance scheme (IKM: Integrated Quality Management) that is now generalized. In the last five years a number of farmers started implementing several sustainable techniques from organic agriculture (e.g. grass-clover mixture).

Experts consider the organic dairy market as a potential grower due to small price differentials with conventional products and the lower share they have compared to other organic products (2 % of food consumption in general is organic), but until now, the figures do not prove them right.

### 5.3.2. Unique selling proposition not exploited:

Biomelk Vlaanderen is the only collector of organic milk in the Flemish region, so it would have a good opportunity to link its product to the territory and thus get a better market position. Research has proved that 50 % of the consumers are prepared to pay a premium for domestic origin certified milk, even if the proposed premiums were rather high (from 10 to 20 %). [17]

[15] GFK Panel Services Benelux 2003.
[16] GFK Panel Services Benelux 2003.
[17] Vandemersch, Matthijs. (2004) Consumer willingness to pay for domestic milk. Centre for Agricultural and Food Economics K.u.Leuven. Working paper 2004/91.

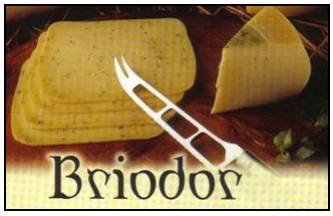
However, Biomelk Vlaanderen can not exploit its monopoly, because it sells most of the milk to processors and these do not want to put the Flemish origin of the milk in the picture for several reasons. The first is that the distribution sector is organised on a national and even on an international level. “Flemish” is in the Belgian context a politically (and negatively) loaded attribute and therefore can not be used in marketing.
Secondly, processors are not willingly to link their product to the Flemish milk. BMV is too small and too unstable to depend upon and so processors remain very careful. They also want to maintain the freedom to source their milk abroad because they can get it cheaper there. The national organic label (private) is also used for imported products, although production standards for animal production are higher in Belgium than in the neighbouring countries. As a result, the Belgian organic dairy products are not or only partly made of Belgian milk and retailers and consumers are not aware of this.

Some retailers might be interested in marketing domestic origin certified organic milk, but BMV lacks the infrastructure to process and pack the milk and remains very dependent on the processing industry.

**Box 4: “Every litre of milk contains a beautifull peace of region”: organic and regional origin: a winning team.**
The concept of the Upländer dairy is regional, even if a small part of the products is sold on the national market. Regionality is the “markenzeichen”. The products are in the first place sold through regional retailers. The director of the dairy thinks that the regional origin becomes more important with every food crisis. She considers the combination of organic and regional as particularly succesfull.
Because of this regional orientation, the “producer’s fair milk” is also succesfull: consumers are aware that they support organic agriculture in their own region.

### 5.3.3. Lack of marketing skills:

The main clients of BMV are processors and the cooperative has no say in their strategy or marketing efforts.
One of the objectives of the cooperative was to have control over the use of their milk and the way it was marketed. Therefore the cooperative wants to develop and market products under an own brand. They developed a brand named “Briodor” and started to make products. The decisions on the products were not based on market study or insight, professional advice or on a long term strategy, but on intuition and coincidence. An artisan cheese maker proposed to make a cheese for them and they accepted the offer, without even knowing if there was a market for this cheese. Afterwards they contacted different retailers to sell their cheese but this proved difficult because the quality was unstable at that time and because of the huge competition for that particular product. The Belgian market was at that time already saturated with organic Gouda type cheese. They never entered into a dialogue with the retailers on what would be a marketable product but tried to sell the cheese themselves. This was even more difficult since they lacked the time and the knowledge to do so in a professional way. When it became clear that they could not find an outlet for their cheese, they outsourced the marketing to a cheese marketing company that works for a few specific non organic cheese brands and



that does not al all specialise in organic products. The organic cheese is not a priority for this firm and the sales are not very high.
At a certain point, the cooperative also started making butter, but was unable to sell it and then had t stop it again. Now it occasionally makes butter, when it can sell it. In all, they remain fairly dependant on the processors they sell their milk to.

The cooperative wants to enter in a direct dialogue with consumer, so that it can put faces on the products, but it lacks the competences and the means to organise a commercial strategy towards the consumers. It tried to respond to some higher motivations of consumer by using health arguments as higher amounts of omega 3 in organic milk, but the problem is that a lot of the benefices of fresh milk get lost in the processing of the milk. In order to be able to use these arguments, they would like to market fresh organic milk, but until now they did not find a processor and a distribution channel. Furthermore there is no fresh milk tradition in Flanders, the distribution structure is not adapted to this product, the consumers are not used to it and the cooperative should build up that market from scratch. It is clear that they lack the resources and the capacities to do so.

The cooperative lacks the means to reach the public. BMV was and is a producer's initiative and has never made any efforts to link up with consumers or consumer groups. The cooperative produced a leaflet and it has a website where it uses environmental and health arguments, but this does not reach a broad audience.

The cooperative's own products have to be marketed by retailers but it lacks the competences and the means to negotiate with retailers in a professional way. In the sector (processors, retailers) it has an amateurish image because the farmers manage everything themselves.

**Box 5: Hinkelspel developed strong brand:**
Hinkelspel CVBA also started out with a Gouda type of cheese, but from the very beginning they sold the cheese themselves, in their shops and on the markets. Consumers could be associates in the cooperative, but they also made a lot of effort to link up with them through visits, customer cards etc. Hinkelspel got a lot of free publicity because it organised events, participated in "openbedrijvendagen", had foreign visitors, etc. When they started to sell through shops, they dit the distribution themselves and thus had regular contacts with the shopowners.
The members of the cooperatives realised that they had to invest in a niche product instead of in a mass product such as gouda cheese. So they put their products on the market as high quality raws milk cheese and they started developing new cheeses such as Dulses (seewead cheese), Pas de Rouge and Pas de Bleu. Their close contacts with customers as well as retailers give them a pretty good insight in the market and over the years they managed to put Hinkelspel on the map as one of the most important producers of quality cheese in Flanders or Belgium. Since 1999 the cooperative has an organic label, but this is only of minor importance: the first claim is artisan, raw milk cheese.

### 5.3.4. Commercial performance of the cooperative:

Biomelk Vlaanderen has a volume of 5.5 million litres of milk. Most of it is sold to one processor. They get an organic premium of 5 cents per litre for the milk, but the main problem is that they have no agreement on quantities. Until now they never succeeded in selling all their milk on the organic market. In 2003-2004 they sold on average 75 % of the milk organically, with extremes of 50 % in one month and 96 % in another.

Consumer prices of organic dairy product are significantly higher than for conventional products: 48 % for consumption milk, 25 % for yogurt and 45 % for cheese.[18] Most of the value-added goes to the processors (30.1 %) and the retailer (29.2 %). The farmer's share is 28.3 % of the gross margin, as compared to 33.3 % in the conventional cooperative sector. [19]

The impact of the initiative is limited since it did not manage to grow. It managed to maintain organic production of milk in Flanders, but it could not put the Flemish organic dairy products in the picture as the farmers would have liked to do. BMV can count on a lot of goodwill from different market parties (processors, retailers) but it was unable to get any real impact on the market. If BMV would end its activities, processors will source their milk in Wallonia or abroad and continue business as usual.

Taking into account the lack of means, the efficiency of the organisation is considered pretty high by the actors involved. The farmers do everything themselves and with a very limited cost, they manage to sell a growing share of their milk on the organic market.
However the means invested prove to be insufficient to be highly effective and to sell all the milk on the organic market or to maintain a higher share of the value added in the cooperative. This implies that the price to producer remains too low to convince other farmers to convert to organic production. The actors do realise this, but are not able or not prepared to invest more in the initiative.

### 5.3.3. Performance of the core case as compared to the satellite cases:

**Potential to create value added:**

At consumers' level, there is a comparable price premium for organic products: 41 % in the case of Upländer and 48 % for organic dairy products in Flanders.
The big difference between the cases is the value added at producers' level: Biomelk gets 5 cent organic premium per kg but pays to the farmers according to the amount sold on the organic market. This was 75 % in 2003-2004, so the average price premium for the farmers would have been only 3.75 cent. Hinkelspel does not link the milk price to the price of the conventional milk, but agreed a fixed price with its producers, based on the production cost and what the dairy is able to pay. This resulted in a significantly higher price to the producers: 0.45 cents per kg, this is 10 to 15 cent premium on the conventional milk price (depending on the quality premium the producer would get for the conventional milk). Upländer pays 6 cent organic premium per kg, but considers this insufficient and started a 5 cent action, a marketing action asking the consumer to pay 5 cent extra per litre, directly for the producer.

[18] GFK Panel Services Benelux (2003)
[19] Ameloot, Gellynck, Van Huylenbroeck, Viaene. (2003) Integrale Ketenprijsvorming in de biologische landbouw. In opdracht van Ministerie van de Vlaamse Gemeenschap Administratie Land- en Tuinbouw.

**Market share:**

All of the initiatives have a modest market share on the national market, but Hinkelspel and Upländer have a stronger market position than Biomelk. This is linked to the fact that they process the milk themselves and that they have developed a strong brand. This gives them a great autonomy in the market and a good position tot bargain.
Biomelk has one major buyer for organic milk and though it established a good relationship with its buyer it remains very depending on him and lacks bargaining power towards him. The cooperative is at the weak end of the chain and had to accept the price that was offered and the uncertainty about quantities that could be sold.
The German dairy has a very clear profile and strategy linked to the region and managed to establish a strong relationship with other market parties. They have different marketing channels, including an own shop, specialised organic shops, retailers and supermarkets. There are no figures on market share, but Upländer clearly is a player on the regional organic dairy market.
Hinkelspel managed over the years to establish a reputation as high quality raw milk cheese maker. The fact that the cheese is organic is not the first marketing issue. Over the years, Hinkelspel invested in innovation and product development, linked to market opportunities. It developed some cheese types that were new on the market or that were not produced locally before. Gradually it also developed a variety of marketing channels: an own shop, an own distribution channel towards specialised cheese shops, specialised wholesalers and supermarkets. As a result it has a significant market share in the raw milk cheese market in Flanders.

**Degree of market differentiation:**

Biomelk until now did not manage to differentiate its product on the market and therefore acts on a highly competitive market. Upländer and Hinkelspel both developed a brand that distinguishes their products from comparable products in the market and thus operate on a medium competitive market. They both managed to develop several outlets for their products and to gain some bargaining power; all these things are missing at the time in Biomelk Vlaanderen.
In fact, Biomelk Vlaanderen has a scale problem: it had to start too big (with too much milk) to be able to develop a niche market with high quality artisan products for all of the milk and it is too small to be a strong partner to the processing industry and to impose conditions upon the processors. This is a very serious problem and even a dilemma, because if it wants to develop its own strategy, it even further weakens its position towards the processors.

**Marketing:**

Biomelk provides raw material to the processing industry that does not communicate on the origin of the milk. It has a weak network outside the organic farmers community. In general, there is very little communication on Biomelk and its produce and the cooperative lacks the capacities to improve this.
Neither of the satellite cases has a big budget for marketing, but they both managed very well in getting free publicity with the story of their initiative and their products. The Upländer dairy has a very broad network of organisations, identifies strongly with the region and benefits from this on the marketing level. Hinkelspel has a very good and personal relation with retailers and runs marketing campaigns in the shops. They regularly organise open days and visits to the farmers and this also attracts the press and gets them free publicity.
Biomelk does not or can not exploit the USP that is potentially present (regional origin of the milk). The satellite cases both better exploit there unique combination of factors. For both the

cases this contains of a close link to farmers and the development of specialities that can not be found elsewhere, for Upländer the regional origin of the milk is also a strong factor.

## 5.4. Social embeddedness, local networks and locality:

Biomelk Vlaanderen was created by producers in order to respond to a crisis situation. Everything was done in a very short period of time, in which there were mainly contacts with interested market parties. The producers at that time did not have the time or interest to look for broader alliances or to involve consumers or other organisations in the initiative. Later on the board members of the cooperative had some wider contacts, mainly to try to find an outlet for their cheese.
Since almost all of the milk is sold to processors, there was no need or even little opportunity to involve consumers in the initiative. As a result, Biomelk Vlaanderen is very little known outside the organic sector and is not carried or supported by anyone else but the producers.

The huge possibilities of local embeddedness and good local networking are clearly illustrated by the two satellite cases.
Hinkelspel was not a producer's initiative but a joint initiative of consumers and people that wanted to create their own job making cheese. From the very beginning they invested a lot in involving consumers, producers and other organisations. Consumers and producers are also shareholders of the cooperative. They have always been active in different networks, e.g. alternative banking networks. They also work together with other initiatives in Belgium and neighbouring countries, through exchange of know-how and products. In their shop, Hinkelspel sells a whole range of artisan high quality products (other types of cheese, bread, wine, beers,…). The cheese of Hinkelspel is considered a regional speciality and they even strengthened the regional image by creating and marketing a beer that goes very well with their cheese. Its active network has helped the cooperative to finance investments, to improve its marketing, to achieve consumer's loyalty and to strengthen its position on the regional cheese market.

Upländer dairy is an example of very powerful networking and good regional embeddedness. From the very start of the initiative, is had the support of the local authorities and regional organisations that wanted to support organic production in the region. This support helped them getting started: the local authorities bought the processing unit and rented it to the cooperative and the "Bund" provided private investors that helped to finance the investments needed to start producing. The cooperative made a clear choice for a regional product: milk from the region, processed and sold in the region and this is also stressed in all its communication. As a cooperative they also invest in non productive activities such as a museum and other educational projects. All this contributes to the attractiveness and dynamism of the region. It is clear that all these efforts do not miss their effect on the performance of the dairy: the regional image and the strong network of the dairy seem to be one of the key elements for its success.

## 5.5. Limited effects on rural development:

Biomelk Vlaanderen was crucial in maintaining organic dairy farming in Flanders. If the collection round would have been stopped without an alternative, most organic farmers would have switched back to conventional farming. Nevertheless the initiative does not contribute a lot to the rural economy in Flanders (as compared to the conventional dairy sector), because of different reasons.

- The cooperative until now did not manage to assure a good price for the organic milk and still has very high collecting costs. As a result, organic dairy farming is not more

profitable for the farmers than conventional farming. The price premium just covers the extra production costs.
- The cooperative does not generate employment: it did not invest in processing capacity and sells the milk to processors that were already producing organic dairy and all the work in the cooperative is done by the farmers.
- BMV did not succeed in making the organic dairy sector grow and it remains a very small sector. The beneficial ecological effect of organic farming thus remains very limited.

Most of these are linked to the small scale of the initiative. If it would grow considerably, there certainly would be a positive effect on rural development: the price for the farmers would increase, some jobs would be created in the cooperative and the positive ecological effects would become visible in the region. Table 2 at the end of this chapter gives a full overview of the effects on rural development.

### 5.5.1. Organic dairy farming is not more profitable than conventional:

Organic farmers that sell their milk to Biomelk Vlaanderen get a better price for their milk than conventional farmers, but get a smaller share of the total margin: 28,3 compared to 33,3 in the conventional chain (see table 1). The farmer's share would considerably increase if production would grow and more farmers would join the cooperative. That would result in a serious decrease in the costs for collecting the milk, which are now very high.

The same figures are available for the satellite case Hinkelspel (table 2) and they show a different picture: the farmer gets 32.3 % of the margin, compared to 30.1 % for the conventional sector and the profit for the farmer is 29 %, compared to 18.5 % for the conventional sector.

In the case of Biomelk Vlaanderen, both processor and retailer have a bigger margin and more profit than in the conventional chain. In the case of Hinkelspel the processor gets a bigger share (39.1 %, but making cheese adds a lot of value to the product) and the retailer gets a smaller share than the farmers (28.6 %).

One could state that production and processing are part of the rural economy. In the case of BMV the processors are rather small family businesses based in rural areas. In the conventional chains, processors are mainly big cooperatives with processing plants in rural areas, although there are also multinational companies active. This figure show that organic milk puts more money in the local economy than conventional milk (25 % more), but if we look at %, we can see that the retailer gets a higher % from the value of organic milk than of conventional milk. However the share of Biomelk Vlaanderen in the milk chain is very small in Flanders (5.5 million litres compared to 3.000 million litres in the conventional chain) and thus there is no real effect on the rural economy in general.

**Table 1: Prices at all levels of the chain for Biomelk Vlaanderen**

Chain: 100 litres milk (A-label) to consumer [20]. In order to correctly understand these figures it must be clear that in the conventional chain the processor also takes the functions that BMV has in the organic sector.

| | | Organic Biomelk Vlaanderen | | Conventional | |
|---|---|---|---|---|---|
| | | Euro | % | Euro | % |
| Farmer (milk producer) | P0 (100 litres) | - | - | - | - |
| | Costs | 26.18 | 30.5 | 21.26 | 37.2 |
| | Profit | 5.82 | 21.4 | 4.74 | 22.7 |
| | Gross margin | 32 | 28.3 | 26 | 33.3 |
| | P1 | 32 | | 26 | |
| BMV | Costs | 14 | 16.3 | - | - |
| | Profit | 0 | 0 | - | - |
| | Gross margin | 14 | 12.4 | - | - |
| | **P2** | **46** | | **26** | |
| Processor | Costs | 27.3 | 31.8 | 30.9 | 54.1 |
| | Profit | 6.7 | 24.6 | 3.1 | 14.9 |
| | Gross margin | 34 | 30.1 | 34 | 43.6 |
| | **P3** | **80** | | **60** | |
| Retailer | Costs | 18.3 | 21.4 | 5 | 23.1 |
| | Profit | 14.7 | 54 | 13 | 62.4 |
| | Gross margin | 33 | 29.2 | 18 | 23.1 |
| Price to consumer | **P4** | **113** | | **78** | |
| | Total costs | 85.78 | 100 | 57.16 | 100 |
| | Total profit | 27.22 | 100 | 20.84 | 100 |
| | Total margin | 113 | 100 | 78 | 100 |

[20] Ameloot, Gellynck, Van Huylenbroeck, Viaene. (2003) Integrale Ketenprijsvorming in de biologische landbouw. In opdracht van Ministerie van de Vlaamse Gemeenschap Administratie Land- en Tuinbouw.

**Table 2: Prices at all levels of the chain for Hinkelspel**

Chain: 100 kg Gouda cheese to consumer [21]. Calculations have been made on the assumption that it takes 9.26 litres of raw milk to make 1 kg of Gouda cheese.

| | | Organic | | Conventional | |
|---|---|---|---|---|---|
| | | Euro | % | Euro | % |
| Farmer (milk producer) | P0 (100 litres) | - | - | - | - |
| | Costs | 242.43 | 34.4 | 212.6 | 39.3 |
| | Profit | 127.57 | 29 | 79.4 | 18.5 |
| | Gross margin | 370 | 32.3 | 292 | 30.1 |
| | P1 | 370 | | 292 | |
| Hinkelspel | Costs | 299.8 | 42.5 | 211 | 39 |
| | Profit | 148.2 | 33.7 | 187 | 43.7 |
| | Gross margin | 448 | 39.1 | 398 | 41 |
| | **P2** | **818** | | **690** | |
| Retailer | Costs | 163 | 23.1 | 118 | 21.8 |
| | Profit | 164 | 37.3 | 162 | 37.8 |
| | Gross margin | 327 | 28.6 | 280 | 28.9 |
| Price to consumer | **P3** | **1145** | | **970** | |
| | Total costs | 705.23 | 100 | 541.6 | 100 |
| | Total profit | 439.77 | 100 | 428.4 | 100 |
| | Total margin | 1145 | 100 | 970 | 100 |

### 5.5.2. No employment effect:

The employment and income effect of the initiative can either be at the farms, at the processors, in the distribution or other services or as a halo effect of an initiative. On all these levels, BMV contributed very little in terms of additional employment and or income.

[21] Ameloot, Gellynck, Van Huylenbroeck, Viaene. (2003) Integrale Ketenprijsvorming in de biologische landbouw. In opdracht van Ministerie van de Vlaamse Gemeenschap Administratie Land- en Tuinbouw.

**At farmer's level:**

Biomelk Vlaanderen has 23 members, farmers that sell their milk to the cooperative. The existing employment on these farms is not calculated as an employment effect of the initiative, since it would be the same if the farms were conventional. We only tried to calculate the additional employment created through the conversion to organic production.

Biomelk Vlaanderen pays a price premium of approx. 0,05 euro per litre compared to conventional milk. With a quota of 5.500.000 litres, this leads up to an increase in income with 250.000 euro per year. The annual labour cost for a FTE in agriculture would be approximately 25.000 euro. According to these figures the additional income would allow to employ 10 FTE on the farms.

In practice however there has been almost no job creation. The need of labour on the farms increased, but in general this is covered by family labour and conversion to organic production did not create employment. Income on the farms increases, but not sufficiently to cover the increased costs. Only on a few farms (the bigger ones) additional employment was created. A possible contribution of organic farming could be that organic production is a solution to make smaller farmers survive. Small farms have better possibilities to deal with the higher production standards and the additional workload[22]. However, the case provides no evidence for this. The average of the quota of BMV is above the average in the whole region (240.000 litre for BMV; 200.700 in Flanders). Possible explanations are that specific investments are needed (e.g. machinery for weed control) and that organic farmers have less access to European support (e.g. cereal premiums because they plant less maize).

**The cooperative:**

The cooperative does not employ people; the work in the cooperative has been done by its members that get paid for this. In 2003 BMV paid about 12.000 euro to the 4 members of the managing board. For one of the farmer's wives it is an additional part time job and one of the farmers got a replacement on the farm for the time he spends on the cooperative.

**Processing:**

The cooperative did not invest in processing capacity. This was an obvious choice given the time constraint for starting up the cooperative. But the farmers deliberately chose a solution with a limited input of capital and thus without investment. The reason was the limited financial capacity on most of the farms. Most of them only shortly before converted to organic farming and the transition period had already been a financial burden. Afterwards some of the farmers wanted to reconsider this decision and would have liked to invest in processing, but the majority of the members were cautious and so it did not happen until now.
There is no employment effect in the processing plant. The production capacity has not been increased because of Biomelk Vlaanderen. Before the creation of the cooperative the processors bought more milk elsewhere, in Wallonia or abroad. The same counts for retailers, although they state that organic production in the region is important to them because they would sell less organic dairy products if there would be no production in the region.

**Distribution and services:**

For distribution and services we could very much state the same as for processing: BMV did not create additional employment or income since it makes use of existing structures and services that did not grow (or survive) because of BMV. Since most of the milk is used to

[22] VAC, (2005). Naar een duurzame melkveehouderij.

produce a product that was already on the market before (Pur Natur yoghurt), everything remains pretty much the same. There might be a minor effect in specific suppliers and services for organic dairy farmers, but this has not been calculated. It would concern supply of seeds, fodder and concentrate, machinery and advisory services.
Since there is almost no creation of additional income, there is little or no halo effect.

**Box 6: Investment in processing capacity creates employment and income:**
The two satelite cases prove that the choice of activity and strategy is crucial to the creation of employment an income.

**Hinkelspel:**
The main objective of Hinkelspel when it started was creating jobs in a cooperative setting. They wanted to create meaningful, non alienating labour in a self controlled small scale business. They wanted to be profitable, without getting rich. The three first working partners, where already making cheese that they mainly sold to friends. As the demand was higher than their production, they decided that it might be possible to make a business out of this. There were 3 partners starting up the cooperative and they processed 35.000 litres milk.
Until the end of 2003 there were 8 working partners and no employees. In May 2004, the cooperative had 6 working partners and employed 3 part time workers. In 2004 they processed an amount of 1 million litres of milk, this means that the processing of a bit more than 100.000 litres of milk can create a job and that this 1 mio litres has created more jobs than the 5.5 mio of Biomelk Vlaanderen.
Since they pay a better price and a fix price to the farmers, it also gives more certainty to the farmers and therefore is more likely to create additional jobs at farmlevel as well.

**Upländer Bauernmolkerei:**
The farmersunion that started the Upländer Bauernmolkerei took over a local dairy that was bound to close its doors. At that time they produced 1 mio litres of organic milk. Farmers brought in capital and own 60 % of the shares, but other private people also brought in capital.
The Upländer Bauernmolkerei now collects and processes 15 million litre of organic milk. The processing capacity is also used for conventional milk in order to fully use it. The dairy has a clear employment effect in the region. The German research partner, IfLS, calculated the following employement and income effects. In the Belgian case, we only counted additional employment on the farms, contrary to the IfLS. Therefore we put the jobs on the farms between brackets.

| **Jobs and salaries** | Jobs | Income (euro) |
|---|---|---|
| Dairy | 30 | 900.000 |

### 5.5.3. Positive ecological effects are not apparent in the region:

Organic dairy production has several positive ecological effects and reduces negative externalities. The initiative was crucial in the maintenance of the 25 organic dairy farms and thus contributes to ecological sustainability. The direct impact on the territory remains limited, due to the small scale, but the impact surpasses the mere organic sector, since there was a substantial influence on conventional farming that also became more sustainable in the last 5 years by using methods from organic farming.

In Flanders there has been little or no research on this issue, so the following is not based on facts and figures but on farmers and expert interviews.

Positive externalities or reduction of negative externalities are the following:

- Enhanced biodiversity:
  As a result of enhanced crop rotation, greater diversity of crops and stopping the use of chemicals, there is a clearly visible increase in diversity of wild plant, animals and insects on the farms.
- Improved soil quality and better resistance to erosion:
  The quality of the soil is essential in organic agriculture, there is more structure in the soil and a better crop rotation and this results in improved soil quality and better resistance to erosion, although the latter is only in a few areas in Flanders problematic.
- Improvement of water quality:
  The use of chemical fertilizers, pesticides, fungicides and herbicides pollutes the water. Organic farming does not use any chemicals and thus decreases water pollution.
- More diverse cultural landscape:
  The Flemish landscape is strongly dominated by the monoculture of maize for fodder. In organic farming maize is hardly used and thus there is an immediate effect on the landscape where there is an organic farm.
- Better food quality:
  In the organic sector everybody is convinces of the higher quality of organic food, but until now there is very little scientific proof of this except for the absence of residues of pesticides and the higher amount of omega3 fatty in organic milk. Producers often also refer to the higher vitality of organic milk, but until now this is not a widely accepted quality feature. An additional problem is that the higher quality of the raw milk is not necessarily present in the processed dairy products. The processing techniques used for organic milk are the same as in the conventional sector and tend to take all life and vitality out of the milk through heating, sterilisation and decomposing the milk.
- Food miles:
  Due to the small scale of the initiative, transport per litre for collecting the milk is higher than in the conventional sector. As a whole food miles do not necessarily increase, because if there would be no collection round, processors would buy milk abroad. But there are no figures available on this.

### 5.5.4. Performance of the core case as compared to the satellite cases:

On the economical level, Biomelk did not provide for a better income for farmers and did not create jobs. The latter is connected with the fact that it does not have any processing activity and it sells the milk to processors that did not expand because of this. Hinkelspel manages to provide a higher and more stable income to the farmers and created employment because it created a new processing unit with a high value added. The Upländer dairy also created or maintained employment in agriculture and in the processing industry.

As far as social aspects are concerned, all three initiatives have a positive contribution, but Upländer dairy and Hinkelspel have contributed more to enhanced trust in the food system, because they communicated more to the consumers. Upländer is also an example of bridging between actors from the chain and from outside the chain. They managed to build a strong regional network around their initiative and the chain gets a lot of support also from actors outside.

Organic farming has several positive ecological effect and all of the initiatives contribute to that. The effects are more important for Upländer dairy than for the two others, because of the scale of the initiative and the fact that it is more important in the region.

### 5.5.5. Assessment of the performance indicators for sustainable rural development:

The organic dairy sector is compared to the conventional dairy sector. The region in this case study is “Flanders”, since BMV collects milk in this whole region.
There is not really a conventional equivalent to Biomelk Vlaanderen: in the conventional milk sector there is only one major cooperative left. So comparison is with the conventional dairy sector in general.

We use a 7 point score from very negative impact (---) to very positive impact (+++), with a neutral 0 that means no or minimal impact.

**Table 3: performance indicators for sustainable rural development:**

| Indicator group | Conventional equivalent | BMV | Key factors determining performance (with respect to that variable) | Scaled up BMV | Room for manoeuvre to improve performance (= scope for scaling up) |
|---|---|---|---|---|---|
| **Economic** | | | | | |
| NVA in region | + | 0 | The initiative is too small too have an effect in the region. | + | |
| Direct, indirect and induced employment in region | + | 0 | The additional income for the farmers is not enough to create extra jobs. There is more work but it is covered by family labour.<br>The processor did not increase its capacity: before he bought more organic milk abroad. | + | If it grows, the price to producer would increase and this might create an income to pay for extra labourers. If the cooperative would choose to invest in processing, this would create new employment. |
| Farmer’s share in retail | 0 | 0 | The farmer’s share in retail is lower than in the conventional chain because of the high costs of the cooperative. | + | If the cooperative grows, the costs of BMV would decrease to the benefit of the farmers. |
| Transaction costs of establishment | 0 | + | Transaction costs have been and still are low: it is a small market and they very quickly reached an agreement with some processors that they still work with. They only have to match quantities every week. | + | |
| Transaction costs of maintenance | 0 | + | | + | |
| Dependence on public sector support | ++ | ++ | There has been no public support in the initial phase, so the cooperative is not dependent on it. | ++ | |

| Indicator group | Conventional equivalent | BMV | Key factors determining performance (with respect to that variable) | Scaled up BMV | Room for manoeuvre to improve performance (= scope for scaling up) |
|---|---|---|---|---|---|
| **Economic** | | | | | |
| Displacement effects within region (which must be clearly specified) | 0 | 0 | There are no displacement effects. | 0 | |
| Halo effect | 0 | 0 | | 0 | |

| Indicator group | Conventional equivalent | BMV | Key factors determining performance (with respect to that variable) | Scaled up BMV | Room for manoeuvre to improve performance (= scope for scaling up) |
|---|---|---|---|---|---|
| **Social** | | | | | |
| Self organisational capacity increased | - | + | The farmers had to do everything themselves and this increased their self organisational capacity. In the conventional cooperatives there is a high involvement of professionals and of the farmers union, rather than of farmers. | + | Professional external advice might help them increase their performances. |
| Bridging capital increased | - | + | There are good relations with some processors, built on mutual trust. | ++ | There might be possibilities to link up with retailers and this would increase the bridging capital. |
| Learning & knowledge enhanced | 0 | 0 | | 0 | |
| Enhanced trust/faith in food system | 0 | 0 | Organic production enhances the trust in the food system, but there is no communication from BMV to consumers, so now there is no effect.<br>Apart from that, the dairy sector in Belgium still has a good public image. | + | If the production would grow, more products would become available and there would be more communication, this would enhance faith in the food system. |
| Enhances | 0 | 0 | | 0 | |

| **Indicator group** | **Conventional equivalent** | **BMV** | **Key factors determining performance (with respect to that variable)** | **Scaled up BMV** | **Room for manoeuvre to improve performance (= scope for scaling up)** |
|---|---|---|---|---|---|
| **Social** | | | | | |
| social inclusion | | | | | |
| Yields job satisfaction | 0 | + | Farmers get more satisfaction out of their work because it demands more skills and is valued by society. On the other hand, some farmers experience more stress and negative reactions from colleagues. | + | |
| Encourages succession | 0 | 0 | There is no positive effect on succession because of land prices (and the need of land in the organic production). | 0 | |

| **Indicator grou** | **onventional equivalent** | **BMV** | **Key factors determining performance (with respect to that variable)** | **Scaled up alternative** | **Room for manoeuvre to improve performance (= scope for scaling up)** |
|---|---|---|---|---|---|
| **Environmental** | | | | | If more farmers would convert to organic agriculture, the effect would become visible on a larger scale. |
| Increases biodiversity | - - | 0 | There is a strong positive effect on the farms, but there are not enough organic farms to have an effect in the region. There is much more diversity of plants and cultures, less pollution of water, a more diverse landscape… | ++ | |
| Reduces negative external effects | - - | 0 | | ++ | |
| Increases positive external effects | -- | 0 | | ++ | |
| Enriches cultural landscape | - | 0 | | ++ | |
| Reduces road miles | 0 | 0 | The collecting round is very inefficient due to the fact that they have to drive all around the region for 25 producers. But processing is in the region, and the production is for local consumption, so in total, the road miles will still be limited. | + | The more producers, the more efficient the collection round will be. |

# 6. CONCLUSIONS:

## Sub-Hypothesis 1:

**Scaling up depends on commercial performance and appropriate public support.**

The initiative in this case study set out in 2002 with a clear objective to grow soon, but until now it did not grow. It is a rather young initiative, so it is difficult to draw conclusions at this moment. It is also clear that factors external to the organisation play a role in the failure of scaling up. However, this case does give some evidence for this hypothesis in the sense that it became clear that the initiative did not scale up also because of poor commercial performance and a lack of public support.

Lack of public support for the organic sector is one of the key factors in the standstill of organic production that prevents Biomelk Vlaanderen from growing. Adequate and lasting public support might have provided the cooperative with the means to invest in marketing skills an din looking for business opportunities. We can not be entirely conclusive in saying that this prevented the cooperative from scaling up, but comparison with other initiatives within Suschain supports this.

## Sub hypothesis 2:

**Nature of organisation changes with scaling up as an effect of growth in market power and of the increased pressure of economic constraints and logics.**

The case did not provide any evidence for this hypothesis, since no scaling up took place. The organisation is a farmer's cooperative with very little written rules and procedures. One might expect that it would need to be more explicit on the rules if it would grow and that the direct influence of the members would decrease, as we often see it in the conventional dairy cooperatives.

## Sub hypothesis 3:

**New food supply chains have a positive effect on rural sustainable development.**

The case did not provide evidence for this hypothesis. The positive effects of the initiative are very limited. There are benefits on the ecological and social level, but due to the small scale of the initiative, the effects are not visible or apparent in the region.

On the economical level, there is almost no impact: there is an additional income for the farmers, but at the time it is insufficient to cover the extra costs and the farmer's share of VA is lower than in the conventional cooperative sector. There is little or no impact on employment, not on the farms, nor in the cooperative or the processors that buy the milk.

On the ecological level, organic dairy farming has a clear positive effect but with 22 farms spread all over the Flanders, this has no visible impact on the region.

On the social level, the initiative increased the organisational capacity of the farmers and their knowledge and organic farming leads to increased job satisfaction.

## Main lessons learned from comparing the core case to the satellite cases:

Biomelk Vlaanderen did not manage to scale up and has only limited positive effects on rural development, whereas both the satellite cases did scale up and the Upländer dairy is important for the development of its rural region. The starting conditions and the context have been very decisive in this and are different for Biomelk and the satellites. Biomelk had to start in a crisis

situation and find an outlet for an important amount of milk immediately. This did not allow them to consider many alternatives and to carefully define a strategy. Since it collects all the available organic milk, growth is very much dependant on growth of the sector and the external conditions have not been favourable for that.

There are some elements of the two satellite cases that might also be of importance to Biomelk Vlaanderen in order to improve its performance: a strong and autonomous position in the chain, find a low competitive market and develop a strong networking outside the chain.
Unlike Biomelk, the satellite cases have a processing activity; produce their own products that they market under their own brand. They carefully selected their products, considering market opportunities. They produce some speciality products which allow them to operate in a less competitive market. They create more value added and this allows them to pay a better price to the producers. Biomelk Vlaanderen made some efforts to develop a product and a brand of its own, but without carefully consider the market. What it needs to do if it is going to invest further in processing is to do some market research and identify high value products for which the market is not yet saturated. However, investment in processing is expensive and in Flanders there are no more opportunities to take over an existing small scale processing unit. Until now the cooperative works with existing processors and this of course also limits the choice in products.
Another strategy to deal with the weak position in the chain would be to look for strategic alliances with other chain parties that assure them of a higher price or at least a certain market. Since it collects all the organic milk in the Flemish region, there certainly are opportunities for this. Organic retailers e.g. are aware that it is important for their promotion and sales to have organic production in the region and this should create possibilities for cooperation with Biomelk Vlaanderen.
A second lesson that Biomelk could learn from the two satellite cases is that investment in networking outside the chain is very useful and rewarding. Biomelk is very much a producer's initiative, that never looked for support outside the chain and that is unknown outside the organic professional community. Looking for alliances outside this community might give them more support and market opportunities. A significant number of consumers are prepared to pay a higher price for locally produced milk, but then they have to be able to identify this milk. Through networking, Biomelk Vlaanderen should try to make itself known to a greater audience and to make the public aware of the importance or the value of local organic production. There are opportunities for this through the member organisations of the platform 10/10 for organic agriculture, especially the most active ones like BBL (environmental umbrella organisation) and VELT (ecological consumer organisation). Like the Upländer dairy, Biomelk could look for alliances, even funding through these organisations, but until now it never invested in this kind of networking.

However, Biomelk Vlaanderen continues to have a scale problem: too small for the processing industry and too big for artisan production.
Both former strategies, might allow Biomelk to get a better position in the market and thus to pay a better price to the producers and to get a better public image. This might also contribute to the growth of the sector and thus to solving the scale dilemma. Farmers will only be convinced to produce organically if they get a stable and high price for their milk and more appreciation in society.
Growth of the sector and of Biomelk Vlaanderen is crucial to increase its contribution to sustainable rural development to a scale that matters and makes a difference. Until now, the effects are limited on all levels and ore not important in the region, due to the small scale of the initiative and the fact that it does not create a lot of value added.

# REFERENCES

AMELOOT, N., GELLYNCK, X., VAN HUYLENBROECK, G. & VIAENE, J. (2003). *Integrale ketenprijsvorming in de biologische landbouw*. In opdracht van Ministerie van de Vlaamse Gemeenschap, Administratie Land- en Tuinbouw. 298p.

BCZ (2004). Jaarverslag 2004 van de Belgische Confederatie van de Zuivelindustrie. 68p.

BEDRIJFSKOLOM MELK (2001). Jaarverslag 2000 (-2001). Brussel, Ministerie van Middenstand en Landbouw. 40p.

BIOMELK VLAANDEREN CVBA (2004): www.biomelkvlaanderen.be

BIOMELK VLAANDEREN CVBA (2003): Jaarrekening per 31/03/2003.

CENTRALE RAAD VOOR HET BEDRIJFSLEVEN (2002b). Verslag over de werkgelegenheid in de voedingsindustrie in 2001. Bijzonder raadgevende commissie Voeding. Brussel, 60p.

GABRIELS,P., PLATTEAU, J., SAMBORSKI, V. (2003). Prijsvork tussen teler en consument. Ministerie van de Vlaamse Gemeenschap, Administratie Land en tuinbouw, Brussel. 46p.

GURDERBEKE, H. (2000). SWOT analyse van de biologische melksector in Vlaanderen. Studententhesis. Academiejaar 1999-2000. Katholieke Universiteit Leuven. 87p.

HET HINKELSPEL. www.hethinkelspel.be.

INNOVATIESTEUNPUNT VOOR LANDBOUW EN PLATTELAND (2004). Korte ketenvermarkting op uw biobedrijf. Een kennismaking voor boer en tuinder. 54p.

KROSENBRINK, E. (2000). Biomilk: “Je moet voor de markt werken, niet voor de prijs”. In Biovisie , juni 2000.

MINISTERIE VAN DE VLAAMSE GEMEENSCHAP ADMINISTRATIE LAND- EN TUINBOUW (2004). Landbouwbeleidsrapport 2003. 164p.

NATIONAL INSTITUTE FOR STATISTICS (2003). Landbouwtelling 2002. Definitieve resultaten. www.statbel.fgov.be

STATUTEN BIOMELK VLAANDEREN CVBA. (2002).

STATUTEN HET HINKELSPEL CVBA (1982).

VANDERMERSCH, M., MATHIJS, E. (2004). Consumer willingness to pay for domestic milk. Working paper 2004/91. Katholieke Universiteit Leuven. 51 p.

VANDERMERSCH, M.,MESKENS, L., MATHIJS, E. (2003). Structuur van de Belgische melkveehouderij. Working Paper 2003/78. Katholieke Universiteit Leuven. 67 p.

VLAAMS AGRARISCH CENTRUM ( juni 2005). Naar een duurzame melkveehouderij. Case study Vlaamse melkveehouderij. Working paper.

VLAAMS INFORMATIECENTRUM OVER LAND- EN TUINBOUW (jan 2003). Biologische melkveehouders bundelen krachten. Nieuwsarchief Vilt. www.vilt.be

VLAAMS PLATFORM VOOR BIOLOGISCHE LANDBOUW (2001). Mag duurzaam duurder zijn? Naar een eerlijke prijsvorming voor de biologische landbouw. Studienamiddag 12 juni 2001, Vlaams Parlement Brussel.

VUYLSTEKE, A., COLLET, E., HAYNES, I., VAN HUYLENBROECK, G. & MORMONT, M. (2003). Effecten van normering op bedrijfsorganisatie en –structuur in de landbouw. Effets de la normalisation sur la structure et l'organisation des entreprises dans l'agriculture. Academia Press.