

Innovative Rural Development Initiatives

Case Study 10: Rosetten

Innovative farm businesses in Norway

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Introduction

Rosetten is a family smallholding in Norway producing a diversified range of products and offering a broad choice of services. It serves as an example of entrepreneurial and market-driven development on a very small farm.

Among its many products and services, Rosetten produces a variety of cheeses at its own production plant and also grows vegetables and fruits in greenhouses. Rosetten sells its products in a farm shop on the premises, which is adjacent to a coffee house and restaurant located in a greenhouse with a tropical garden.

Rosetten owners Inger and Hans Rosenfeld also created a production plant for exotic mushrooms in a greenhouse on the premises. The mushrooms are now produced under the company name MYO and are sold directly to restaurants and specialty stores in Oslo.

As it caters mostly to visitors - whether one-time tourists or regular clients - the rural smallholding profits from its proximity to Oslo. Rosetten is situated on the plains along the Oslo Fjord, some 30 kilometers south of the Norwegian capital in the municipality of Ås within the county of Akershus.

Rosetten's development has also profited from the proximity to the AUN (Agricultural University of Norway) in Ås. The Rosenfeld's have also made full use of their connections with the University's research and knowledge environment.

Rosetten has been a member of the Norwegian farm food organization Norsk Gardsmat since its beginnings and also cooperates with other businesses from the area in formal and informal networks. Rosetten is one of 11 members of the "Visit Follo", a tourism project initiated by the agricultural administration in Follo. This

initiative united 11 local rural businesses under one marketing and advertising umbrella.

For the following case study report, IIASA's ERD team and its collaborators - the Norwegian NILF and NIJOS institutes - took an in-depth look at Rosetten and at some of the smallholding's business collaborators - such as Krukkegården and Bondebakst - in order to gain an insight of Norwegian rural businesses and how they cooperate within formal and informal networks.

Description of Rosetten:

History of Rosetten

Rosetten became the diversified smallholding it is today due to the flexibility of its owners to steer their business accordingly to market needs and demands. Inger and Hans Rosenfeld never had a grand master plan for their business but instead profited



Image 1: A sign outside the Rosetten farm shop.



Image 2: The farm shop at Rosetten.



Image 3: The Coffee Shop at Rosetten.



Image 4: Rosetten owner Inger Rosenfeld and her greenhouse tomatoes.

The contract also forbids the provider from selling the stock to a third party. After having to throw away large stocks of butterhead lettuce, Inger decided it was time to concentrate on other activities that had been gradually built up over the years and Rosetten stopped lettuce production in 2001.

But instead of leaving quietly, the Rosenfelds caused a major splash by informing the media about the unfair conditions of Norwegian wholesale contracts. Inger said that other vegetable producers throughout Norway had contacted her and congratulated her for having done so.

Rosetten's Facilities

The Rosenfelds have made full use of the now 1.5 hectares farm that houses all their businesses. The Rosenfeld's land is, however, not next to the main road that runs from the city of Ås to Drobak, a picturesque fishing village that attracts many Oslo residents over the weekends. Instead a dirt road through the premises of a neighbor leads to Rosetten.

There are four greenhouses on the premises – two of these are rose-shaped greenhouses of which one houses the tropical garden, coffee shop, restaurant and pub and is attached to a wooden house that serves as the farm shop, while the other rose-shaped greenhouse contains the mushroom production plant. The other two greenhouses are the regular rectangular-shaped ones that were originally constructed for lettuce production but where currently the wine, vegetable and fruit plantation are housed.

The cheese production plant called "The Blind Cow" dairy is in another

from their multitude of entrepreneurial ideas as well as their talent to adjust to the requests of their clients.

It all began with the purchase of the 0.5 hectares smallholding Solheim in 1976. Shortly afterwards Inger quit her job in order to take care of the couple's two young daughters. The Rosenfeld's Farm is not far from the Agricultural University of Norway, where the both Inger and Hans were educated – Inger as a landscape architect and Hans as a horticulturalist. Through contacts with various chefs at hotels in Oslo, Inger discovered an unmet demand for fresh specialty vegetables. She began growing and delivering some 25 different types of vegetables and transformed the 0.5 hectares holding into her base for entrepreneurial activity where she has worked ever since.

However, direct sales to hotels proved laborious over the years so Inger decided to specialize in lettuce production and began selling through wholesalers. In 1993, the Rosenfelds

invested in heated greenhouses and packing equipment and landed a wholesale contract for butterhead lettuce only. By investing in a 0.35 hectares greenhouse and selling up to ½ million lettuce heads a year, the Rosenfelds had a turnover of 3.5 million NOK. At this time they were also able to buy an additional plot of land. This business flourished until market demand for the very common butterhead lettuce dropped radically because more exotic types of salad were in demand. The Rosenfelds were then only able to sell 60% of their stock to wholesalers and, since the cost for heating and hired labor were fixed, profits decreased. The electricity cost of the greenhouses amounted to 300,000 NOK per annum while the same amount is spent yearly on oil.

Under such a wholesale contract in Norway, a provider is expected to have at least 80% of the stock required by the wholesalers although the wholesaler is not obliged to buy it.

wooden house on the premises, painted in typical Scandinavian red. It neighbors two further red barns housing horse stables. There is also a small field for the Rosenfeld's only cow and a training field for the horses. The family house is at the back of the premises.

Below are descriptions of the main business activities at Rosetten:

The Rosetten Farm Shop

After toying with the idea of a farm shop for several years, Inger finally opened such a shop under the name of Rosetten in May 1998. The Rosetten name comes partially from the family name and partially from the special rose-shaped greenhouses that Inger designed. Products sold at the store include tomatoes and several other vegetables grown in the Rosetten greenhouses, as well as cheese from Rosetten's own dairy. The range of products is complemented by fruit, vegetables and plants from local producers or wholesalers as well as eggs, frozen meats and processed products from other local



Image 6: Inger Rosenfeld in her farm shop holding up newspaper articles about Rosetten activities.

small-scale businesses or businesses from the Norsk Gardsmat group.

Shortly after the shop's inauguration, customers began asking if the products could be tasted and consumed at the store. In response, Inger opened up a small coffee shop and restaurant in a greenhouse that is attached to the wooden building housing the shop. She serves homemade cakes and waffles as well as cheese sandwiches. In the greenhouse, Inger

also created a tropical garden with plants such as banana, lemon, mango, papaya and fig trees.

This popular facility is also used for larger parties, such as weddings, hosting up to 75 people. As with the coffee shop, the idea for such a business activity stemmed from the request of a client. So far, a catering company that is some distance away from Ås has provided the required food and drink for such parties. Inger, however, is considering the possibility of either providing the large-scale catering herself or of finding local caterers.

Inger obtained the license to serve alcohol when the coffee shop and restaurant were opened. She has also opened up a pub in one of the branches of the rose-shaped greenhouse that is open every Thursday. While she herself works at both the shop and in the dairy, she has a further employee at the store and coffee house. Inger said she would like to hire yet another person for the store, finances permitting. Store opening hours are daily from 11:00 to 17:00.



Image 5: Inger Rosenfeld at the cheese stand in the farm shop at Rosetten.

The Blind Cow Dairy

When Inger received a cow as a birthday gift in 1997, she decided to fulfill her childhood dream of starting a dairy. In spite of opposition from her own family, Inger took special courses in cheese production at the nearby Agricultural University of Norway and shortly afterwards opened a dairy at Rosetten. Because the cow was blind in one eye, she named the dairy “The Blind Cow”. After setting up a dairy and experimenting with various cheeses, she finally sold her first piece of cheese in December 1999.

“My family opposed the dairy idea because they considered the work to be too tough,” she said. “If I hadn’t gotten a cow for my birthday then I would have never started the cheese production.”

Of all Rosetten’s products and services, the cheese production currently generates the highest turnover. Although seven restaurants in Oslo pur-



Image 8: The logo of “The Blind Cow dairy”.

chase cheese from “The Blind Cow Dairy”, the largest bulk of the production is sold directly through the farm shop. In 2002, the dairy was expanded and newly refurbished allowing production to increase from three to twenty tons of cheese a year. At this time, Rosetten also obtained the authorization to sell its dairy products throughout the European Union. The dairy, obviously, requires more milk than can be produced by a single cow so Inger obtained the authorization to purchase up to 500,000 liters

of milk a year. She is currently using some 120,000 liters a year for cheese production.

“The Blind Cow” dairy produces 12 different kinds of cheese, including Camembert and blue cheeses. Over the years, these cheeses were tested on customers who were asked to fill out forms regarding the quality and taste of the products. The Camembert cheese also underwent official blind testing at Matforsk – a special quality center in the nearby city of Ås – and obtained excellent results.

Although “The Blind Cow” is the smallest dairy in Norway, Inger has started small-scale exporting of her blue cheese – called “Ingers blå - to the French city of Clermont Ferrand in cooperation with Tine – one of the leading producers of dairy products in Norway. Inger has plans to develop models of cooperation between small- and large-scale producers for the purpose of exporting. Tine provides Inger with the know-how on the packaging, transportation and marketing of dairy products.

Inger said that she would not increase production if her cheese proved to be successful in France but would, instead, sell the recipes. In fact, her dream is to produce three or four exceptional cheeses for which she could sell the recipe to either Tine or a French company. This would allow her to earn money without having to do all the physical work her job currently requires. She is also dreaming of having weekends off. Inger currently has one apprentice employee at the dairy but would like to have two in the near future.

At the time of the visit of IIASA’s ERD team and its collaborators NILF



Image 7: Machinery at “The Blind Cow” dairy.



Image 9: Inger Rosenfeld preparing Camembert.

and NIJOS to Rosetten, Inger was carrying out experiments to make cheese out of rain-deer milk at the request of a Norwegian company producing an alcoholic drink from rain-deer whey for the Japanese market. This company delivered the milk to Rosetten free-of-charge. Inger will attempt to make Camembert, blue cheese and a hard cheese with her own shitake mushrooms – she hopes to sell the latter in Japan.

MYO

The production of exotic mushrooms was started in a spare corner of the lettuce greenhouse because a seasonal employee of the Rosenfelds – a foreign student at the Agricultural University of Norway – was doing his masters degree on methods for mushroom production. After small-scale trials and sale through Rosetten, the family created the MYO mushroom company in 1999 in cooperation with former students and employees. MYO is set up as a separate Limited company, which does not form part of the Rosetten business although it is situated on the Solheim farm premises. The Rosenfelds helped create MYO, investing 1 million NOK in buildings, while the company has invested a further 2 million NOK on equipment and laboratory. However, MYO has its own manager while Inger and Hans Rosenfeld are the company’s main shareholders.

MYO aims at developing the market for specialty mushrooms in Norway in close cooperation with its customers – who are mainly restaurant chefs. Their business idea includes the research and development of new production methods, varieties and so forth. MYO received grants from The Norwegian Research Council, the



Image 10: A worker in one of the mushroom storage rooms at the MYO.

SND and from the municipality of Akershus and have also recently invited shareholders. The new plant has recently been put into production but is not yet working at full capacity or generating profit.

In addition to the manager, three former foreign students from the nearby AUN who were previously employed on a seasonal basis are

now employed full-time at the plant. Staff should be increased if the plant is to operate at full capacity.

The production of such mushrooms requires a lot of equipment and completely sterile facilities. MYO has developed its own technology in mushroom cultivation and use organic wheat in the substrate.



Image 11: Mushroom production machinery.



Image 12: More machinery at the MYO plant.



Image 13: Vineyards in the greenhouses at Rosetten.

Rosetten Wine

Growing grapes with the aim of producing top quality wine is a brand new project initiated by Hans Rosenfeld. He has planted 14 different types of grapes in one of the rectangular-shaped greenhouses where the lettuce had previously been grown. Before embarking on the project, Hans took a course on wine production in France. In comparison with lettuce, wine plantations do not need much heating. Wine grapes can survive in cold temperatures of minus 15 degrees Celsius.

The German-born Hans believes his wine could be of a better quality than those produced in his home country, primarily because the grapes are not exposed to wind or fungus and other diseases. Inger also told IIASA's ERD team and its collaborators NILF and NIJOS that pesticides are not needed in greenhouse plantations.

The Rosenfelds plan on serving their wine at the Rosetten restaurant and on selling it to other restaurants in the region or in Oslo. In September

1999, a new law was passed in Norway allowing producers to sell their own wine. The Rosenfelds also plan on organizing official wine-tasting sessions and have already had requests from various wine clubs in the region. Rosetten wine was already officially presented at the 1999 Norwegian week in Berlin – a sort of trade fair.

The Rosetten Stables and Animals

The Rosenfeld's daughter, who also lives on the Rosetten premises, rents out stable places and takes care of the horses housed there. When she started this business in 1995, she used to buy horses, train them and sell them as racehorses for good prices.

On opening the Rosetten farm shop in 1998, the Rosenfelds acquired a pony in order to offer children rides over the weekends. This was intended as a further means of attracting visi-

tors to Rosetten. There are also goats, rabbits and hens at Rosetten serving a similar purpose. The animals were “on holiday” at another farm during the visit of IIASA's ERD team and its collaborators NILF and NIJOS.

Although the pony and the other animals have so far served as successful tourists attractions, Inger said she was considering getting rid of them because keeping them involved too much work. Having animals as a tourist attraction also caused friction for Rosetten with another company from the local Visit Follo network – the “Jegstad Gard”, a dairy farm that primarily attracts schools and other groups of children who wish to see and be around animals on a real working farm. Inger said the owner of Jegstad Gard had personally complained to her. Inger thought the complaint was “fair”.



Image 14: Close-up of wine grapes at Rosetten.



Image 15: The Rosenfeld's pub at Rosetten.

Formal and Informal Networks

Rosetten collaborates with various other rural businesses in the municipality of Ås within formal and informal networks. IIASA's ERD team and its collaborators NILF and NIJOS visited two of these businesses, Krukkegården and Bondebakst, which will both be presented later in this report. We will first take a closer look at the formal network called "Visit Follo".

The Visit Follo Network

In 2001, the local agricultural administration in Follo (an area including 7 municipalities in the east of the county of Akershus) invited local farms and rural businesses, which were involved in some form of tourism, to a meeting. The intention was to unite rural tourism-oriented businesses under one marketing plan. Of the 25 companies invited – which included Rosetten – 11 ended up joining the formal Visit Follo network.

The group received 140,000 NOK from SND and produced a Visit Follo brochure and a website in which all the member companies are presented in German and English as well as in Norwegian. The brochures are distributed at the tourism information point in the region and by the participating partners themselves. The presentation of Visit Follo resembles the so-called "farm-trail" initiatives in the United States – an initiative in which sightseeing tours of neighboring farms are mapped out for visitors.

Visit Follo member companies are:

Antikklåven

A former farmhouse selling antique furniture and household ornaments as well as typical Norwegian flower ar-



rangements and handmade dolls. An old refurbished room can be rented for parties with up to 12 persons, catering included. Courses in dried flower arrangement and doll making are also offered. A Christmas market is set up in November and December.

Blomsterparken Tusenflor

A flower park exhibiting over 400 types of perennials, shrubs and trees and some 70,000 flowers. Virtually the whole park has been adapted to wheelchair users. There is a fully licensed coffee shop. Only open in summer.

Fjøset

A farmhouse offering overnight accommodation for short and long-term stays. There is also a party room catering to groups between 10 and 40 persons. Demonstrations in traditional Norwegian griddle baking are held regularly.

Husfliden Solveig

A workshop and sales outlet selling new and traditional textile products as well as other handicrafts. Products include knitwear, textiles, ceramics, rose paintings and a seamstress service. Workshops on various techniques, such as hand spinning and the carding of wool as well as lace making, are held regularly.

Jegstad Gård

A barn offering sightseeing tours of farm life and its animals. The premises also have a museum of farm memorabilia and horse carts. The farm shop, situated in a former brewery and washhouse, offers a selection of

locally produced gifts, honey, eggs and traditional baked goods and bread.

Klokkeruk Kjøre-og Ridegård

An equestrian center offering rides on Døla horses. The rides are either directly on the horse or in a buggy. Open both in summer and winter. Canoe and boat trips on the Sâna river are also organized.

Krukkegården

IIASA's ERD team and its collaborators NILF and NIJOS visited this business. They offer one of the largest selections of ceramic pots for home use in Norway. The former Treider farm also has a gallery featuring exhibitions of local handicrafts and artwork. There is a jewelry workshop on the venue as well as a gift shop selling gourmet oils, vinegars, dried herbs, homemade chocolate and other souvenirs.

Lillebru Gård

A recreational farm offering accommodation in a cottage or in Norwegian Sami Lavvo tents. Space for regular campers is also rented out. Canoe rentals on the Langen Lake are offered. They also specialize in organically grown products and have a variety of farm animals.

Låven på Huseby

A farm producing grain, organically grown vegetables and herbs with a sales outlet selling these products as well as homemade Norwegian bakery goods, herbs, teas, gourmet oils and vinegars. Products may also be ordered.

Rosetten

The farm visited by IIASA's ERD team and its collaborators NILH and

NIJOS and analyzed in more depth in this case study report. Rosetten is a farm shop as well as a coffee house and restaurant, selling its own vegetables that are grown in greenhouses. There is also a dairy on the premises as well as a mushroom production plant.

Smebøl Gård

A farm motel located in a renovated former brewery and washhouse providing accommodation for up to 15 persons in four family rooms. They also have rabbits and horses as tourist attractions. Offer homemade Norwegian specialties and baked goods. Also organize wine tasting sessions and courses in flatbread baking.

Krukkegården

Krukkegården, like Rosetten, is one of eleven businesses in the Visit Follo initiative. However, the two companies that are geographically situated very close to one another, began collaborating before joining the Visit Follo initiative. For several years, Krukkegården owners Åse Sekkelsten and Roar Hunnes have had an informal deal with Rosetten in which both parties had promised to advertise the other's business to their clients.

In order to reduce advertising costs, Krukkegården and Rosetten also decided to send joint Christmas marketing advertisements to all their clients and local inhabitants. Together the pair sent out a total of 1,000 cards that included invitations to visit both of the farms. Åse said the collaboration had also proven useful in getting grants and loans, as it is easier to obtain subsidized loans for two companies than it is for a single company. Krukkegården and Rosetten are now



planning collaboration in the making of a production facility for homemade chocolates and marmalade on the Krukkegården premises.

History of Krukkegården

Similar to Rosetten, Krukkegården is a small rural business offering a diversified range of products and services. While primarily selling ceramic pots, Krukkegården also has a gallery with regular art exhibitions in what used to be a pig barn, as well as a gift shop selling gourmet oils, vinegars, herbs and other local and international souvenirs. As a learnt silversmith, Åse also makes jewelry in her own workshop on the premises. She also produces chocolate.

Krukkegården is positioned between Ås and Drobak on the Treider farm, one of the oldest farms in Norway situated near ancient Viking graves. Unlike Rosetten, it lies on the main road and is therefore a lot more accessible. Åse Sekkelsten and Roar Hunnes took over the farm in 1980 and refurbished the inherited farm slowly and without any subsidies. They had no troubles changing the business from a pig farm to a workshop and then later in 1987 a farm shop, because it happened at a time when the local government was trying to get rid of animal farming in the area.

The idea to sell pots occurred to Åse by chance during one of her many trips as a mountaineering instructor in central Norway. During this time, she kept an herb garden and catered to the local cooks of the area. As she required pots for this project, she first

asked potters from her network of handicraft colleagues, who were unable to meet her demands. Later, she attended a 1988 trade fair in Oslo where she met the Danish owners of the Kiki pottery company. Although she needed only 2-3 pots, Åse ended up purchasing a whole palette because Kiki only sold wholesale stock. When Åse was able to sell the remaining pots effortlessly at the farm, she decided to enter the pottery business.

At the beginning, Krukkegården was only opened for a few hours a day during the tourist season from May until August. But as demand increased, Åse began opening the store for more months and longer hours.

In the meantime, Åse has become one of Kiki's designers. Every two years, she joins Kiki in their travels to Vietnam – where the pots are made – to discuss the production of the new collection. By 2002, Krukkegården has become one of the biggest ceramic pots businesses in Norway. They have even provided pots for the interiors of Norwegian embassies in Stockholm and Cuba.

At the beginning, Åse ran the jewelry and pottery shops while her husband Roar has an off-farm job and also attends to a grain plantation on the premises. When Roar lost his job in 1997, Åse asked him to join her in expanding the business activity at



Image 16: Krukkegården owner Åse Sekkelsten.

Krukkegården and plans for further development were designed. They aim at increasing their annual turnover from 2 million NOK in 2001 to 3 ½ million over the following years. With this increase, they could afford an employee and Åse could use more of her time for the making of jewelry. Three years ago Krukkegården had an annual turnover of 1 million NOK. Åse and Roar are planning on expanding the business with a coffee shop, a gift shop selling only local products, more art exhibits and a larger parking lot for visitors.

Åse said that Krukkegården's vicinity to Oslo and, especially its closeness to Drobak, had helped her business immensely. She said tourists often visit Krukkegården and Rosetten and then drive over to Drobak for dinner.

Bondebakst

Bondebakst is not a member of Visit Follo because it is not a tourist business as the other members of the formal network. Bondebakst is a bakery specializing in traditional Norwegian bread and pastry. They also make products from organic flour for a specialized local shop.

Bondebakst does not have its own shop and instead sells through other stores and markets in the area, including Rosetten, the Agricultural University and other shops in local museums. Bondebakst products are not sold throughout Norway because they are brittle and difficult to transport. The company's vicinity to Oslo has, therefore, been very important.

Like Rosetten, Bondebakst is also a member of the Norsk Gardsmat – the Norwegian farm food organization. Unlike Rosetten, Bondebakst does

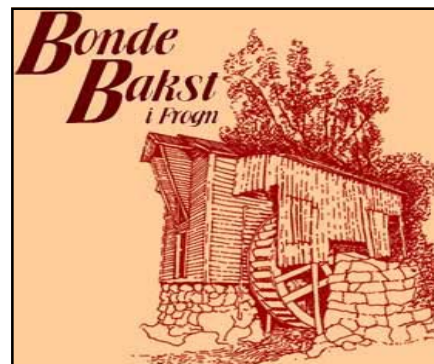
not invite visitors to view the premises. After our visit to Bondebakst, IIASA's ERD team believes that the company could expand into the tourist business by organizing tours of their bakery with its old-fashioned pastry and bread making equipment.

History of Bondebakst

The idea of a company that bakes and markets traditional and homemade bakery, came up at a local meeting on rural development possibilities within a special program in the municipality of Frogn (UTSYN). Eight farmwomen from the municipalities of Ås and Frogn set up Bondebakst in 1997 in order to create a workplace with flexible hours and part-time opportunities with which they could earn money using traditional skills. Many of these women have other extensive activities in horticulture and agriculture. For them, Bondebakst represents a flexible workplace and income during off-season periods. Some of the women have other part-time jobs while others work at Bondebakst virtually full-time. All members of Bondebakst are self-employed and can choose their own flexible working hours.

Bondebakst was initially set up as common marketing organization and outlet for homemade products. Shortly after its inauguration, they also set up their own production and storage facility in a building owned by the Smebøl farm – the premises that Bondebakst rents from one of its founding members for 30 thousand Norwegian Kroner a year.

While members were previously remunerated according to overall production, they are now paid on an



hourly basis. Because Bondebakst decided to enlarge payments instead of increasing volumes and turnover, hourly rates have gone up from 65 to 100 Norwegian Kroner.

Investment has been small, since Bondebakst uses traditional methods of baking. The company received only an initial grant of 100,000 NOK from the local rural development fund to start up the business. This money was partially invested in a rolling machine and partially for the creation of a web page that was designed by one of the members.

During the summer months, local shops and museums in the region are the biggest clients of Bondebakst. However, in the winter and especially around the holiday season, Christmas cakes are the company's most important product. In fact, during the winter months Bondebakst can often not meet the large demand for Christmas bakery. They could sell much more in the winter if they would have the resources to increase production.



Image 17: Traditional bakery at Bondebakst.

Analysis of Statistical Data

Population:

The Rosetten farm visited by IIASA's ERD team and its collaborators NILF and NIJOS is situated in the municipality of Ås in the southeastern county of Akershus near the Norwegian-Swedish border.

With its 22 municipalities, Akershus has a total area of 4,917 km² of which 4,587 km² or 93.3% are land areas.

The county has 152 kilometers of coastline, mostly along the Oslofjord, and an overall population density of 102 per km² – which is very high for Norwegian standards. The municipality of Ås has a population density of 134.3 per km² on its total surface area of 103 km², of which 101 km² is land area (Source: Statistical Yearbook of Norway 2000).

The population in both the municipal-

ity of Ås and in the county of Akershus has increased between the years 1952 and 2001. Table 1 shows that the population growth in Ås increased from 4,932 inhabitants in 1952 to 13,838 in 2001. In Akershus the population increased 187,016 in 1952 to 471,988 in 2001. During the same time span of 50 years, the population growth for the whole of Norway was much lower than in Ås and Akershus. This difference can be seen clearly in the column in which 1952=100: in Ås the population growth was of 289, in Akershus it was of 258 and for the whole of Norway it was only 137. This difference in population growth is also illustrated in the graphic in figure 1.

At first glance, the relatively impressive population growth curves in Ås and Akershus appear to be in stark contrast to the general European trend in rural areas. Generally speaking and oversimplifying, it can be said that peripheral rural areas in Europe are experiencing serious population decline. Although this does not appear to be the case in Ås and Akershus, this area is nevertheless not defying the European trend! These areas are not an exception to the rule for the below-mentioned reasons:

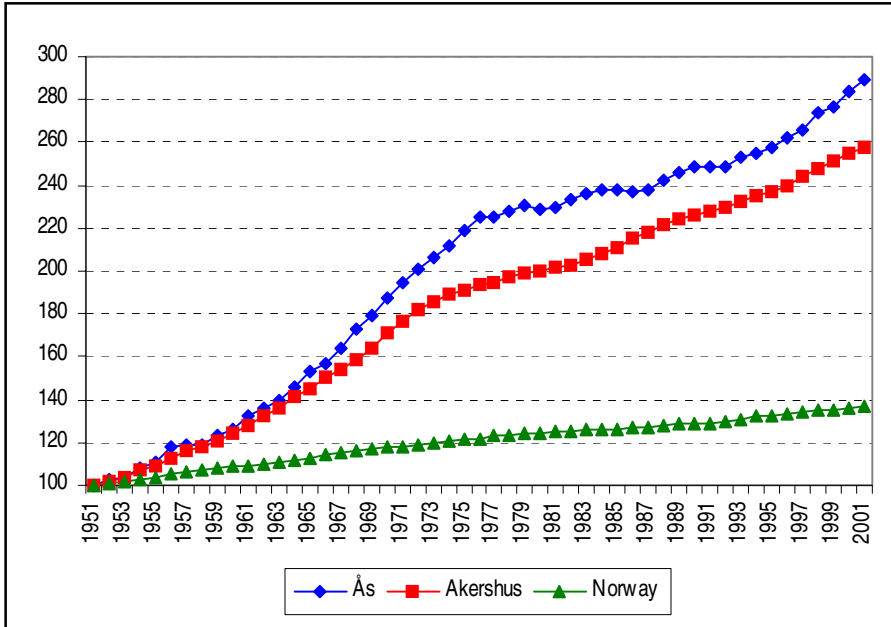
The county of Akershus surrounds the county of Oslo on three sides – northeast, south and southwest - and thus profits from its vicinity to the Norwegian capital city. In fact, from Oslo, all areas in Akershus can be reached within an hour by car. Inger Rosenfeld, the owner of the Rosetten rural business that was visited by IIASA's ERD team and its collaborators NILF and NIJOS, admitted the vicinity of Oslo had helped

Table 1: Total Population (Ås, Akershus, Norway) 1952-2001.

	Ås		Akershus		Norway	
	(Municipality)		(County)		(Country)	
	Total	1951=100	Total	1951=100	Total	1951=100
1952	4,932	103	187,016	102	3,310,821	101
1954	5,159	108	195,267	107	3,375,870	103
1956	5,647	118	206,403	113	3,445,673	105
1958	5,709	119	216,863	118	3,510,199	107
1960	6,016	126	226,948	124	3,570,554	109
1962	6,486	136	241,450	132	3,624,829	110
1964	6,983	146	257,647	141	3,680,068	112
1966	7,541	157	274,436	150	3,737,696	114
1968	8,297	173	290,643	159	3,802,479	116
1970	8,935	187	312,235	171	3,866,468	118
1972	9,622	201	332,561	182	3,917,773	119
1974	10,164	212	345,894	189	3,972,990	121
1976	10,756	225	354,975	194	4,017,101	122
1978	10,931	228	361,253	197	4,051,208	123
1980	10,962	229	366673*	200	4,078,900	124
1982	11,162	233	372,347	203	4,107,063	125
1984	11,374	238	380,258	208	4,134,353	126
1986	11,351	237	393,239	215	4,159,187	127
1988	11,597	242	405,991	222	4,198,289	128
1990	11,917	249	414,503	226	4,233,116	129
1992	11,909	249	421,440	230	4,273,634	130
1994	12,206	255	429,595	235	4,324,815	132
1996	12,516	262	439928*	240	4,369,957	133
1998	13,090	274	453,490	248	4,417,599	135
2000	13,568	284	467,052	255	4,478,497	136
2001	13,838	289	471,988	258	4,503,436	137

Source: Statistics Norway

Figure 1: Total Population (Ås, Akershus, Norway) 1951-2001.



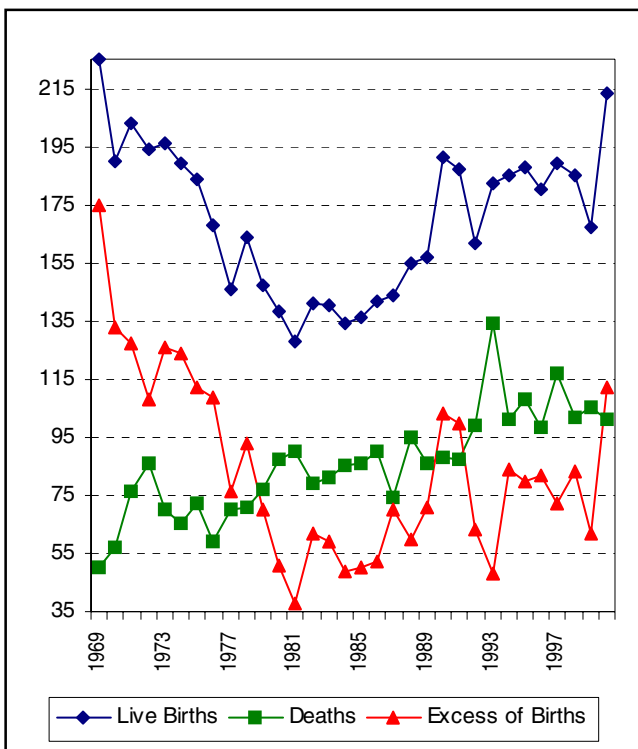
Source: Statistics Norway.

her company tremendously. The owner of Krukkegården, Åse Sekkelsten made a similar statement during the visit of IIASA’s ERD team to her premises.

In terms of landscape, Akershus serves as a “green belt” around Oslo, providing city inhabitants with many recreational activities in nature. Throughout Europe we can observe similar trends – rural areas that border or that are close to larger cities are generally recording an increase in population figures. These areas serve not only as weekend getaways for urban people, but also as residential areas for those willing to commute to work.

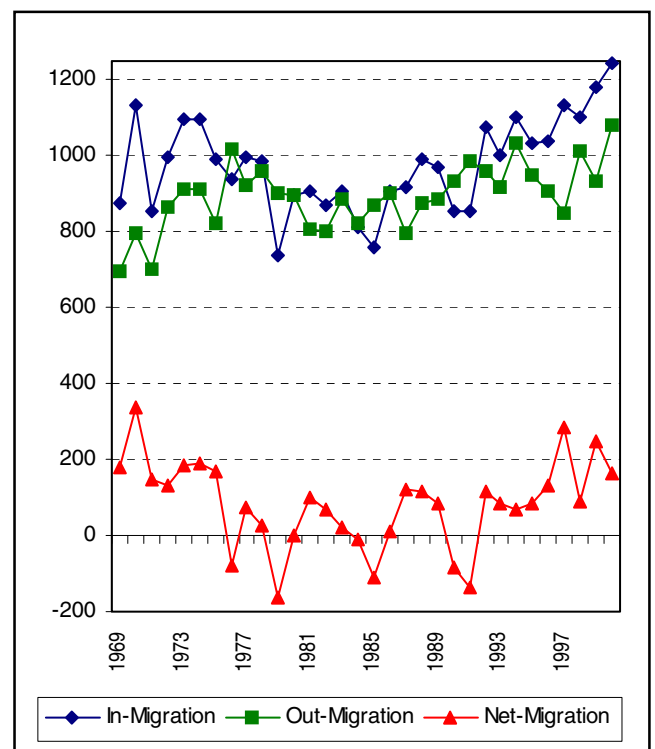
We also find that very often, property is a lot more affordable in the

Figure 2: Population change in the municipality of Ås, 1969-2000 (Live births, Deaths and Excess of births).



Source: Statistics Norway

Figure 3: Population change in the municipality of Ås, 1969-2000 (In-migration, Out-migration, Net-migration).



Source: Statistics Norway

Table 2: Population change in the municipality of Ås, 1969-2000.

	Population	Live Births	Deaths	Excess of Births	In-migrations	Out-migrations	Net-migration	Population Growth*
1969	8,588	225	50	175	875	695	180	347
1970	8,935	190	57	133	1,134	795	339	403
1971	9,338	203	76	127	852	702	150	284
1972	9,622	194	86	108	995	864	131	245
1973	9,867	196	70	126	1,096	912	184	297
1974	10,164	189	65	124	1,098	910	188	312
1975	10,476	184	72	112	993	822	171	280
1976	10,756	168	59	109	940	1,020	-80	25
1977	10,781	146	70	76	998	925	73	150
1978	10,931	164	71	93	986	958	28	119
1979	11,050	147	77	70	740	904	-164	-88
1980	10,962	138	87	51	898	898	0	53
1981	11,015	128	90	38	908	809	99	147
1982	11,162	141	79	62	872	804	68	132
1983	11,294	140	81	59	906	886	20	80
1984	11,374	134	85	49	813	824	-11	36
1985	11,410	136	86	50	762	871	-109	-59
1986	11,351	142	90	52	909	900	9	52
1987	11,403	144	74	70	918	798	120	194
1988	11,597	155	95	60	992	878	114	168
1989	11,765	157	86	71	971	887	84	152
1990	11,917	191	88	103	853	935	-82	18
1991	11,935	187	87	100	853	989	-136	-26
1992	11,909	162	99	63	1,077	962	115	177
1993	12,086	182	134	48	1,002	918	84	120
1994	12,206	185	101	84	1,104	1,033	71	148
1995	12,354	188	108	80	1,036	952	84	162
1996	12,516	180	98	82	1,041	908	133	218
1997	12,734	189	117	72	1,135	851	284	356
1998	13,090	185	102	83	1,102	1,011	91	170
1999	13,260	167	105	62	1,184	935	249	308
2000	13,568	213	101	112	1,246	1,083	163	270

Source: Statistics Norway. Population Changes in Municipalities. 1951-2000. 01214 Ås.

outskirts of cities than in the cities themselves, where prices have risen considerably over the past years. Therefore, many younger families can be found in these areas. The considerable population growth figures in the municipality of Ås and the county of Akershus are, therefore, very much

in the European trend. The rural areas in Europe that are dying out are typically those in remote areas that are far away from larger cities or towns.

With the exception of the summer months, the population of Ås is actually higher than the official num-

bers. This is because the municipality, which is situated in the south of the county of Akershus, hosts the Agricultural University of Norway with its yearly student figures of 2,500. In Norway, students do not have to register in the place of their studies, but can remain registered in their

Table 3: Total age groups for Ås, Akershus and Norway, 1/01/2001

	Ås		Akershus		Norway	
	Total	%	Total	%	Total	%
0-4	1,025	7.4	33,629	7.1	300,954	6.7
5-9	1,148	8.3	35,395	7.5	308,148	6.8
10-14	983	7.1	32,774	7.0	293,329	6.5
15-19	735	5.3	27,119	5.8	265,960	5.9
20-24	752	5.4	26,347	5.6	274,936	6.1
25-29	1,006	7.3	30,384	6.4	326,322	7.2
30-34	1,135	8.2	37,832	8.0	351,737	7.8
35-39	1,187	8.6	39,239	8.3	333,382	7.4
40-44	1,047	7.6	36,666	7.8	319,473	7.1
45-49	876	6.3	32,626	7.0	305,663	6.8
50-54	924	6.7	33,210	7.0	308,364	6.8
55-59	791	5.7	27,057	5.7	248,061	5.5
60-64	583	4.2	19,921	4.2	188,281	4.2
65-69	516	3.7	16,416	3.5	164,834	3.7
70-74	400	2.9	15,529	3.3	163,410	3.6
75-79	361	2.6	13,582	2.9	153,681	3.4
80-84	216	1.6	8,506	1.8	111,706	2.5
85-89	98	0.7	4,117	0.8	59,200	1.3
90+	55	0.4	1,639	0.3	25,995	0.6

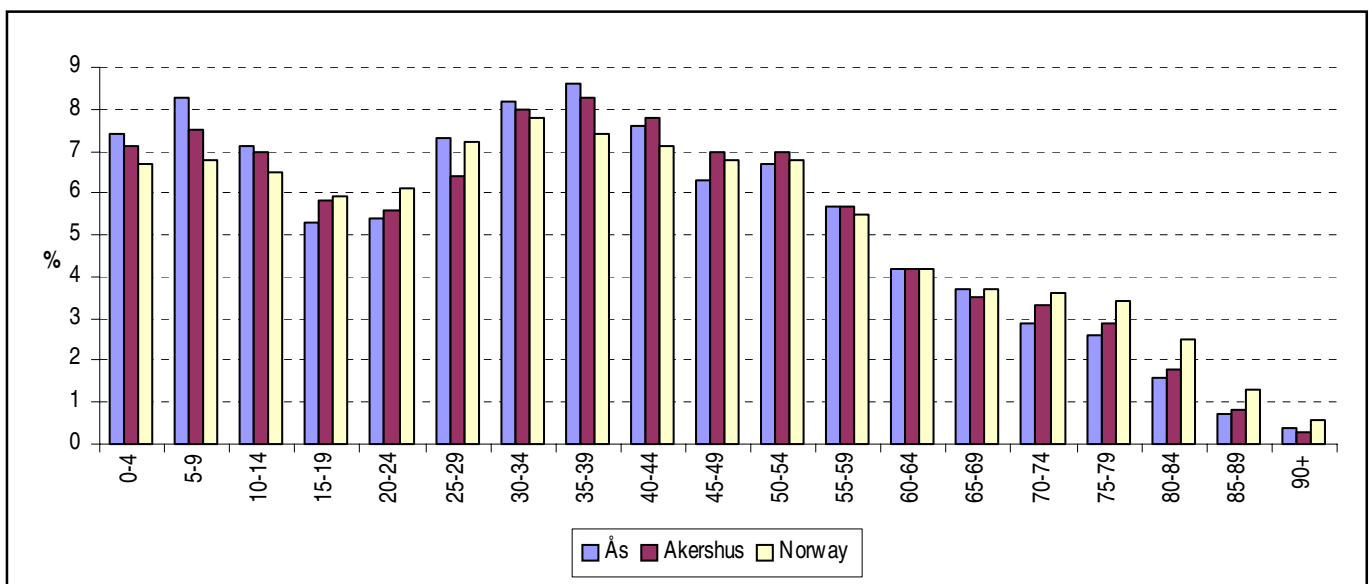
Source: Statistics Norway. Population by age.

hometown or city even if they spend many years studying in another place. It would be safe to say that a further 2,000 people live in Ås during most of a year.

In terms of in- and out- migration, we can see in table 2 and figure 3 that the numbers are fairly even in both columns from 1969 to 2000. The net-migration figures have been fairly stable with negative figures recorded only six times since 1969. These negative figures were posted in 1976, 1979, 1984, 1985, 1990 and 1991. In more recent statistics, the net-migration figures were very positive. In 1999 and 2000, net-migration figures were of 249 and 163 respectively.

The university not only attracts a lot of students to the municipality, it also creates more employment opportunities that, in turn, also attracts younger people and those below their mid-forties. Table 3 shows that the largest percentage of people in Ås is between 35-39. This age group makes up 8.6% of the municipality's

Figure 4: Total Age groups for Ås, Akershus and Norway, 1/01/2001.



Source: Statistics Norway

Table 4: Population by age and sex for the municipality of Ås, 1 January 2001.

Males								
	0-4		5-14		15-64		65+	
	Total	%	Total	%	Total	%	Total	%
Ås	532	7.6	1,095	15.7	4,600	66.0	741	10.6
Akershus	17,295	7.4	35,038	15.0	155,349	66.5	25,763	11.0
Norway	154,424	6.9	308,837	13.8	1,485,795	66.6	282,245	12.6
Females								
	0-4		5-14		15-64		65+	
	Total	%	Total	%	Total	%	Total	%
Ås	493	7.2	1,036	15.0	4,436	64.6	905	13.2
Akershus	16,334	6.8	33,131	13.9	155,052	65.0	34,026	14.3
Norway	146,530	6.4	292,640	12.9	1,436,384	63.2	396,581	17.5

Source: Statistics Norway

population. The age group 30-34 trails closely behind with 8.2%. The age distribution in Ås is very similar to that in Akershus and the whole of Norway, where the majority of the population is in the age groups 25-29, 30-34, 35-39, and 40-44. This is not the case in other municipalities in Norway.

However, as seen in Table 5, the unemployment rate had gone up in April 2001 as opposed to the average percentage of unemployed between the years 1998 and 2000. The unemployment rate in the whole of Norway is, however, higher, at 3.7% in April 2001. In the municipality of Ås, unemployment was 2% in April 2001 as opposed to the 1.8% average between 1998-2000. The increase was similar in the county of Akershus that

posted an average of 1.9% between 1998-2000 that increased to 2.1% in April 2001.

The municipality of Ås also seems to attract many families as it can also boast a relatively high birth rate. In the "Excess of Births" column in table 2 as well as in figure 2, we see that the figures are all positive – at least since our data begins in 1969. Although the number of births decreased slightly in the 1980s, it began an upward trend in the 1990s. In 2000, the second highest number of births was recorded since 1969 when 213 children were born. This is, once again, not the case in other municipalities in Norway and also not a common trend throughout Europe where birth rates in general, whether in rural or urban areas, are decreasing.

Unemployment

Table 5 shows that the unemployment rate has been lower in Ås and Akershus, over the past three years, than it has been in Norway.

With a population of 4,503,436 at the end of 2000, the average unemployment rate in Norway between 1998 and 2000 reached 3.5%. This figure was 0.2% higher at 3.7% in April 2000. The average unemployment rate in Ås and Akershus between 1998 and 2000 lay at 1.8% and 1.9% respectively.

As mentioned earlier, these low unemployment figures are largely due to the region's vicinity to Oslo. The location of the Agricultural University of Norway in Ås also provides many employment opportunities for residents of the county.

A spokesman of the Statistics Norway office told IIASA's ERD team, that the annual unemployment average for 2001 in Ås was 1.4% and that this figure had increased to 1.7% in the first quarter of 2002. In Akershus, the annual unemployment average for 2001 was of 1.5% and 1.8% in the first quarter of 2002.

Table 5: Unemployment rate (Ås, Akershus, Norway).

	Population end 2000	Unemployment rate %	
		Average 1998-2000	April 2001
Ås	13,838	1.8	2.0
Akershus	471,988	1.9	2.1
Norway	4,503,436	3.5	3.7

Source: Regional Development in the Nordic Countries 2002, Nordregio Report 2002:2

Evaluation

Human Factors

As a member of the Visit Follo network, Rosetten and the network's other members have helped attract tourism to the municipality of Ås. IIASA's ERD team found the idea of such an initiative, which unites tourist attractions under one marketing and advertising umbrella to be a very good one. Other areas in Europe might also profit from such a network. However, it must be pointed out that the municipality in the county of Akershus is not far from Oslo, and that these businesses admitted to profiting from their vicinity to the Norwegian capital. It is questionable whether such businesses could have survived in more remote rural areas. On the other hand, cooperation may be even more necessary in remote areas to create an attraction and a range of services to fulfill the diverse needs and interests of tourists.

While the Visit Follo network and the Norsk Gardsmat group serves some of the needs of small rural businesses, Rosetten owner Inger Rosenfeld agreed with IIASA's ERD team that such services could be improved. Instead of providing only marketing and advertising strategies, Inger said Rosetten would benefit from an organization that would offer information on available subsidies and help its members complete the paperwork involved when applying for these. Inger said a lot of her time was spent with such paperwork - time she would rather spend working in Rosetten production. Inger said that very often deadlines for subsidies and other such opportunities were missed because she lacked the time. Such a network, that provides services in the



Image 18: Visitfollo member Smebol Gard - A farm offering accomodation and homemade specialties.

fields of marketing, advertising, investments, finances and technology, exists to a certain extent in western Finland. This network, called WOODPOINT, was analyzed in more detail in a previous case study report carried out by IIASA's ERD team.

Being a smallholding, Rosetten has not created a large number of new jobs. However, Rosetten has created more jobs than other members of the Norsk Gardsmat. At the time IIASA's ERD team - and its collaborators NILF and NIJOS - visited Rosetten in August 2002 Rosetten together with MYO had six employees. Inger hopes to increase this number to ten. However, the termination of their lettuce wholesale contract in 2001 has made Inger cautious when it comes to incurring new financial responsibilities.

While Rosetten has contributed to making the rural area more attractive for tourists, it is not responsible for attracting young people to the area. The municipality of Ås has a large number of young people due to the

Agricultural University. Rosetten helps these students – and indirectly also helps the community – by hiring them on a seasonal basis and thus contributing to improving the living standards of students in the area. They also provide an attraction for families in the area with some educational value.

The Rosenfelds have also contributed to improving the educational level of the community through the various workshops and courses they offer. Inger enjoys passing on knowledge she has acquired over the past years. Inger and Hans Rosenfeld, both graduates of the nearby Agriculture University, have attended many courses in order to improve production at Rosetten. They offer courses in cheese and mushroom production as well as specialized cooking courses in mushroom dishes. Inger is planning on building larger kitchen facilities at Rosetten so that she can organize larger cooking courses.

Regarding social relations, Inger has had some problems with her neighbors. On one occasion, owners from

neighboring farms launched an official complaint about the building of the Rosetten dairy. This resulted in the construction of the dairy being delayed by two months. The neighbors opposed having a dairy in their vicinity because they believed this, in turn, would bring a lot of cows to the area that would pollute the streams – a complaint that was deemed unfounded.

Economic Viability

It was difficult for IIASA's ERD team to obtain concise information about the financing of Rosetten. In our opinion, there is no master plan of Rosetten's financing in the same way that there was never a master plan about what kind of products and services the company was going to offer. Inger Rosenfeld admitted to being a bit chaotic in this field. Rosetten's business strategy appears to be that of "muddling through".

Until recently, new investments have mainly been financed through the returns from the operation. The reduction of a relatively large and regular income from lettuce sales combined with new investments, forced the Rosenfeld's to apply for more grants and loans. This has also made it necessary to put up more formal business plans. But in spite of what appears to be a lack of financial organization, Rosetten has survived for many years and does not appear to be doing too badly.

Early investments were financed through the business itself. On setting up the farm shop, Inger received a subsidized loan of 150,000 NOK and a grant for new businesses of 10,000 NOK that helped her get started. The

total costs of the farm shop building were estimated at 600,000 NOK.

The holding was doing well financially between 1993 and 2001 – the years when the Rosenfelds had a wholesale contract for lettuce that provided them with a fixed income. Although Rosetten is currently in a financially tight situation because of this, Inger is optimistic about the future. She hopes the increase in cheese production will be enough to fill the financial gap.

After dropping the wholesale contract, the Rosenfelds required loans of up to 40% for the restructuring and rebuilding of the dairy. This loan amounted to approximately 1 million NOK. Inger said Rosetten had received some subsidies, although not of any substantial amount. This was because she had been too slow with the paperwork involved for obtaining such subsidies and too impatient to delay the implementation of her idea. This was when Inger said a network such as WOODPOINT would benefit her business. The Rosenfelds could have financed many activities at Rosetten through subsidies but didn't because of their impatience in applying and waiting for a potential subsidy. They are currently expecting to receive some 75% worth of grants for the wine production.

While vegetables, and especially lettuce, represented the largest part of Rosetten's income in the first years, cheese now generates most of the income. The annual turnover of the farm shop and the adjacent coffee shop and restaurant increased from 500,000 NOK in 1998 – the first year - to approximately 1.2 million NOK in 2000.

IIASA's ERD team had the immedi-

ate impression that Rosetten was perhaps a bit too diversified in the products and services it offered and that, instead, efforts should be concentrated on fewer activities. However, after taking a closer look at projects involved in the Visit Follo network, we discovered that, with the exception of one company, all the businesses are rather diversified. This could suggest that rural businesses near larger cities are more profitable when they offer a broad range of products and services. Although currently undergoing a slight financial slump, the Rosenfelds continue to toy and experiment with new business ideas. Hans Rosenfeld, for example, is currently also cross-breeding strawberries in order to create a new brand of the fruit. Constant development seems to be at the core of their business idea and important for the satisfaction they derive from long working hours.

Resources and Environment

During our visit to the Rosenfeld's farm, we were of the impression that Rosetten products are of high quality. These products can boast several quality guarantee labels. For example, Rosetten's blue cheese, called "Inger's Blå", is currently being granted the quality label "Spesialitet" from Matmerk - a Norwegian quality label for which a company has to present precise product documentation as well as a marketing plan.

Rosetten products have also been tested at "Matforsk" by a panel of testers who compare national products with similar international ones. In a recent test, Rosetten's Camembert finished ahead of various such cheeses from France. The Matforsk

testing center is not far from the Rosetten premises in the municipality of Ås.

However, as a smallholding that grows its vegetables in greenhouses, it could perhaps be relatively easy for the Rosenfelds to specialize in organic farming. Although Inger told IIASA's ERD team and its collaborators NILF and NIJOS, that no pesticides were used at Rosetten, they do use both artificial and chemical fertilizers. IIASA's ERD team had the overall impression that organic products are not as popular in Norway as they are in other parts of Europe.

Science and Technology

Rosetten have their own website (www.rosetten.no) and are also advertised on the homepage of the Visit Follo initiative (www.visitfollo.com)

and on the homepage of Norsk Gardsmat (www.gardsmat.org). The mushroom production plant on the Rosetten premises, MYO also has its own website (www.myo.no).

The Rosenfelds did not have to make major investments in their site that was created by their daughter in 1999 as part of her education in marketing. Although the site helped attract some new customers, Inger said that most customers had learned about

Rosetten either through media articles or word-of-mouth. Inger has been efficient in her media contact and her constant creation of new ideas helps gain even more media attention – also from broad circulation newspapers in Oslo. Inger did not seem too convinced that the website was absolutely necessary for the existence of Rosetten. IIASA's ERD team was able to find other websites on which Rosetten were advertised, such as several Norwegian tourism pages. Rosetten has been a paying member of the Akershus tourism board for some time. Membership fees per company amount to 5,000 NOK per annum.

The Rosetten homepage as well as that of the MYO are, unfortunately, only in Norwegian and, therefore, can only cater to home visitors. However, the Visit Follo website and its accompanying brochure are in various languages (Norwegian, English, German) and can thus advertise for its members outside of Norway. The language problems also applied to the homepage of Krukkegården, (www.krukkegaarden.no), as to the pages of several other Visit Follo members.

Rosetten did produce an A4 sized brochure in the German-language that was handed out in Berlin in 1999 during the “Norwegian Week” – a sort of trade fair. The cost of the brochures was 2 NOK apiece.

Political Factors

The Rosenfelds faced no pressure from the local political elite to develop their business in a certain direction. Inger said the local county government often boasts publicly about Rosetten and other such projects, inviting important visitors to view such

places under the motto: “look at the successful businesses we have in the county.” The county government has, however, done little to help or facilitate things for Rosetten or other projects.

One of the obstacles faced by small rural businesses of the region is that the country road authority is strict about the kind of signs and advertisements businesses such as Rosetten can place along the roads. When Rosetten and other businesses in the network defied the law and placed signs to indicate the kind of services they offer, these were quickly removed by authorities.

For the Rosenfelds this situation is especially difficult because their premises are not directly next to the main road. During the visit of IIASA's ERD team and its collaborators NILF and NIJOS, Inger had put up a hand-painted sign on the main road that had not yet been removed by authorities. Without this sign, it would have been very difficult, if not impossible, for IIASA's ERD team to locate Rosetten without the help of locals. Inger is convinced she would have more customers if she were allowed to place indication signs a few kilometers before her premises.

Inger suggested to road authorities that businesses be allowed to set up a “melkerampe” (small roadside shed for milk collection) on a new track for cyclists and pedestrians, which would serve as both a resting place and an advertising board. Although authorities initially applauded the idea, it was eventually turned down much to Inger's disappointment.

Krukkegården owner Åse Sekkelsten admitted to having an advantage because her premises are



Image 19: The cheese storage at Rosetten.

directly on the main road. But despite being able to place signs on her own premises - which can be seen from the main road - visitors often see these signs after they have driven past Krukkegården. Because of this, some visitors make U-turns further down the road and usually on the properties of various neighbors.

Regarding connections and social networks, Inger admits to having profited from her many social associations. For example, such connections had helped Inger considerably in February 2001 when she applied for authorization to sell her dairy products throughout the European Union.

Summary

Following the visit of IIASA's ERD team to Norway, we concluded that Rosetten was an overall success. However, extremely creative and entrepreneurial owners with flexible characters are required for such a business to succeed. A business like Rosetten must not stagnate but, instead, its owners must always be aware of market changes and react accordingly to client demands.

The fact that Inger and Hans Rosenfeld had never devised a master plan for their business can be seen as the secret of their success. It is not everyone who has the courage for change and risk. At first, IIASA's ERD team was skeptical of such a diversified company, now we believe Rosetten's main strength lies in the willingness of the smallholding's owners to diversify and change. We would like to further underline this factor by pointing out the case of Krukkegården, yet another of the many companies in the municipality of Ås that offers a diver-

sified range of products and services. Other such businesses include Antikklåven, Fjøset and Smebøl Gård.

Rosetten caters not only to local inhabitants but also to tourists and has, as such, served the community well. The rural business has not created a large amount of jobs – Rosetten had six employees at the time of the visit of IIASA's ERD team and its collaborators NILF and NIJOS in August 2002 – but it has secured the existence of its owners and created activity in a region in which farm holdings are characterized by monoculture grain farming and owners commuting to off-farm jobs. The Rosenfelds also make a point of hiring students from the nearby Agriculture University on a seasonal basis. They are also open to any ideas and knowledge these students bring with them. For example, the mushroom production plant MYO was created following the experimental know-how of one such hired student who is now the company's manager.

Running a small business has not always been easy for the Rosenfelds. On several occasions their existence

could have been at stake – for example when their wholesale contract for butterhead lettuce threatened to become unprofitable because the demand for this type of salad diminished considerably. However, with her power and determination, Inger saw alternatives and managed to adjust to market possibilities and client demands. Although Rosetten is still suffering from the lack of the wholesale contract, the dairy was quickly made into the main source of income and appears to be doing well.

There is one point that cannot go unmentioned and that significantly affects the success of Rosetten and other such companies in the region: these companies profit from their vicinity to the Norwegian capital as well as from the nearby Agriculture University. Such companies, which rely heavily on tourism and the number of visitors, could have faced considerable problems in more remote rural areas of Norway. Throughout Europe we can observe how rural areas near larger cities are blooming while many remote areas are heading towards a population collapse and economic recession.



Image 20: Close-up of cheese produced at the "Blind Cow" Dairy.

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