

School-Farm Cooperation on Family Farms in Norway

Linda Jolly and Erling Krogh, University of Life Sciences, Norway

Abstract

School-farm cooperation has been systematically built up in Norway since the national project Living School began at the Agricultural University of Norway (now: Norwegian University of Life Sciences) in 1996. Cooperation between family farms and schools has occurred sporadically in Norway as long as individual pupils have needed an alternative arena for learning, but until the Living School project, very few regular pupils had experienced the farm as a complimentary learning arena. Since 2000 the cooperation between schools and farms has been fostered through university courses for farmers and teachers in many regions of the country. In this paper we focus on three such farms and the development of their pedagogical co-operation with nearby schools.

We begin with a consideration of family farms as educational arenas. What are the advantages for learning, the effects on the production and economy of the farm, the connection to the community and the possibilities of creating a life-style identity in miniature communities on the farm? We present three farms which we use as examples of different stages and types of development of family farms as educational arenas. In the appendix, a description of each example farm and its production, facilities and of the participants from the farm seeks to give insight into the basis for pedagogical activity. In these descriptive texts, the personal motives, the development of the projects, the economical compensation and the contracts are also included. After the short presentation of each farm in the article, we discuss their experiences in relationship to the aspects presented in the beginning of the article. At the conclusion, we look at the challenges for farm-school cooperation and discuss possibilities for further development.

Family farms as educational arenas

Norway still has relatively many small and middle-sized diversified farms, in common with several other European countries such as Switzerland, Austria and Finland, (Lie & Løkeland-Stai 2012). As in other countries, these farms are vanishing at a rapid tempo also in Norway. During the last 10 years one third of the farms in Norway vanished, and 9 out of 10 of these farms were based on grass-fed animal production (Riksrevisjonen 2010). The reason for the declining number of farms is to be found in the fact that the income from agricultural production has remained unchanged since the 1990s, while income in other productions and salaried positions has increased substantially (Lie & Løkeland-Stai 2012).

In able to survive in farming, multiple sources of income have become more and more common in Norway. Already in 2002, 4 of 10 farmers had the farm as a supplementary income (Løwe 2004). In 2009 only 28 % of farming families had more than 50 % of their income from the farm (Logstein 2010). For many farming families, the need for higher income has been met through taking work outside of the farm. Another solution has been to use the buildings and area of the farm for work which is not related to agricultural production, such as renting out storage room or to other types of businesses. Still others increase the farm income through small-scale manufacturing from their own raw products or use the farm as a basis for tourist activity or services to other groups.

The farm-school cooperation has grown to more than 1000 projects in Norway (Meistad og Fjeldavli 2004, Logstein 2010). Aside from the income which these projects bring to the farm, the projects also open up for further groups that can have benefit of using the farm as an arena for learning and doing meaningful tasks. In many farm families, especially the women have training and experience from the health and social sector or from school and kindergarten. Qualifying education and work experience have been

important motivating factors in establishment of such projects. In addition, the farms are often home to several generations. The older generation lives on the farm and continues to contribute to the farm tasks which can include a pedagogical program for school children. The Living School project, as well as the courses in "The Farm as a Pedagogical Resource", has also been a midwife for new cooperative initiatives between farm and school.

Learning on a family farm: place-based learning and role models

The reasons for using family farms and enterprises on family farms as arenas for learning are many and complex. In the following we will take our point of departure in the characteristics of the family farm as we discuss the distinct qualities of such farms as a basis for learning and growth.

Family farms are owned, developed and driven primarily of self-employees. The farming family often continues a tradition to further develop, change and re-create their own work place on the basis of the available resources. In modern Western society such arenas for learning have become rarities. During childhood and youth from 1-19 years of age, Norwegian children move between three types of societal systems: The institutional education system, the organized leisure time system (sport and other activities), and the screen-based communications system (Skår and Krogh 2009). These societal systems have in common that children and youth are often put in a passive recipient role where adults instruct or where physical activities are limited to use of the eyes and the fingertips on keypads.

Most time in the years between 1 and 19 is spent in the institutional education system, in kindergartens, elementary school with daycare supplements and in high school/vocational training. The educators are employees in institutions which have responsibility for upbringing and learning. The employees sell their services, and usually have neither responsibility nor motivation to create or secure the economic foundation for the institutional enterprise. This applies also to the institutional school farms which are to be found in many western countries. When pupils come to a family farm, there is someone at home, not a staff, but a farming family of self-employees with a long standing relationship to the place, the history, the fields, the weather and the play of nature in this particular place. According to Bandura (1986), learning occurs primarily when we observe, imitate and identify ourselves with role models. Children and youth seldom experience longer encounters over time with self-employed adults in enterprises where income is generated through the initiative of the entrepreneur. On family farms, children and youth have the opportunity to identify themselves with self-employed entrepreneurs and with entrepreneurial activity. In Norway, as in other places both in western as well as in the developing countries it cannot be assumed in the near future that young people will be readily employed in secure jobs after completion of educational programs.

The role model that a pupil can identify him/her self with on the farm is not limited to the classical role of the farmer. Due to the high costs of handworkers compared with the farmer's income (on average 35 % of the income of similar occupations in Norway), the farmers themselves do many of the maintenance tasks and repair work such as plumbing, electrical-mechanical and carpentry. Many farmers have professional competence in one or more of these trades and use practical trades to supplement their income as well as to maintain the farm. This means that the farmer has multiple skills and proficiencies which provide practical experience and insight into different trades for the pupils. The pupils receive thus a broad and concrete orientation in many occupational fields.

Self-employment on a farm builds upon a competent relationship to the resources and processes which constitute the foundation for the trade, also on a directed, driving impetus towards and capability to use

the resources, and on adequate knowledge of the resources and processes such that the work can be done in an appropriate manner. Relationships, will-force and knowledge are joined in an authentic setting in the work of the self-employed farmer on the family farm. When the farmer gives instruction, it is from his own experience, and the words carry a natural authority and demand respect. The tasks are often self-evident and call on the pupils to be done. Through participation in work on the farm with the farmer as a role model, the pupils identify themselves with this context where a relationship to the resources, knowledge about putting them to use and will to work independently is the basis for making a living. They can develop a basis in themselves to become independent entrepreneurs.

It can be maintained that this is a different way of learning than institutionalized learning. Through doing necessary tasks with the farmer, learning occurs through encounter, rather than through lessons structured to fulfill certain goals. This reflects the type of learning that Dewey urged teachers to develop, where learning is not the acquisition of information about how the world is, but the acquisition of a set of predispositions to act. (Biesta and Burbules 2003). In the encounter with the farmer, and through the farmer with the nature elements at the farm, he/she becomes a learning partner and role model who is at the same time a colleague in the riddles of both the natural and man-made world. Why is the tractor not starting, why isn't the little lamb growing as fast as the others? The pupils can make graphs and chart the weight on the lambs at school, but what engages is the enigma for both the pupils and the farmer. The farmer stands existentially in the position of co-creator, coordinator of living processes, as a steward of nature. The complexity of endless factors that affect a living organism fosters the use of focused sense-attention and a fluid, rather than linear, thought process. By identifying with and imitating the work of the farmer, a type of learning occurs which can be called "serendipitous learning", learning which occurs through the context, the relationships and the process of working in real life situations (Kagan 2012).

The role of the farm in the community

During the industrialization of agriculture, family farms have become suppliers of raw materials to industry which refines them to food products. Mechanization has led to fewer and fewer people have a connection with farms. The farm becomes isolated as a raw material supplier in the food value chain and still fewer in society have any idea about how these raw materials are produced. The farmers often work alone with a large machine park, which is strongly in contrast to the teeming cooperation which characterized farms a generation or two earlier. When the farm is used as an educational arena, the role of the farm as a societal institution is changed radically and the farmer becomes a coordinator of work tasks shared between many hands on the farm.

The farm as a place for learning draws the whole value chain into the farm. The pupils partake in producing the raw materials, processing and refining them in production of products both for sale and for meals. This is an essential part of regaining a relationship to where food comes from. The refining processes which were left to factories are taken back to the farm out of pedagogical considerations. The fragmented and hidden value chain is re-created on the farm to make a connection between the elements of nature and the food on the table. This changes also the character of the farm. The farm has the potential to develop from a raw material supplier towards becoming a miniature community, where, for instance, a forge, a carpenter bench, a mechanical workshop as well as a weaving loom can play a part, in addition to the production and refining of food products. This in turn, demands skills that can be gradually drawn in to the farm from other family members or from skilled neighbors, immigrants, retirees and others in the local community.

The widening and differentiation of production is often followed both by the inclusion of the different generations in the new activities, as well as incorporation of new target groups at the farm. For instance, the school activity can lead to inquiries from the child welfare sector and interest in sheltered housing and

work-training which can be offered at the farm. The more the enterprises develop on the farm, the more the farm becomes a living micro-society and the more attractive the farm becomes for different types of users. When different groups of users are connected to the farm, there is a greater need for skilled workers to cover the needs of these groups. Some of the family farms develop gradually into family enterprises, where both the members of the family and outside employees work together.

We will now give a short description of three farms which work closely with one or more schools and provide an arena for learning:

Hegli Farm

Hegli Farm is a small farm one hour north of Oslo which has organic milk and meat production with 15 cows. In addition the farm has chickens, pigs, geese, a horse, one big dog, innumerable cats and a large production garden for vegetables, fruits and flowers. Sidsel Sandberg, the present farmer, started the cooperation with the local lower secondary school together with her husband in 1997. After the death of her husband in 2002, she has continued the project where school classes of 25-30 youth from 13 to 16 years of age participate in the farm work for 1-2 weeks each year. Sidsel is employed as a full-time teacher and together with an assistant, organizes and supervises the work of the pupils 5 days a week throughout the year. The pupils participate in the daily tasks of tending the animals, cultivating the garden, cooking a warm meal and all other practical tasks. The last week in the 10th class is dedicated to making a banquet, planned and executed by the pupils for their grandparents on the basis of the products from the farm. For a more complete description of the farm and the project, read appendix 1.

Straumøy Farm is an organically driven farm on the West coast of Norway, south of Bergen. The production is based mostly on grazing animals and has cows, goats, sheep, pigs, horses, two lamas, chickens, rabbits and three border collies for herding the sheep that are on the mountain pastures most of the summer. There is also a large garden, field production of potatoes and forest plots with which the pupils work. Since the farm is on the coast, setting of nets and fishing are also important activities. Anne and Leif Grutle began working with pupils on the farm in 1997 and today have pupils with learning disabilities from 4 counties and 10 schools in groups of 9-10 three days a week. One day a week is also used for classes and general education. Anne has a 50% position in the local school, but most income comes from yearly contracts with the schools, the child welfare department in the county which rents facilities and services outside of school hours and now also from the health and welfare department for young handicapped adults who live in a rehabilitated house on the farm and partake in the farm work.

Sør-Fallet Farm is a small farm north-east of Oslo in an agricultural county with 20.000 residents. The main production on the farm is sheep and horses, where riding lessons have provided important income to the farm. Margit Fallet lives with her husband and two children on the farm. The older generation lives in another house on the farm. Margit began as a teaching assistant five years ago in a lower secondary school. The principal asked her if she could take a group of pupils with behavioral and learning difficulties to her farm to give them other opportunities for learning through practical work. Since 2009 she has had two days a week with groups of 9 pupils from all three class levels (8th, 9th and 10th) together with an assistant. They participate in routines for taking care of the animals and have various projects in the afternoon which include restoration work on older farm buildings, training the horses and making a garden. They take turns making a warm meal and all eat together. Recently a primary school has also sent one pupil and the county is considering a model where the farm can serve all the schools in the

district. Margit entered a part-time teacher training program in 2010 and will soon have a teacher certificate which guarantees competence for the schools as well as a higher salary for her work.

The example farms as educational arenas

Although these three farms which we have described above (and more fully in the appendix) have varying conditions, productions and user groups, there are several of the circumstances which we described earlier which apply to all of these farms. All of the farms are typical "småbruk", small farms which have become marginal and unprofitable in the present agricultural policy regime. In all three cases, a position at the local school for one of the adults at the farm was initially a necessary supplement for bringing more income into the family farm economy. At both Hegli and Straumøy, the women already worked at the schools and took the initiative to move part of the school to the farm because they saw the advantages of using the farm as a pedagogical arena. From Hegli, Sidsel Sandberg writes:

I noticed that the pupils woke up when I used my own experience at the farm in my teaching. After a time I was not satisfied with digging up worms and collecting wilted leaves to take to the classroom and had the idea that learning could be more authentic and effective at the farm.

For Anne Grutle at Straumøy who worked as a teacher in an elementary school it was the challenge of finding adequate teaching tools for all of the pupils. She writes:

Our project began with a course in social pedagogy and an assignment I wrote about the farm as an arena for individually adjusted teaching. Through my own experience as a teacher in elementary school, I felt helpless to reach some of these pupils. There was no alternative outside of the classroom. As a newcomer on the farm, I had experienced what a farm meant for my own children and for children and youth who worked in short periods on the farm. I became more and more certain that there was an exciting possibility in the tension between practical work and learning.

In the case of the youngest project at Fallet farm that has started more than 10 years after Hegli and Straumøy, it was the school that took initiative and came with the suggestion that the farm work could bring pedagogical advantages for the pupils with social and learning challenges. After a year filled with positive experiences with these pupils on the farm, Margit Fallet joined the course offered by our University (The Farm as a Pedagogical Resource) to be able to further develop the work with the pupils. This led also to her enrollment in our teacher training program to insure formal pedagogical competency for the pupils that were entrusted to her at the farm.

All three projects have been connected in some way to the network for school-farm cooperation at the university. They cite support and advisory work from "Living School" as an important factor in their establishment. Hegli and Straumøy belonged to the first example farms during the period of the national project from 1996 to 2000. They have since lectured widely and helped with the advisory work in courses for new projects.

Contracts and income at the example farms

Can the school-farm cooperation be another leg to stand on for the family farm economy? Earlier, and in some places still,, it was expected that a farmer would open the farm for visits from the school without any

remuneration. This visit had an informative character. The pupils were not to do anything but listen and the farmer fell into the role of a lecturer who tried to convey the proper facts about farming in order to justify the school's use of time on the farm visit.. When the project "Living School" began it was not unlikely to hear from teachers that if the pupils were to work on the farm, the farmer should pay them and be grateful for their contribution. Therefore it is still demanding to achieve an understanding that the school/county must pay both for using the physical arena of the farm and also for the services of the farmer as an organizer and teacher.. How have these three farms managed?

In all three farms, the farm-school cooperation has made it possible to combine farm work with school activity. For the farm families, the classroom is at the farm, for two to five days a week. In addition, the school contributes to covering expenses and the salaries of assistants or other members of the family. At Straumøy where they had to build a new house as a school base, child welfare services share the rent with the schools for a house which is in use 7 days a week, around the clock. Fallet farm also receives rent for each day there are pupils on the farm.

The farm-school cooperation allows the farmer to be on the farm, develop the farm and still make a living. They do not have to travel somewhere else to supplement their income. Aside from Hegli, which has been an exception, the challenge is still to get long-term contracts which allows for investments in an appropriate farm structure. The latest developments with sheltered living and work at Straumøy farm have also the potential for long-term contracts and a reliable income.

From place-based learning to place developing

At these three farms, pupils participate in activities which are embedded in the life of the farm and which contribute to necessary tasks. The tasks are not constructed for the pupils as an exercise in learning or to meet the goals of isolated subjects, but rather as a consequence of the daily routines and life at the farm. The connection to and identification with the farmer provides incentive to learn skills, do the work as well as possible and to comprehend what is needed. We have developed a theory of learning based on the experience of the pupils at the farm which we have designated as "Relationship-based experiential learning" (Jolly and Krogh 2010). Our theory takes its point of departure in the models of learning from John Dewey. (1916, 1938) and David Kolb (1984) and is supplemented with perspectives from phenomenology, the theory of salutogenesis and neurological research. Here we want to focus primarily on the relationships formed to the farming families who become role models ("significant others") for the pupils through their active participation in meaningful tasks on the farm.

Anne Grutle at Straumøy farm describes how the pupils gage their participation out of a respect and consideration for the farmer who they know must take on the work which they neglect.

The pupils come to the farm and to the farmer in his authentic environment. The tasks they do are real and they know that the farmer must do them if they shirk their duties. Maintaining order and doing repairs takes on another meaning when they know the farmer, in comparison to a state or county institution...

The pupils take on the role of the farmer as they acquire a deeper connection to the farm and the work. They are socialized into a situation where they not only take responsibility, but also contribute to the further development of the enterprises at the farm with their own initiatives and insights.

We want them to be a part of the work that has to be done, something which is meaningful and gives them a chance to succeed. The pupils have understood what they are doing the day they begin to voice opinions about how the work should be done. We see this as a sign of their engagement, skill and knowledge when they begin to tell us how we should do things.

This in turn has contributed to new projects and new productions on the farm, such as the building of a new rabbit house as a entrepreneur project for a group of pupils.

Sidsel Sandberg at Hegli has also described how the participation of the pupils has contributed to enlivening of the farm and a wealth of activities. The most recent development is the renovation of the old barn as a workshop for carpentry, sewing, spinning and weaving. She describes how the pupils give both a daily structure to the work and imprint the atmosphere of the farm with the different activities:

The pupils who come to the farm help to structure the work days on the farm with stable mealtimes and thoroughly planned programs. New activities which the farmer could not manage alone can enrich the farm. It can be a vegetable garden, workshops, market stands, production of winter wood and many other activities. The older buildings can acquire new functions as well, which justifies them being restored and kept up.

The farm awakens almost as out of a deep sleep and receives new life. The pupils go to and from their tasks, there is smoke from the chimney, someone is hammering, others sawing or digging and the looms send out a regular banking rhythm. The scent of food sieves out from the kitchen, as the smell of the barn fills the yard.

The work at Fallet Farm is still in the first stages, but it has already contributed to the building of new facilities, the renovation of older farm buildings and the beginning of a vegetable garden.

The work in developing good farm activities for and with the pupils contributes to the development of the farm as a workplace and a miniature community. In the same way the farm offers work for the pupils, the presence of the pupils fosters change on the farm. This dialogue seems to have been fruitful for all three farms.

At the same time, by working on the farm, the pupils are spurred on to develop a focused will, knowledge and skills as entrepreneurs and developers. When the pupils master place-base skills and are encouraged to see the results of their work in a creative and community-related connection, the foundation is laid for seeing oneself as a future entrepreneur.

School-Farm Projects in the community and as community

As the farms develop their work with schools and other groups on the farm, the effects of this work begin to be known in the community. Instead of the isolation which most farmers feel today, as well as negative associations to subsidies and pollution, these farms have many participants that tell another story about the farm. And while the experiences at the farm and some of the farm "products" are spread in the local community, the farm also grows as a miniature community attracting more participants and hands that

want to share in the work. Fallet Farm is at the beginning of this development, so we will focus on the farms at Hegli and Straumøy here.

At Hegli the contact with the community is ensured through the sale of small plants at a stand in the village in the spring and of vegetables and bread in the autumn. The customers speak with the pupils directly and hear about the project. As Sidsel tells, the flowers and vegetables also turn up in many gardens and the products that are served in many households also contribute to an interest in the farm. The grandparents tell about the banquet where their grandchildren helped make and serve the food and where perhaps the mayor, the school director or the county manager were invited guests of honor.

At the same time, the Hegli has grown as a meeting place for many who contribute to the work. Sidsel describes some of these participants:

A school assistant, paid by the school after the death of the husband, participates during the school days. A neighboring farmer is employed one day a week to give me time for administration. I have an agricultural worker originally from Pakistan who does the milking every morning and afterwards helps the pupils with the cooking. Her children also work at the farm when extra hands are needed. A retired colleague, the former music teacher at the school, has taken on responsibility for the garden and helping the pupils with the musical contributions at the winter banquets. In addition there are trainees and visiting youth who live and work on the farm. One comes back each year to help with the spinning and weaving, as well as with the banquet. Students on practice for teacher education and many guests from other countries also imbue the mood of internationality. We speak often English and German, sometimes French and Spanish, with a bit of Urdu on occasions.

A house built for the older generation that has passed on is now living quarters for the assistant, as well as for a nurse who works in the community, but also participates in the life of the farm. She has taken a course in cheese making and is actively experimenting to see what new products can be made at the farm. At Straumøy, in addition to the 20 some pupils who work on the farm one day a week and the classes that come to the farm throughout the year, there are many who have a part of their work week as assistants or in other roles:

Today there are around 19 people who have a part of their workweek on the farm in addition to us, and they come from 3 different counties. We have no employees ourselves. These people work in the schools, in child welfare and handicapped care at the farm. We also have cooperation with 4H, Haugesund Tourist Club, The Holiday Club for children in Haugesund and take in many visitors who come to see the animals.

Newspaper articles, café for the older people in the community and visiting students from the local teacher academy have also contributed to the reputation of the farm. Each week the teachers who are responsible for the pupils at the farm receive reports with photos of the work that has been done on the farm as a basis for the school work. Already some years ago, one of the five youth in the family could tell about some young women at a party who wanted to know which of the sons in the family would be taking over the farm! Whereas farms are not considered to be an attraction for most young people today, it was obvious that these girls considered the farm to be a positive attribute!

In the meantime, the farm has grown from one house to three, filled with activity based on the life of the farm. Child welfare services takes over the schoolhouse after school hours and participates in the farm chores with the children and youth in the afternoons and on the weekends. The newly renovated home for the older generation now houses "graduates" of the farm project who have come back to live and work on

the farm as a part of care services for handicapped adults. In addition the farm now houses almost every type of animal which is possible to have on farms in the Norwegian climate. It is no wonder that the farm has become an attraction for visitors.

The agriculture policy practiced in Norway encourages farm-mergers based on monocultures. The farms at Hegli, Staumøy and Fallet show that smaller farms have the potential to become diversified small communities characterized by social, cultural and ecological sustainability. In addition, the farms are economically sustainable and can offer paid work to the local inhabitants. This is not the case with the large farms supported by agricultural subsidies which favor rationalization of structure. Almost all of these farms have a deficit without the subsidies from the state (Lie & Løkeland-Stai 2012)

Conclusion

We have attempted to show some of the advantages of family farms as educational arenas, for the farms and their possibilities for developing a lifestyle which supplements the specialization of today's production, for the learning processes which are facilitated through the real work on the farm, and for the community.

Family farms as miniature communities have the potential to restore connections between our food and the soil, between people and the basis of human existence. These connections are fragmented and partially dissolved in modern society. The connections can be restored both for the self-employed entrepreneur on the family farms as well as for the groups which use the farm as an arena for learning and working. Last, but not least, the miniature communities on farms can inspire the local inhabitants to restore the connection between themselves and their use of local resources in production and processing of food. Thus, place-based learning on the farm can contribute to encouraging entrepreneurship and to revitalizing the potential for local food production and culture. Through place-based learning it becomes possible to renew the value of local resources and see the potential for local production and processing in a connection to historical traditions. In addition, new residents can be invited in and included with their knowledge and skills in use of the local resources.

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Example 1: Hegli Farm

Location: The farm is located 50 kilometers north of Oslo in an agricultural area which has grown in population due to the establishment of Norway's largest airport not far from the farm. The landscape is still composed of farms nested among hills and ravines.

Agricultural production: The farm has organic milk and meat production as the main agricultural income. There are 14 hectares of cultivated land in addition to 3 hectares of pasture and 3 hectares of deciduous forest.

Farm animals: 15 milk cows (64.000 liters) in addition to heifers and calves, one bull, one horse, two pigs, 30 chickens, 5 geese, a Newfoundland dog and many cats.

Buildings: The buildings surround a square yard, the oldest building from the end of the 1700 century. The traditional house for washing, baking and brewing has been renovated as a base for the pupils. It contains a simple kitchen with both an open hearth with wood-fired oven and an electric stove for cooking, a wardrobe and showers, a food storage cellar and two adjacent rooms with tables for eating and/or working.

The new free stall barn was built in 1999. The old barn has been renovated to accommodate weaving looms, sew machines and carpenter benches. The installation of a wooden stove enables winter use.

Participants in the pedagogical activities: After the death of my husband in 2002, I maintain the farm with the part time help of an assistant. A school assistant, paid by the school after the death of the husband, participates during the school days. A neighboring farmer is employed one day a week to give me time for administration. I have an agricultural worker originally from Pakistan who does the milking every morning and afterwards helps the pupils with the cooking. Her children also work at the farm when extra hands are needed. A retired colleague, the former music teacher at the school, has taken on responsibility for the garden and helping the pupils with the musical contributions at the winter banquets. In addition there are trainees and visiting youth who live and work on the farm. One comes back each year to help with the spinning and weaving, as well as with the banquet. Students on practice for teacher education and many guests from other countries also imbue the mood of internationality. We speak often English and German, sometimes French and Spanish, with a bit of Urdu on occasions.

School partner: The local lower secondary school (junior high school) uses the farm during the whole school year. The 8th grade classes are on the farm one week both autumn and spring and the 9th and 10th classes have one week each year.

Pedagogical motives and development of the project:

I was already a teacher at the school. I noticed that the pupils woke up when I used my own experience at the farm in my teaching. After a time I was not satisfied with digging up worms and collecting wilted leaves to take to the classroom and had the idea that learning could be more authentic and effective at the farm. I presented my thoughts for the faculty and the leaders at the school and applied for support at the local agricultural office to work out my ideas. In addition the farm became an example for exploring farm-school cooperation in a national project, “Living School”.

The main motives from the beginning in 1998 were and still are:

- acquaintance with and respect for life processes
- a closer connection between theory and practice
- work experience, pleasure in one’s work and self-efficacy
- more continuity in learning situations
- opportunity for insight into whole systems in reference to knowledge
- quiet and time for reflection

With the new curriculum in 2006, the goal of being able to discuss sustainable development is also important. During the time I have had pupils on the farm, I have learned to see that they have had few opportunities to work with their hands. They have difficulty separating the eggwhites from the egg yolk when they cook, neither is it easy for them to use scissors and tie knots when we pack the meat for freezing. A farm can give young people the possibility to work, to test their own strength, to use and refine knowledge and understand the basic connections in life processes. How can we expect a democracy to function without the experience of the conditions for living organisms, including ourselves?





Examples of tasks and organization:

The 8th class begins at the farm in the fall with only half of the class at a time. They become acquainted with the farm and the routines. The pupils draw the buildings (we have made a geometry booklet to aid them), count all the animals, go along the borders of the farm and draw a map over the whole area. We take up the history of farming and use Hamsun's "The Growth of the Soil" to follow the pioneer work of making a new farm. The 8th class comes again in the spring with the whole class where the focus is on planting the garden, in addition to all the daily tasks of cooking, washing, carpentry, sawing and piling up wood, giving feed to the animals and cleaning the milk kitchen and stall. On Fridays we sell plants in the village.

The 9th class comes back after the summer holidays to a garden ripe with products to be harvested. One animal is slaughtered each week at the farm by a professional butcher and afterwards cut and packed for freezing by the pupils. Bread is baked in the wood oven for eating, taking home and selling at the stand. On Fridays we sell vegetables, bread and flowers in the village.

In the 10th class the pupils come to the farm in the middle of the winter. Traditionally this is the time for inviting guests. The pupils invite their grandparents and use one week to plan a banquet, complete with a program for entertainment and telling about what they have learned on the farm. We use the story and film "Babette's Feast" by Karen Blixen as an inspiration and literary reference point.





Rules and Precautions

A farm is a dangerous work place which cannot be secured in the way a school or kindergarten can when the pupils are to "learn by doing". We attempt to ensure safety through organization and responsible guiding.

When the pupils are at the farm, they are organized in groups of three pupils. Each morning they receive a plan for the day where the tasks for the morning and the afternoon are described for each group. The teachers and assistants move between the groups and help them where necessary. The pupils receive written instructions as to where they should work. Nothing else is allowed. They use axes and knives only when an adult is by their side. And everyone who works with the pupils has responsibility for groups of three. They must follow the groups at all times. Each adult has responsibility

Contracts and economic compensation:

When the proposal for cooperation between the farm and school was made, I was to continue with my teacher salary. Together with a 10-year contract, a sum of 200.000 Nkr (25.000 Eu) was stipulated for reconstruction of the washhouse to room the pupils' activities. In addition I received 25.000 Nkr (3.000 Eu) to cover electricity and water, and the interest on the additional loan for reconstruction. The school also covered the food items from the local shop which we couldn't produce ourselves. After the death of my husband, the school hired an assistant to share the responsibility with me when the pupils were at the farm.

In 2008 I received a new 5-year contract. I was given one day in the week for administration, so that a neighbor farmer is now engaged to take my role one day a week. Since there have been many things which the school would like to see improved and repaired at the farm, I also have received 200.000 Nkr (25.000 Eu) a year for necessary improvements, improvements which the farm income would otherwise not be able to cover.

We are working on a plan for how the cooperation with the school can continue after my retirement. We envision a type of trust where the tasks are divided between several people. One who is already working here is taking teacher education. Both the farm and the local government have invested in the farm to make it a resource for the school. The generational turnover should be a part of all planning in such projects.

The connection between the farm and community

During the time the project has developed, many new connections to the local community have appeared. We began to have a market stand every Friday in the village, both spring and fall. The sale of small plants in the spring brings flowers and vegetables into many local gardens and maybe people show them to others and tell about the project they bought them from.

In the same way, when the vegetables from our stand turn up on the dinner table in the fall, they also tell about our project. The customers get the chance to speak directly with the pupils about the raising of the plants and the harvest of the vegetables. Also those who don't buy see what is going on and draw their own conclusions.

The grandparents who have been at the banquet are likely to speak both with their children and with their grandchildren about what they have experienced. Moreover, they will talk with the other grandparents who have also been at other banquets.



Reflections on the farm project and the community

The conversations, such as mentioned above, will take up the worth of such cooperation between farm and school; to which degree the goals that I have described above are fulfilled. The discussions will surely also to some degree have to do with the question of ecological farming, local food production and sustainable development. The farm is almost like an island in the local community and forces questions to the surface in relationship to our contemporary organization of society.

Advantages and disadvantages of farm-school cooperation

Many farms which were big enough to provide outcome and work for a whole family, perhaps also with hired hands, can no longer manage without an income from outside the farm. The work at the farm is largely mechanized which allows at least one in the family to have work days off the farm. But this means that the one who remains alone at the farm has a more difficult and lonelier work place. And for the one who works off the farm, the work burden seems twice as large since they divide their work and engagement between two separate places.



In cooperation between farm and school, the whole family can work on the farm and have the opportunity to make the farm more alive. The demands for efficiency can perhaps be reduced to provide for more meaningful tasks for the pupils. For the animals on the farm it is a great advantage that there is always someone there who can intervene if something unforeseen happens.

The pupils who come to the farm help to structure the work days on the farm with stable mealtimes and thoroughly planned programs. New activities which the farmer could not

manage alone can enrich the farm. It can be a vegetable garden, workshops, marked stands, production of winter wood and many other activities. The older buildings can acquire new functions as well which justifies them being restored and kept up.

The farm awakens almost as out of a deep sleep and receives new life. The pupils go to and from their tasks, there is smoke from the chimney, someone is hammering, others sawing or digging and the looms send out a regular banking rhythm. The scent of food sives out from the kitchen, as the smell of the barn fills the yard.

But all this must be administered and organized each and every day. It is very interesting – but it **MUST** be done. There is an enormous potential for chaos lurking around each corner.

A school-farm cooperation is dependent on the approval of the school, the county and the local community. In addition to the good will of the county to continue the cooperation, it is also dependent on the economy and priorities. This is very important to enable long-term agreements which give the possibility for investments and thus for more activities which can increase the learning outcomes for the pupils. The family on the farm has a need for some security that their effort with the farm-school cooperation can be continued as long as the need for supplementary arenas for learning still exist.

Long-term agreements are also important for the school. It has invested many hours of work with the teachers in integration of the project in many subjects and in the teaching schedule.

Example 2: Straumøy Gard

Location:

Straumøy Farm is a “småbruk”, a little farm of 40 ha along the west coast between Stavanger and Bergen. The farm has a coast line on the Bømle fjord and owns also part of an island.

Approximately 5 ha is arable land, but we lease to other farms where we harvest grass and use pasture. Together with others we also access a large mountain area along the glacier Folgefonna.

The highest altitude at the farm is 74 m over sea level and the landscape is hilly with small grass slopes between the knolls.

The outlaying areas are pine forest and heather. There are many small farms around us but they have only sheep and work primarily outside of the farm



Agricultural production:

The farm is driven according to organic principles and has 7 cows with calves and 80 winter-fed sheep. The cows belong to an old Norwegian race, Westland fjord cows. The sheep are in the mountains during the summer. In addition we have a flock of cashmere goats that graze on the island during the summer, one sow with piglets that help us plow up and renew the pastures, 25 chicken, 2 Nordland horses that are used for forest work, 3 border collies that are trained to gather the sheep, to lamas and several rabbits.

Buildings:

There are three houses on the farm. The house where we live was built in 1981. The Yard House was built as a base for the school project and for child welfare work in 2003. The Larine House which is the oldest house was built in 1850 and renovated in 2010. It is used today as sheltered living quarters for young adults with handicaps.

The farm buildings include a stall, chicken coop and sheep shed, a rabbit house, a boathouse, a tool shed and two lavos.



Participants from the farm in the pedagogical activities:

Anne and Leif Grutle share the responsibility for the work at the farm. Leif has mainly the agricultural work, whereas Anne has main responsibility for planning, organizing and reporting for the school activities. Both Anne and Leif participate in the work with the pupils.



School partner(s):

We have pupils with special needs in small groups from 4 counties and 10 schools. The pupils who participate are here 1 to 3 days I week and are otherwise in the lessons at their own schools. There are between 8 and 10 pupils in each group all three days. In addition we have classes from the Waldorf School in Haugesund and from our nearest school 15 days in the course of a school year.

Pedagogical motives and development of the project:

Our project began with a course in social pedagogy and an assignment I wrote about the farm as an arena for individually adapted teaching. Through my own experience as a teacher in elementary school, I felt helpless to reach some of these pupils. There was no alternative outside of the classroom. As a newcomer on the farm, I had experienced what a farm meant for my own children and for children and youth who worked in short periods on the farm. I became more and more certain that there was an exciting possibility in the tension between practical work and learning. At that time we became a part of the national Living School project which helped us to get started. Some pupils came from our own commune (Sveio with 5000 residents), but the rumor spread and pupils began to come from Haugesund. Today the most pupils are from Haugesund, a city with 35000 residents.

Examples of tasks and organization:

The pupils participate in the farm tasks and do the stall duties, repairs and work in the forest, on the fjord and have also work in the garden and in the fields. We want them to be a part of the work that has to be done, something which is meaningful and gives them a chance to succeed. The pupils



have understood what they are doing the day they begin to voice opinions about how the work should be done. We see this as a sign of their engagement, skill and knowledge when they begin to tell us how we should do things.



The days are divided in two parts. The first part is with the feeding of the animals and cleaning of the stalls. In the other part we have projects which depend on the season and theme. After the barn work, they eat lunch together. A work plan is available on internet one week ahead of time. At the end of the day we talk with each pupil and write an evaluation of their contribution, level of cooperation and endurance, among other things. In addition we make yearly plans which cover the main topics, as well as individual plans with goals for each pupil and a report in the spring on each pupil.

Rules and Precautions:

Pupils and adults must respect the rules when they are on the farm. These are taken up each half year and otherwise when needed. They tell about what is allowed and not allowed, how we handle animals and procedures for fire and accidents. Some of the pupils have assistants with them from the different schools. These receive information and our expectations to them as role models for the pupils and how they must participate in the work with them.

Contracts and economic compensation:

Although the contracts have been subject to many changes, today Anne has a 50% teaching position in our county. We bill the school for the farmer's salary. With the schools outside of our county, we have a contract for 2+1+1 years and send bills once a month according to the number of pupils which come. We have a contract for each pupil for one school year and a term of notice of a month for both sides. Rent and running costs are a part of the price per pupil. Income will therefore vary according to the number of pupils. In addition the Yard House is used for child welfare after school time, which means that the schools share these expenses with other services. The income from the groups and the welfare service has been between



126.000 and 190.000 euro in recent years. We are now in a new phase with the sheltered living and working accommodations for young adults and this can change the economic situation in the future.

The connection between the farm and community:

The fact that we have an active farm with many people working here has made the farm known locally and regionally. Today there are around 19 people who have a part of their workweek on the farm in addition to us, and they come from 3 different counties. We have no employees ourselves. These people work in the schools, in child welfare and handicapped care at the farm. We also have cooperation with 4H, Haugesund Tourist Club, The Holiday Club for children in Haugesund and take in many visitors who come to see the animals. One of our goals is that all the pupils in the local school get to know our farm through work days with their classes.



Reflections on the farm project and the community:

Our work with pupils on the farm started when I saw a need for an alternative arena for learning for pupils who, with different backgrounds, did not thrive at school. The goal is that this is a stable offer such as all other services provided by the school. This is a prerequisite for other farmers to create such arenas as a way of living. We have one son who wants to take over the farm as a pedagogical resource as his future job and has chosen a further education in this direction.

Pros and cons of family farms as educational arenas:

The pupils come to the farm and to the farmer in his authentic environment. The tasks they do are real and they know that the farmer must do them if they shirk their duties. Maintaining order and doing repairs takes on another meaning when they know the farmer, in comparison to a state or county institution. The farmer knows stories about the history of the place from several generations. The fellowship with those who have been here before and thus the roots and connection to the place becomes stronger. This can contribute to identity-building for the individual pupil. The farm goes from being a private to a public arena, something which brings life and events to the farm. The farmer and his family must welcome this change. In order for a private farm to be used in a public setting, there must be good contracts which



regulate the relationship between the farm and the public users. It must be formed on the basis of good cooperation and both partners must be flexible and generous. Open and clear communication is a pre-requisite to succeed.

Example 3: Sør-Fallet Farm

Location:

Sør-Fallet farm is in Nes County, northeast of Oslo. We are 12 kilometers from a main road and have 20.000 residents in the county. It is the largest agricultural county in the country. Our farm lies in a valley with poor and stony soil which is best used for growing grass. This is both because of the length of the growing season and the large number of grazing moose. We also have occasional visits of wolves.

Agricultural production:

At the moment we lease out 8 ha of fields to a neighbor while I am engaged in teacher training and in developing the project. We take over this area this year and will sow with grass. We also have 2.200 da of spruce forest.

Farm animals:

There are 15 winter-fed sheep, five horses, two cats and 3 rabbits on the farm.



Buildings:

The main house is from 1950 and was renovated between 2000 and 2010. My parents-in-law live in second house on the farm.

An old barn from the 1800s was in such bad shape that we had to replace it. In 2008 we built a new stall with a classroom in the second floor. All activity with the pupils has its base here. The room is 45 m² with a kitchen where the pupils make a warm meal each day. There is a toilet in the stall built for handicapped access.

There is also a traditional storehouse (“stabbur”) which is occasionally used as classroom.

An old stall without insulation is still used for the sheep in the winter.



Participants in the pedagogical activities:

Margit Fallet is the only member of the family engaged in the work with the school. Different assistants come with the pupils from the school. Now we are two adults and 9 pupils. Since we have activities with horses which occupy much of the time in the winter, I am dependent on having an assistant who knows horses. So far this has worked well. I do all the planning and reporting back to the schools.

School partner:

Until Christmas 2011, I worked with one junior high school that sent pupils to Fallet two days a week. After Christmas that year a grade school from the same county applied for a place for a pupil in 3rd grade. This pupil is now together with

the other pupils on the farm both Tuesdays and Thursdays every week. Now there are two schools in the district who are my partners.

Pedagogical motives and development of the project:

I began working at the junior high school 5-6 years ago. I had my training and background from agriculture and had never worked at a school before. My task at the beginning was to be an assistant for pupils who had difficulties with behavior and social relations or other diagnoses which meant that they needed help and support throughout the school day.

One day the principal asked if I could take some of the pupils home with me to the farm. There they could perhaps try doing other tasks than the theoretical tasks they had at school. The principal seemed to think that this could be positive for them. After taking the course, "The Farm as a pedagogical Resource" offered through the university, I began to develop a program at the farm and have now soon finished a teaching education program in agriculture, the subject that I teach in at the farm.

Next year there will again be two days a week with pupils on the farm. The pupils have learning difficulties, diagnosis and individual plans for their learning goals. These pupils receive an offer for small group-based learning in adapted learning areas. The parents must sign a contract of permission enable to allow the school to use the farm in the education of their children.

We see that these pupils find tasks which they manage, they find new friends in the group and they have good days judging by their spirits. They partake in tasks where they have received instruction and had some theoretical background. They work with competency goals from the curriculum and that is documented in reports each week.

Examples of tasks and organization:

The pupils who come to the farm two days a week are from three different class levels (8th to 10th). This works well and serves as arena for training of social competence. The tasks vary according to the year, but each day begins with a half hour of subject work and thereafter the daily care of the horses and rabbits. The subject, "Food and Health" is included through having one group that cooks lunch for everyone and serves it at 11:00 AM. After lunch the tasks vary with both projects, such as building a lavo, and games. They are divided up into two groups. The train the horses, cut wood for winter and learn to use an axe. We own another small farm which we are gradually renovating and engage the pupils in this work too. It demands hard work and a lot of planning. We are also working

on a school garden. I'm lucky that some of the pupils have greener fingers than mine!

At the end of the school year we invite the parents who wish to come. There is always at least one parent for each pupil. They are interested to see what their children are doing at the farm.

Contracts and economic compensation:

I have a contract one year at a time with the junior high school. This is now being negotiated with the county. A new organization of the school system has led the principal to the question of how many resources should be used for such a small number of pupils. The school pays 1.670,- as rent for use of the facilities each day, also for picking up and delivering the pupils to and from the school, as well as 30 Nkr per pupil for food made at the farm each day. In addition, I am now paid as a qualified employee of the county these two days. When I have finished my teaching diploma, I hope to get paid a teacher's salary. The county is considering a type of organization where all schools in the county will be able to use the farm and my services



The pupils work with "Food and Health" . At Fallet this gives the pupils a feeling of achievement



Here the pupils are weighing the feed for the horses. It is good math exercise. We learn about calculating fodder according to weight.

Fallet For Alle



