

## CHAPTER 9

### GREEN CARE IN NORWAY

*Farms as a resource for the educational, health and social sector*

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**Abstract.** In Norway, Green Care comprises farm-based services to schools as well as health and social care. Farms can be used to host a wide range of activities, such as kindergartens, after-school programmes, school projects and theme assignments, education adapted to pupils with special needs, activities and tasks designed for psychiatric patients, mentally impaired and elderly with dementia. Green Care farms can also assist child-welfare authorities, e.g., by acting as day-care centres or foster homes. Three case presentations of service farms are given. As a large fraction of Norwegian farms are rather small, they are well suited for such services, which in most cases are paid by the local municipality. The county departments of agriculture provide advice and help in developing quality-assurance tools for the Green Care services and their physical environments. For persons with mental disorders, e.g., a psychiatric institution has the professional responsibility. Scientific research on Green Care is performed at two institutions. The Centre for Rural Research has conducted a nation-wide survey of Green Care farms. At The Agricultural University of Norway, research focuses on effects of working with farm animals on persons with mental disorders, and on health effects of plants indoors and in the working environment. This university also gives courses on Green Care at Bachelor level and as continuing education to farmers and health personnel. The chapter ends with a discussion on future challenges related to Green Care.

**Keywords:** animal-assisted therapy; dementia; human-animal interactions; indoor plants; multifunctional agriculture; rural communities

#### INTRODUCTION

##### *Defining 'Green Care'*

In Norway, other terms are also used to denote the concept of 'Green Care', such as *Inn på tunet* ('on the farmyard') or 'farms as a pedagogical resource', when it comes to schools using farms as an arena for teaching or other activities. In this article, all of these are defined as Green Care.

**Green Care** combines farm resources with society's need for alternative arenas. On such Green Care farms, meaningful activities are organized in a stress-free *Jan Hassink and Majken van Dijk (eds.), Farming for Health, 109-126.*

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environment, focusing on learning via practical challenges and experiences. On these farms, there is always useful work to be done, independent of the users' varying health conditions or motivation. On these farms, it is possible to experience classroom theory through practical work.

A recurrent theme of many Green Care programmes is the social training and interaction, as well as the sense of belonging experienced among the programme participants. For example, it is common to arrange one or several joint meals each day, gathering everyone on the farm.

Farms can be used to host a wide range of activities, such as kindergartens, after-school programmes, school projects and theme assignments, education adapted to pupils with special needs, activities and tasks designed for psychiatric patients, mentally impaired and elderly with dementia. Green Care farms can also assist child-welfare authorities, e.g., by acting as day-care centres or foster homes.

Each new initiative is designed according to the needs of the users, and in accordance with public priorities and the farm's and farmer's resources and potential. The quality of the provided services depends on successful cooperation between the farm and the municipality and society in general. Green Care services are intended to have a 'win-win' effect, in which all parties benefit from the programmes. Green Care shall increase the well-being of its users, provide better services to its clients (local governments) by improving the utilization of available resources and secure increased income for the farmer.

By now, numerous experiences of how to establish satisfactory Green Care services have been documented. Many of these are presented on the website [www.innpaaturnet.no](http://www.innpaaturnet.no), as case studies and guidelines for farmers and public-service experts.

## BACKGROUND

### *Agriculture in Norway*

Norway is the northernmost country in Europe. The distance from the country's northern to its southern tip is as great as the distance between Oslo and Rome. Due to significant climatic variations, farming conditions vary considerably within the country, e.g., between North and South. Whereas vegetables and fruit are primarily grown in southern Norway, livestock farming is most common in the North, i.e., sheep, cattle and reindeer husbandry. In the past 30 years, Norwegian farm policies have 'channelled' most of the ruminant livestock to areas that are not suited for grain or vegetable production, i.e., northern and western Norway and other mountainous areas.

Only 3% of Norway's total land area is cultivated land (approximately 1 million hectares), and 22% is covered by forests. The remaining area is mainly mountainous, much of which is above the tree line. In addition to producing safe, high-quality food, Norwegian agriculture also contributes to maintaining the rural population and business activities throughout the entire country. Farming activities help to maintain viable rural communities. Norwegian farm subsidies vary between

different parts of the country, depending on the natural conditions. The aim is to compensate for poor competitive conditions, thus enabling the continuation of farming activities and settlement in all parts of the country.

#### *Recent developments*

In the past decades, Norwegian agriculture has gone through a rapid development towards increasingly fewer and more efficient farm enterprises. In spite of this development, the total farmland area has not decreased. The number of farms in Norway has been more than halved in the past 25 years. In a European context, Norwegian farms are small, with an average of less than 20 ha cultivated land. Average herd sizes on livestock farms are 17 dairy cows, 40 breeding sows and 50 winter-fed sheep. Most farms also have forest land, and a large share of the timber harvest is carried out by contractors with modern machinery. However, wood is widely used as a source of fuel in the long, cold Norwegian winters, and much of the firewood is still prepared manually.

Presently, there are about 55,000 farm enterprises in Norway. However, there are more than 150,000 properties that are classified as farm estates. Total employment in agriculture is about 70,000 man-years, or about 2.8% of the country's total work force. Many farms are run part-time, implying that a certain share of the total farm-family income is derived from off-farm employment. In 2002, off-farm employment was the main occupation for more than 40% of the part-time farmers.

#### *Norwegian agriculture well suited for Green Care*

Within such a farm structure, many farmers are trying to utilize all of a farm's resources, and not only for traditional agricultural production. Empty buildings and idle machinery can come to other uses than originally intended for. Many farm couples would like to earn as much of their income as possible on the farm, but this is often impossible to achieve from traditional farming activities alone.

Certain aspects of Norwegian agriculture make it relatively easy for outsiders to take part in farm operations, without the feeling of being on a large-scale farm 'factory'. These aspects include their small size and wide range of products, relatively small machinery as well as a number of operations still being conducted manually.

Health and welfare services in Norway have changed in recent years – from focusing on centralized institutions to providing services in the users' local communities. Other important guidelines are individual adaptation and a broad range of services. The concept of Green Care complies well with this trend.

#### *Public responsibility for welfare*

Norway is divided into three administrative levels: the state, counties ('fylke' in Norwegian) and municipalities. There are 19 counties and 434 municipalities. The latter are responsible for, among other things, kindergartens, elementary schools and

care services. The municipalities are also in charge of primary services in the health and welfare sector. The county authorities are responsible for such services as secondary education and local/regional public transport. Specialist health services are run by the state, and are organized as five regional enterprises.

There are significant differences between municipalities with regard to their geography, area and population. More than half of the municipalities have less than 5000 inhabitants, and 12 have a population exceeding 50,000. This makes it difficult to discuss a 'typical' Norwegian municipality.

Municipal and county activities are of great importance for the welfare of individual citizens. These two administrative levels account for about 60 percent of the public services presently provided in Norway. As a result, most of the services provided in the educational, health and welfare sector have been operated by the state, and few such services have so far been outsourced.

For Green Care, this implies that in most cases the municipality or the county would be the buyer of a specific service. In other words, each farmer must enter into an agreement with either of the two authorities.

## ORGANIZATION AND QUALITY ASSURANCE

### *General organization*

Green Care requires extensive cooperation between several ministries. At a national level, an inter-ministerial committee has been established, which is chaired by the Ministry of Agriculture. The committee also has representatives from the following ministries: Education and Research; Social Affairs; Health, Children and Family Affairs; and Local Government and Regional Development.

An important issue for the county departments of agriculture is business development. The county departments have thus urged the local governments to consider agriculture a new arena for developing measures in the educational, health and welfare sector. Furthermore, the county administrations have also helped to develop quality-assurance tools for the cooperation between farmers and municipalities, and provided capacity-building activities such as courses and professional seminars.

### *Cooperation between farmers and the local and county governments*

The municipality is usually responsible for assuring the professional quality of the provided service. It is thus important to prepare new initiatives thoroughly, and to make sure one finds a suitable farm(er). Before any farm service can be defined as Green Care, a written agreement must be made between the farmer and the buyer of the services. The agreement shall address such issues as guidelines for contents, quality requirements, division of responsibilities and designation of various functions (supervisor, assistant, teacher, manager, etc.), cooperation routines, financial aspects and the agreement's validity period. Financial aspects are to

include such items as agreed compensation for working hours (wages), rent and reimbursement of expenses.

*Quality assurance of the provided service*

So far, there are no specific quality standards for Green Care services. The buyer of the services is responsible for assuring the quality of the services. The general quality assurance guidelines must be specified in each agreement, including such aspects as organization, professional responsibility, counselling routines, routines for admission of new users, reporting systems and evaluation routines. The management of the service in question must thereafter develop the design, routines and measures necessary to secure the service's professional quality.

The on-farm professionalism and quality assurance must lie in the routines linked to the day-to-day interaction with the users, and include the right of access by all relevant parties.

Farmers shall not act as social educators, teachers, social workers etc., unless they have the necessary professional background. A Green Care farmer shall primarily act as supervisor and supporter, while the experts purchasing the farmer's services are responsible for assuring the professional quality of the training or welfare services provided to the pupils/users. However, the quality of the services, as experienced by the individual user, is highly dependent on the farmer's commitment, understanding, communicative ability etc.

Those involved in Green Care services will always be in need of professional development related to the user groups associated with the farm. Good routines should therefore be developed to assure that farmers receive necessary professional training. Some municipalities enable farmers to participate in their training courses, planning days and seminars as part of the professional follow-up.

*Quality assurance of the physical environment*

As part of the quality-assurance system, the farm's physical environment must also be looked after. This can include securing the standard of buildings, risk and hazard management strategies, noise protection (machines etc.), dust protection and safety with regard to pollutants such as chemicals etc.

The Working Environment Act places stringent demands on safety measures. Farms with activities classified as Green Care are subject to these regulations. Farmers must therefore contact various authorities (Norwegian Farmers' Association for Occupational Health and Safety, or the Labour Inspection Authority) in order to confirm which regulations apply to the farm's new activities. The farm's insurance company should also be included in the discussions about necessary safety measures related to the planned activities on the farm.

A central aspect of the Green Care concept is to let users meet 'real life' and 'genuine challenges' on the farm. This will always include a certain risk of small accidents. It is important to be conscious of this, without becoming all too hysterical about safety.

*Farm investments*

Often, investments may be necessary in order to comply with specific requirements. Farmers can apply for financial assistance to cover these costs partially. These funds are allocated via the Agricultural Agreement<sup>1</sup> in order to promote farm-based business development. The funding scheme can provide interest-free loans and subsidize such investments as the construction, expansion or modernization of buildings, or the purchase of fixed assets:

- renovating and rebuilding houses and farm buildings to comply with the needs of users and pupils;
- adapting farm buildings, houses and the farmyard area to the needs of the physically disabled;
- installing sanitary facilities;
- implementing security measures.

Farmers contact the local agricultural authorities for application guidelines and more information about such financial-assistance schemes.

## RURAL RESEARCH RELATED TO GREEN CARE

*Number of farms*

In 2003-04, the Centre for Rural Research conducted a nation-wide survey entitled "Green Care – flexible specialization or traditional supplementary business for Norwegian farmers?" The study showed that there are between 500 and 600 farms offering Green Care services in Norway. A similar study in 2002 resulted in a figure of nearly 500. The number of farms providing Green Care thus seems to have stabilized in recent years. However, relatively many farmers stated that they were just getting started or were considering to start-up in the near future. Also, numerous farmers reported that they wanted to start providing Green Care services, but so far, without success. There are few data about the reasons for such failure, except for the cases in which farmers state that the local authorities have a negative attitude to such services, or do not prioritize their funding. Green Care farms are spread all over the country.

Another study conducted by the Centre for Rural Research (Rye and Storstad 2004) reports that nearly 8% of a representative selection of Norwegian farmers either provide Green Care services (2.7 %), are in the process of starting up (0.6 %) or are considering the establishment of such services (5.7 %).

*A diversity of services and target groups*

The most commonly provided service is general education for schoolchildren (141 farms), followed by services defined as 'child welfare'. The third largest target group are persons in need of psychiatric care (120), followed by children with behavioural problems (103). Farm kindergartens and services for the elderly with dementia are provided by 25 farms (about 8% of the survey group). On several

farms, various services and target groups are combined. In some cases, youths or persons with an emotional dysfunction were employed in one of a farm's programmes after having completed individual treatment in another.

The gender distribution is somewhat imbalanced. In 35% of provided services, the distribution of men and women is even, in 27% of the services, there are more girls/women, but boys/men are the majority in 43% of all services offered. Regarding ethnicity of users, Norwegians dominate on most Green Care farms. About 18% of the users, however, are from Asia or Africa.

#### *The 'Green Care farmer'*

Of those regarding themselves as the 'main providers' of farm-based Green Care services in the survey, 64% are women and 36% are men. The average age of the 'Green Care farmer' is about 49 years.

Many of the farmers in the survey have higher education (42%), and many have professional experience from public services related to the welfare services they provide. Many of these farmers are seemingly resourceful persons, showing a certain degree of entrepreneurship within their field. Many Green Care farmers state that their motives for establishing such services include the wish to be self-employed on their own farms. The mere lack of other employment possibilities is not a main incentive.

Also, 88% report that their spouse or partner is their closest co-worker in the Green Care enterprise. On many farms, three generations work together.

#### *Farm income*

In 2002 nearly 60% of the Green Care farms had a net income of below €23,800 and operating profits of below €11,900. Thirteen percent of the farms reported a net income of more than €59,000. When asked about expected income developments, 43% replied that they expected a higher income, 12% expected a lower income and 46% expected about the same income as in the year of reference (2002). About 66% replied that they considered the profitability of Green Care activities to be better than that of traditional farm production.

#### *Labour input*

Of the survey farms, 57% replied that Green Care accounted for *less*, and 43% replied their services accounted for *more* than one man-year. Of the latter group of farmers, 27% had a labour input of between one and three man-years, and 7% had activities corresponding to five man-years or more. This implies that for some farms, Green Care has developed into a significant business with several employees. Eighty percent of the survey farms had between one and four employees. About two thirds of the farms had the same number of employees in 2003 as in 2002, whereas 27% had a larger staff in 2003 than in the previous year. Nearly 60% believes that the number of employees in the Green Care sector will increase.

Articles from this survey (Fjeldavli and Meistad 2004) can be found at <http://www.bygdeforskning.no/>. For a description of three individual Green Care farms see the Appendices 1 - 3.

#### RESEARCH AT THE AGRICULTURAL UNIVERSITY OF NORWAY

At the Agricultural University of Norway, research on Green Care is part of the topic 'Environment, Welfare and Health' within the University Programme in Environmental Research. Research interests include the use of animals, plants, gardens and the landscape to promote health for all humans and provide therapy for psychiatric patients.

##### *Farm-animal-assisted therapy*

While there is much practical experience with letting psychiatric patients work with farm animals on Green Care farms, there is almost no scientific documentation on effects on their mental health. In 2001-2002, a pilot study was conducted to investigate the feasibility of documenting positive effects of working with cattle or sheep on the mental health of humans with moderate mental diseases: marked depressions, light schizophrenia and various personality disorders (Berget et al. 2004). Validated psychiatric questionnaires were used after 3 hours' work twice a week for 10 weeks. Results were encouraging, although 50% of the patients dropped out before the period ended. The most pronounced effect on the completers was a marked reduction in depression. Persons favoured especially the physical contact with the animals, and nearly all those who completed the intervention period wanted to continue. Farmers and psychiatric primary contacts reported quite positive experience with this therapy form.

In 2003, a three-year PhD project started, with the title "Green Care with farm animals in agriculture for humans with mental disorders". The main objectives of the project are to document effects of animal-assisted therapy (AAT) with farm animals on humans with mental disorders, investigate the relationship between the nature of the human-animal interaction and the observed health effects, and develop scientific competence on the topic AAT to be used in education on Green Care in health and agricultural studies. The project involves cooperation with psychiatry at the University of Oslo. Validated questionnaires testing degrees of depression, anxiety, stress coping, self-esteem, quality of life, and social and working functioning are completed before and after the intervention period, and six months after to check for long-term effects. Ethological video studies are performed on the nature and frequency of the human-animal interactions, at the beginning and at the end of the intervention, in order to test for correlations between behaviour towards animals and improvement of mental health.

*Plants indoors and in the working environment*

As an integration of plant sciences and environmental psychology, research work focuses on the effects of plants in the working environment on human health and well-being (Fjeld et al. 2002). This study will be continued by studies of the influence of indoor plants and window view on health outcomes of patients in a rehabilitation institution for people with lung and heart diseases. Results may have relevance also for the indoor and working environment on Green Care farms.

*Gardens for people with dementia*

The increasing number of people developing dementia has led to an increasing interest in designing gardens adapted to such persons in connection with institutional homes. A guide is developed for helping in the design and selection of specific components of such gardens that may help the users in releasing frustration and giving moments of enjoyment and remembrance (Grefsrød 2002). Many gardens also make use of activities related to the farm that elderly people with dementia relate to, and which become a tool in the communication with the staff and family members.

## EDUCATION RELATED TO GREEN CARE

At the Agricultural University of Norway bachelor-level courses are titled “Nature and quality of life” (PHG112-113, 10-15 ECTS points). The aims of these courses are to develop a comprehension of the significance of nature for the experienced health and quality of life in humans, and how knowledge from natural sciences and agricultural sciences can be used in prophylactic and therapeutic health work. A last objective is to enable the students to work in cross-professional teams with persons from health and social care. Teaching includes the significance of nature for human well-being and the biophilia hypothesis, relevant health and social concepts, and effects of forests, plants and animals on the well-being and physical and mental health of humans. Interested students can later develop a master’s thesis project on a topic from this course.

Continuing education courses entitled “Green knowledge for use in Green Care” (10 ECTS points) are given to health personnel and farmers interested in Green Care. Topics are the same as for the bachelor’s courses, but with more focus on practical projects.

Both types of courses are given in collaboration with a university college that runs programmes in health sciences.

## FUTURE CHALLENGES

Education, health and welfare services in Norway are a public responsibility. Hence, professional interest groups and certain specialists (e.g., in pedagogy and psychiatry) have been sceptical of services that are not based on professional expertise within the public health and social sector. Not all farmers providing Green Care services

have other formal training than agricultural school, and are thus often classified as unskilled labour in the health and welfare sector. This presents a challenge when it comes to receiving satisfactory pay for the provided services, and in connection with the quality approval of these services.

There are also challenges with regard to general professional and political aspects of developing the expertise of Green Care providers and assuring the quality of their services. Which criteria should be applied to approve the providers of Green Care and the services themselves?

The question of privatization of statutory public services is currently a hot political issue in Norway. One result, or side effect, of this debate is the creation of several new terms and organization models in the public administration sector, such as exposure to competition, client/supplier model, roles and partnership.

The increasingly tighter municipal budgets are another challenge. This must be seen in connection with the increasing number of responsibilities that have been transferred to the local level. Local governments are thus forced to prioritize their use of funds, and cut back on services that are not fixed by law. In many cases, this will also affect Green Care services, since many of these are of preventive nature and thus do not belong to those responsibilities which the municipalities have to provide according to the law. However, it should be noted that preventive measures are statutory to a certain degree. In such a context, Green Care can only survive as a result of political negotiations.

With the current debate on multifunctional agriculture in mind, these issues also involve both farmers and the entire agricultural sector. Following the recent WTO negotiations on agriculture and this summer's agreement on the liberalization of trade in food and fibre products, there has once again been considerable media and public focus on the role of agriculture and farmers. The above-mentioned challenges for Green Care thus directly involve the actual justification of Norwegian agriculture and the question of its functions in future society.

## NOTES

<sup>1</sup> agreement based on negotiations between the government and the two farmers' unions

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## APPENDIX 1. FUNDAUNET ENVIRONMENTAL FARM

**Farm facts**

Location: municipality of Meråker, North Trøndelag County  
 Arable farmland: 40.7 ha + 20 ha fenced-in pasture.  
 Rough grazing land: 39 ha.  
 Crops: Fodder (grass)  
 Livestock: 200 winter-fed sheep and 13 suckler cows  
 School garden: vegetables, herbs and flowers  
 Schoolroom facilities: 163 m<sup>2</sup>, including kitchen, classroom, toilets, showers, cloakroom and storage room.

*Objectives*

The Fundaunet Environmental Farm's educational programme aims to be an integrated part of the teaching activities at Meråker School.

The curriculum of numerous subjects is well adapted to being carried out on the farm, including natural and environmental sciences, home economics, art and crafts, as well as physical education.

Farm activities also enable a practical approach to certain aspects of theoretical classroom work. By

using the farm as a classroom, it is possible to:

- link the school's curriculum to practical farm work
- help pupils see the connection between theory and practical work
- enable children to experience personal growth by overcoming practical challenges
- motivate pupils by giving them responsibility
- let pupils experience that they can contribute in a working environment
- experience a working rhythm in step with the changing seasons

*A brief history*

The Fundaunet Environmental Farm is based on cooperation between farmer and owner Svenn Tore Ness and agronomist/pedagogue Kjetil Aarbakke. Svenn and Kjetil founded a cooperative society, constructed housing for teaching and training, and established a school garden on the farm. Through contact with their local government, they have established cooperation between the farm, school authorities and the health and welfare sector. Things have happened fast and are still in a process of development. The Green Care services are based on political decisions and formal agreements.

The environmental farm has been well received among pupils, teachers, school authorities, social authorities and local politicians. The farmer and a teacher participated in training courses provided by the national project 'Levende skule' ('Living school'). The teaching activities on the farm are adapted to the Norwegian curriculum L97. The focus is on providing a better quality of education than can be achieved in a traditional classroom setting. This was a necessary prerequisite for the general acceptance of the farm's services. Meråker School has previous experience

with outdoor schooling and other forms of off-campus education. This made it easier for both teachers and pupils to utilize the potential of the Fundaunet Farm.

#### *Available services*

The farm is a large, well-run sheep and suckling cow farm. It is located close to Meråker, 3 km from the school, where the farm also has a plot of land and teaching facilities. Three days a week, the farm is used by the local school, and two days a week it is used in connection with a sheltered employment service for psychiatric patients. This presentation focuses mainly on the school-based services.

The farm provides an educational programme for classes and groups throughout the entire year, but most activities are concentrated in spring and autumn. Specifically adapted teaching of individual pupils can be provided two days a week. The general educational programme consists of:

- Class teaching (1st to 10th grades)
- Pupil's choice
- School business

The fixed, annual class programmes are the backbone of the farm's activities. The standard programme includes one visit in spring and one in fall for all grades. A curriculum for each grade has been agreed upon, thus ensuring the continuity of the programme in the long run. In addition, there are project-based periods, such as 'pupil's choice' in grades five to seven, farming experience, and school business establishment in 9th grade.

#### *Organization*

The farm is organized as a cooperative society, which runs the teaching facilities. They have a rental agreement with the municipality, and the owners are employed by the municipality on an hourly basis as teacher and environmental therapist, respectively.

The farm's activities are based on political decisions and formal agreements. One-year agreements regulate the rent, which shall cover capital costs related to buildings, electricity, insurance, accounting services, telephone and office expenses, land rent, maintenance, operating equipment, furniture and machine rent. The local school and Fundaunet Environmental Farm cooperate closely.

#### *Results*

General feedback and a user-survey among 7th-graders show that the provided services are very popular among pupils. Teachers also expressed that the farm's activities are positive and useful for their classes. The children are able to develop through the practical farm work they are assigned and their close contact with the farm animals.

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## APPENDIX 2. VIKUM FARM

**Farm facts**

Location: municipality of Gaular, Sogn og Fjordane County  
 Arable farmland: 8 ha  
 Rough grazing land: 65 ha  
 Crops: Fodder (grass)  
 Livestock: 60 winter-fed sheep  
 Other animals: hens, horses, dogs, cats  
 Housing facilities (for user): separate house with bedroom, living room, kitchenette, bathroom with a toilet and shower.

*Objectives*

After having stayed at Vikum, users shall be able to live on their own, avoid relapse and thus have a better quality of life.

The services are intended for persons with drug/alcohol problems in need of more intensive care than can be provided by polyclinic treatment. Users of the Vikum Farm stay in a safe, drug- and alcohol-free environment with a structured daily rhythm.

*A brief history*

Zandra and Kurt started working on establishing their services in 1999. Kurt has been a dry alcoholic for the past 12 years. He also worked as an environmental therapist at a youth centre, and has 20 years' experience as a support person.

Both have gone through treatment themselves, so they feel they know a lot about what it is like to overcome drug/alcohol abuse.

"We've been thinking about this for years, but things didn't get going until we read a bit about Green Care", Zandra explains. Their programme was developed in cooperation with local health and welfare workers. Kurt says that it was very important to communicate well with his own municipal authorities and the drug-abuse consultants. These were, and still are, important partners. Their Green Care services began in August 2000.

*Available services*

Users participate in all work related to the farm's sheep husbandry and forestry activities. Work varies with the seasons, and can include:

- Feeding and taking care of animals
- Assistance during lambing

- Sheep herding
- Gathering the sheep in the autumn
- Shearing
- Forest work
- Building maintenance

#### *Recreation*

There are lots of things to do for the users in their leisure time, such as hiking, fishing, hunting or skiing. Indoor activities are available in the nearby village.

#### *Housing*

Users have their own house at their disposal. The house has a bedroom, living room, kitchenette, bathroom with a toilet and shower. A PC and a TV are also available. Housing is based on self-catering, thus strengthening the users' ability to be responsible for their own lives.

#### *Organization*

Users live and are under supervision at Vikum full-time. Zandra and Kurt are accessible 24 hours a day. There is usually only one user on the farm at a time, but having several users together has also worked well. The duration of the stay varies, from several weeks to several years. This depends on how the stay at Vikum is integrated with other treatment. Some users come to Vikum prior to moving to other institutions, whereas others come as part of a post-treatment programme. Most users stay at Vikum during their entire treatment period.

It is important to clarify the responsibilities and roles of farmers and users. An agreement is made for each user, in cooperation with the municipal primary and secondary services. Users shall be under continuous observation of the health and welfare system. The treatment scheme must be outlined in a contract, which is to be signed by the user and the provider of the service. The contract must contain detailed information about:

- Design and duration of the stay
- Working hours
- Work description
- Improvement of the user's drug/alcohol problem
- Use of medicines
- Timing of therapy
- Visits
- Leave of absence
- Leisure time
- Consequences of relapse during the stay

An agreement is also to be made between Vikum and the buyer of the service, i.e., the state. The services can also be provided for users from other counties. Zandra and Kurt are self-employed and charge a daily rate in those periods when they have users on the farm.

#### *Quality assurance*

The service is based on cooperation between the psychiatric clinic, the user's social welfare office and Vikum Farm. Admission is based on a written application sent to the farm by the welfare office of the user's place of residence. The drug-abuse consultant is also involved, and decides on which patients to prioritize. The drug-abuse consultants approve the treatment programme at Vikum, and are responsible for quality assurance. The head physician of the psychiatric clinic, however, is generally responsible for the treatment. Zandra and Kurt also receive support from the local psychiatric nurse.

#### *Results*

The providers of the services at Vikum have only received positive feedback from their users and the drug-abuse authorities. Users appreciate working with animals and the close contact with nature. The main challenge for many users is the period after having completed the stay at Vikum. Some have a relapse, and thus have a much longer road ahead of them to overcome their drug abuse.

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### APPENDIX 3. SANDE BRUK

#### *Admission criteria*

- Dementia diagnosis, early stage. Cognitive deficit also relevant
- Assessment of functional status
- Users must be able to walk, also stairs
- Users should be between 50 and 70 years; older persons can also be admitted, mobility and health conditions allowing
- Trial period of 2-3 days prior to admission
- If a user is injured, or his/her condition changes and more intensive care becomes necessary, other, suitable services must be provided

*Users from other municipalities*

The service is provided as long as a user fulfils the necessary requirements. When these are no longer met, the contract is cancelled with two weeks notice. The user's municipality of residence is responsible for the further treatment of the person

*The project*

The day-care service is based on cooperation between the municipality of Horten, the Vestfold County Governor and the Norwegian Centre for Dementia Research. The project was initiated in 2002, and lasts until 2005.

The focus is on the preventive effect of such systematic measures for the user group in question. The project will also evaluate the organization of the service within the inter-municipal cooperation in Vestfold County.

*Agriculture and dementia care*

Agriculture in Norway is in a phase of transition, and as a result there are now common interests between the farming community and elderly care, with specific focus on dementia patients. The services are designed to meet the needs of middle-aged persons (about 50-70 years old) in early stages of dementia. The day care services include:

- Morning coffee, small talk, singing
- Joint planning of the day's programme
- Various social and physical activities
- Lunch

Day care service is adapted to the needs of the users. Day-to-day activities depend significantly on the interests and functional status of the users. There is a daily user charge of NOK 59. During the project period, transport is free.

*Family and prevention*

The day care service at Sande Bruk aims to maintain an open dialogue between staff, users and their family members. The service also intends to enable relatives to have some time off from their caring responsibilities.

A dementia diagnosis leads to many necessary changes in life. In numerous ways, the illness also affects one's family and social network. Research and experience related to dementia underline the need of an open approach to the illness. Individually designed activities help patients to master their daily lives and increase their well-being.

Day-care services for dementia patients have been shown to have a beneficial effect on the development of the illness after a relatively short time. Another benefit is providing some relief to their families. This preventive effect may enable patients to have a better quality of life at home. The development of dementia can be slowed down by as much as a year and a half.

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