

## CHAPTER 22

### FARMING FOR HEALTH ACROSS EUROPE

*Comparison between countries, and recommendations for a research and policy agenda*

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#### INTRODUCTION

This paper integrates data from the various country papers and presents the main differences and similarities of Farming for Health (FH) characteristics between countries. The country papers are the first product of the Community of Practice 'Farming for Health' that was initiated in 2004. Participants from twelve European countries and the US decided to write the state of the art concerning FH in their country during a first meeting in April 2004. After the country papers were written, a second meeting took place in March 2005. During this meeting recommendations for a research and policy agenda were formulated. These recommendations are presented at the end of this paper.

For many countries it is still not possible to give a good overview of FH. In most countries there are no organizations that are familiar with all existing initiatives. However, the different contributions make clear that FH is growing in the agricultural and health-care sector. The term 'Farming for Health' comprises a wide spectrum of different kinds of social agriculture in the different countries. The following categories can be distinguished:

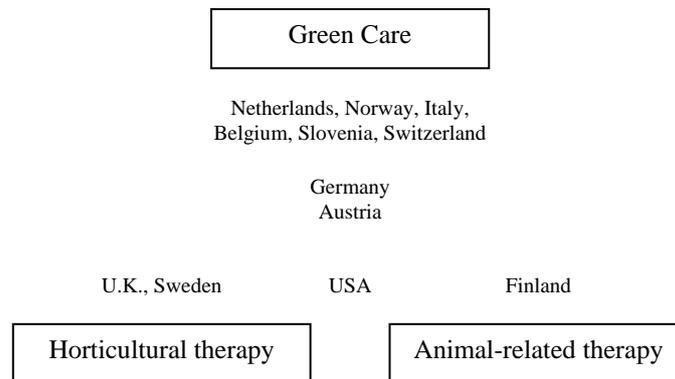
- Green Care farms represent a working environment where a diversity of target groups is performing meaningful activities.
- Horticultural therapy, therapeutic horticulture, healing gardens and healing landscapes. Plants, horticulture, gardens and landscapes are used in therapy or in a recreative setting in order to improve well-being or to reach predefined goals.

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- Animal-assisted therapy, education and activities. Animals are used in therapy or in a recreational or educational setting in order to improve well-being or to reach pre-defined goals.

As the various chapters in this book show, in some countries one of these categories is dominant, whereas in other countries all categories have been developed to some extent (Figure 1). The general similarities and differences between countries will be presented and discussed.



**Figure 1.** Focus of Farming for Health in different countries

## GREEN CARE FARMS

### *Development and number of Green Care farms*

It is striking that in all countries initiatives for Green Care farms have mainly been taken by farmers and not by health institutions. Green Care farming started as a bottom-up process. Apparently, farmers' objectives form the main driving force for the development of Green Care and not the demands of the health sector. The number of Green Care farms differs considerably between countries. Leading countries are Norway with 550, The Netherlands with 430, Italy with 300-350, Austria with 250 and Flanders with 140 farms. This corresponds with 1, 0.5, 0.01, 0.1 and 0.4 % of the total number of farms, respectively (LEI 2004). In countries like Slovenia, Sweden and Finland Green Care farms are a new phenomenon. For other countries like Switzerland and the United Kingdom it is not possible to give a good estimate of the number of Green Care farms. In the Emmental region of Switzerland, Green Care is well known. In the village of Eggiwil, 17 out of 240 farmers participate in Green Care activities. This illustrates that in certain regions like the village of Eggiwil, up to 7 % of the farmers perform Green Care activities.

The situation in Germany is somewhat different. In Germany health institutions have created labour units to integrate disabled persons. Of the 630 labour units,

approximately 150 have an agricultural or horticultural section. Unlike in the other countries these working units have not developed from existing commercial farms.

It appears that the importance of Green Care is not primarily determined by the general farming condition in a country. European countries present a huge diversity of farming conditions. In some countries like Slovenia and Italy the average farm size is less than 10 ha. In countries like Slovenia, Austria and Norway agricultural land has limited productive capacity due to unfavourable natural conditions. In countries like The Netherlands, Belgium, United Kingdom, Sweden and Finland, the average farm size is more than 20 ha. The average economic size of farms ranges from less than 10 ESU (unit for economic size: 1 ESU = 1200 European Currency Units) in Slovenia and Italy to 90 in The Netherlands (LEI 2004). This shows that Green Care is relatively important both in countries with intensive agricultural production systems like The Netherlands and Belgium and in countries with smaller, more extensive farms like Norway and Italy (Table 1).

**Table 1.** Number of Green Care farms (absolute number and % of total amount of farms) and the average economic size (1 ESU = 1200 European Currency Units) in different countries and regions in Europe

Country/Region	Green Care farms		Farm size (ESU)
	Number	% of total	
Norway	550	1	10
Netherlands	430	0.5	90
Italy	325	0.01	9
Austria	250	0.1	11
Germany *	150	0.03	41
Flanders (Belgium)	140	0.4	53
Eggiwil village (Switzerl.)	17	7	?

\* In Germany the Green Care farms are part of health institutions

This observation seems to contradict the expectation that agriculture and care is mainly suitable for small-scale farming conditions because on such farms many operations are still conducted manually and a wide range of activities is performed.

In the more intensive, large-scale farming countries like The Netherlands and Belgium the number of Green Care farms increased dramatically in recent years, while in the small-scale farming countries the number of care farms developed more gradually. The increase in The Netherlands and Belgium in recent years is partly due to the worsening economic perspectives of the world-market-oriented agriculture. An increasing number of farmers are looking for new activities.

#### *Diversity in Green Care farms*

In all countries there are large differences between Green Care farms. There are differences in activities and goals, differences in financing, differences in the balance between care and agricultural production, and differences in target groups.

Different categories of Green Care farms are distinguished in Italy, Slovenia, Austria, Belgium and The Netherlands. In all these countries the categories are mainly related to the balance between care and agricultural production. A distinction can be made between the more care-oriented farms and the more agricultural-production-oriented farms. Different terminologies are used for this distinction: family farms versus social cooperatives in Italy; traditional household-based schemes versus nursing places in Austria; independent farms cooperating with health institutions versus institutional farms in Belgium, The Netherlands and Slovenia.

There is also diversity in target groups. In Norway children and psychiatric clients are dominant, in Switzerland and Sweden vulnerable children. The experiences in Belgium, The Netherlands and Italy show that Green Care farms can be a good provision for a diversity of target groups like people with mental problems, people with an addiction history, elderly people with dementia, autistic persons, long-term unemployed, people with burn-out and prisoners.

Goals differ from offering a useful daytime occupation, work training, social inclusion, rehabilitation, education, a place to live and specific therapeutic goals.

In some countries, like Norway and Switzerland, municipalities have a major responsibility for the primary services of the health and welfare sector. Financial agreements are made between local and county governments and Green Care farmers. In other countries like The Netherlands and Italy independent Green Care farms receive funding in various ways, e.g. by collaborating with a health institution or by a personal budget of the client. Payments of 40-70 euros per client per day have been mentioned in different countries. However, in Italy, The Netherlands, Belgium and Austria quite a number of independent Green Care farmers receive hardly any income from their care activities. The independent Green Care farms do not fit into the mainstream health-care-financing structures. Payment of care activities depends on negotiation capacities and motivation of the individual farmer.

#### *Supporting structures of Green Care farms*

In The Netherlands, Belgium and Norway national networks of Green Care farmers have been set up. In Italy the network is being created, and a structure for starting a supporting system has been developed in Poland.

The most extensive supportive structure for Green Care farmers has been developed in The Netherlands; this includes a national support centre and association of Green Care farmers, regional associations and study groups of Green Care farmers. This can be an example for other countries. The national support centre in The Netherlands has developed a quality system and a handbook for Green Care farms. These products are available for the other countries. This is already one of the benefits of the Community of Practice that has been developed.

### HORTICULTURAL THERAPY, THERAPEUTIC HORTICULTURE AND HEALING GARDENS AND HEALING LANDSCAPES

Gardening became one of the 'specific activities' of occupational therapy as the discipline developed in the 1950s and 1960s in the UK. Gardening as a therapeutic activity is significant in the UK (with more than 800 projects), Germany (part of work therapy in 400 hospitals and rehabilitation centres) and Austria, where horticultural therapy is widely used in hospitals, nursing homes, vocational training institutions, schools and day centres. Initiatives for horticultural therapy, therapeutic horticulture, healing gardens and healing landscapes are usually taken by health institutions or local communities. A diversity of client groups is attending gardening projects. Horticultural therapy is supported by institutions like the Society for Horticultural Therapy and Thrive in the UK and the Association for Horticulture and Therapy in Germany. In Sweden some healing gardens are linked with universities. In the other European countries gardening as therapy has no recognized status.

Horticultural activities can be linked directly to health institutions or be part of the local community. In the UK therapeutic horticulture has its roots in hospitals. Present-day garden projects are often part of a local community: gardens and community gardens make up over half of the garden projects in the UK. A link with formal health institutions no longer always exists.

This development is in line with observations in other countries that allotment gardens, community gardens and city farms are more and more recognized as green sites that can be beneficial for human well-being in a curative and preventive way. Organizations of allotment gardens, community gardens and city farms are getting more interested to make room for specific client groups (Kieft and Hassink 2004).

FH can also contribute to the quality of landscapes as observed by Petrarca, the European Academy for the Culture of Landscape. Petrarca's work is connected to the intention to evaluate nature conservation and cultural landscape as marketable products of agriculture. Petrarca works in a participatory approach with organic farms. In several countries Petrarca observed that Green Care farms offer perspectives for combining sustainable farming for healthy people and for healthy landscapes. The cooperation between Petrarca and the FH initiatives can be very beneficial.

### ANIMAL-ASSISTED THERAPY, EDUCATION AND ACTIVITIES

The use of farm animals for therapeutic purposes is not widely accepted and implemented. Riding therapy or equine-assisted therapy is the best known form. Equine-assisted therapy is recognized as a useful and meaningful therapy for children, youngsters and adults with mental or physical disabilities, learning and behavioural problems or psychiatric disorders. In Finland riding therapy has a recognized status. In Germany, Switzerland and Austria, equine-assisted therapy is divided into three different forms. Hippotherapy is physiotherapy from a medical perspective. 'Behindertenreiten' is riding for the disabled as a sport activity. 'Heilpädagogisches Reiten' has a psychological and pedagogic background. The

German Kuratorium für Therapeutisches Reiten offers equine-assisted-therapy courses for therapists since 1970.

The European partnership programme 'Pegasus' aims to develop a postgraduate course of equine-assisted therapy for students already obtaining a diploma in the field of education, social and health care or psychotherapy. Another aim is to build a European Network of Expertise concerning equine-assisted therapy. Spain, The Netherlands, Slovenia, the UK and Belgium participate in the project. An international congress 'The Complex Influence of Therapeutic Horseriding' was held in Hungary in 2003.

In Austria several projects have started in the field of animal-assisted pedagogics and therapy. Initiatives in animal-assisted therapy and education have started in Germany and Portugal.

As for gardening as a therapeutic activity, there is increasing interest in animal-human interactions, which is not directly linked to formal health institutions. The contacts with farm animals are recognized as an important quality for different client groups on city farms and Green Care farms.

Therapy with pets, mainly dogs, has its origin in the USA. The International Association of Human-Animal Interaction Organisations (IAHAIO) has members all over the world. Research and experiences on topics of beneficial interaction between humans and animals were discussed at an international conference in Scotland in 2005. Keynote speakers came from the USA, but also from Europe, Australia and Asia.

## SCIENTIFIC KNOWLEDGE AND EDUCATION

### *Research*

It has been recognized that there is limited scientific knowledge on the possible beneficial influence of FH activities on our health and well-being (Gezondheidsraad 2004). Recently some research projects have started in different countries. Currently the effect of Green Care is studied in Norway and The Netherlands. In Norway the study is focussed on the contribution of Green Care farms on the development of clients with psychiatric problems. In The Netherlands, clients with an addiction background and clients with chronic psychiatric problems are the target groups. In both studies the development of clients is monitored for a period of more than one year. Human-farm-animal interactions are investigated in Norway, Finland and The Netherlands. In Sweden, the UK and The Netherlands the effects of gardening and nature on human health are studied. Different approaches are chosen: interviews and quantitative research with control groups. In the near future, the sector needs to prove the effects of working on a farm or in nature for different kinds of people. This is crucial to become a generally accepted provision in health care and to develop sustainable financing structures. Evaluations and research on the satisfaction of clients could give more inside information about the significance of different elements of working on the farm on clients and their quality of life. Research should be performed by interdisciplinary teams of researchers with a

background in health care and agriculture or nature. It is also recognized that a common conceptual framework for FH activities should be developed. This framework should include models describing Green Care, horticultural therapy and animal-assisted therapy and explaining why interactions with plants, animals and nature are beneficial for well-being.

### *Education*

Educational activities regarding FH are still limited. University programmes in this area have started in Norway, Sweden and Italy. Educational activities at secondary schools take place in Italy and The Netherlands.

In The Netherlands educational programmes are developed for the clients in need to teach them how to be a good assistant of the farmer, as well as for farmers to be a professional Green Care farm manager.

International exchange of educational programmes in the context of FH is initiated by the Centre of Expertise Agriculture and Care at Dronten, The Netherlands.

## FINANCING FARMING FOR HEALTH INITIATIVES

In most cases FH activities that are not part of a health institution are not a generally accepted provision in health care. Sustainable financing structures are often missing. General tendencies observed in different countries are:

- cutting down on costs for health care;
- increasing individual responsibility;
- increasing competition;
- demanding quality assurances;
- demanding effectiveness of treatment;
- decentralization: making municipalities more responsible for financing the primary services of the health and welfare sector.

This means that FH activities should invest in good relationships with municipalities, quality systems and research showing the effectiveness of their activities. This requires local and regional cooperation between different FH projects. Specific tasks that should be covered are: promotion activities, matching supply and demand, education, and building networks with health institutions, welfare organizations and client organizations.

## DIFFERENCES BETWEEN EUROPE AND THE UNITED STATES OF AMERICA

The development of FH in the US is quite different from that in Europe. In many European countries an increasing number of commercial family farms initiate Green Care activities. In the US this is not the case. Here, farm-based programmes are started by non-profit organizations. This may be due to the different focus of US commercial farms. In the US the average farm size is 200 hectares, compared to 19

hectares in the European Union. Many US farms are corporate farms focussing on technology to increase productivity and profitability. Many US farm-based programmes are dealing with at-risk children.

The US is the basis of many initiatives and organizations in the field of horticulture and plant-related therapy and animal-related therapy. Well-known organizations are the American Horticultural Therapy Association and the Delta Society.

### SIGNIFICANCE OF FARMING FOR HEALTH

The contributions of the different countries show that FH relates to many human and societal issues. The most obvious ones are highlighted below.

#### *Benefits for different client groups*

Working with plants and animals and farm life offers space, structure, diverse activities and stress reduction. The necessity of the activities and the interaction with animals and plants generate engagement. The working environment of a Green Care farm offers status and social contacts.

FH projects can contribute to rehabilitation and inclusion of clients and can be an educational tool.

#### *Farm economics and economics of rural areas*

Green Care farming is an example of multifunctional agriculture and land use. It appears that most multifunctional farmers perform different broadening activities. This means that many Green Care farmers are also involved in nature and landscape conservation and recreational and educational activities. Main motives of farmers for broadening activities are: personal interest, self-realization, enriching one's own life with new activities and need of extra income (Oostindie et al. 2002). Broadening activities can contribute significantly to the family income. The income generated with Green Care activities can be crucial for the survival of farmers.

#### *Strengthening urban–rural relationships*

Green Care creates new linkages between agriculture and society at large. Green Care can be of specific importance for rebuilding urban–rural relationships. Clear examples in different countries have been presented. Swiss farmers offer a safe place for psycho-socially periled children from the cities such as Berne, Bâle (Basel) and Lucerne. In The Netherlands and Italy, urban people with drug addiction history and inmates experience the quality of farm life in the rural area. The involvement of urban citizens with gardens and city farms can be a first step to become interested in farming in the rural area around the city. In an urbanizing society, rural values become more scarce and more valuable (Van der Ploeg 1998).

*Preserving the landscape*

Green Care farms can contribute to landscape development. The focus on intensification and efficiency in agriculture during the last decades has often resulted in the diminishing of characteristic landscapes. Another threat for the openness of the landscape is urban pressure, mainly in Western Europe. German research showed that organic farmers pay more attention to landscape quality than more traditional farmers. Their motives are exceptionally intrinsic in nature. It also appeared that Green Care farms have unique opportunities to contribute to landscape development. Green Care farms generally have more access to financial support for integrate landscape measures in their farm activities and they have more access to labour. Especially in winter, activities in landscape development and nature conservation can be attractive ways to broaden the activities for clients.

## FUTURE OF FARMING FOR HEALTH

The general opinion in the different chapters is that FH is a promising development as it links up with various developments in society; the increasing demand of inclusion and rehabilitation of clients with mental and psychiatric problems, the demand for multifunctional forms of land use, additional sources of income for farmers and rural areas, and the reconnection of rural and urban areas and agriculture and society. It is expected that the number of Green Care farms will increase in the coming years and that Green Care, horticultural therapy and animal-assisted therapy will get more interaction.

*Increasing number of Green Care farms*

In The Netherlands and Belgium, the amount of Green Care farms has increased dramatically in the last few years. It is to be expected that in most European countries the number of Green Care farms can increase considerably in the years ahead.

- In most countries one or a few target groups are still dominant. The broadening of target groups in The Netherlands, Belgium and Italy can also take place in other countries.
- According to Dutch research 6 % of different target groups (elderly, people with mental disability, people with psychiatric problems) are interested in day activities on a Green Care farm (Kramer and Claessens 2002). This is three times larger than the actual percentage making use of a Green Care farm.
- According to a recent European survey (Oostindie et al. 2002) more than 12 % of the farmers in the European Union are interested to perform care activities on their farm. Presently, less than 1 % of the farmers are performing care activities.
- Most Green Care farms are located in the rural areas of the country. The new target groups like people with an addiction history, elderly people, youth at risk and long-term unemployed are concentrated in the urban areas. The increase in Green Care initiatives may be considerable especially in urban areas.

*Integration of Green Care farming, Horticultural Therapy and Animal-Assisted Therapy under the umbrella of Farming for Health*

An important development is linking different networks under the umbrella of FH. This concerns:

- linking the green spaces in urban areas (city farms, community and allotment gardens) with green areas around cities (Green Care farms and nature areas);
- linking formal green therapies such as horticultural therapy in health institutions with green activities that are not directly linked with health institutions but increase well-being of clients;
- incorporating the green and agricultural networks into health care and rural and urban networks.

This development is in line with the many examples from the different countries showing that different green therapies, Green Care farms and gardening can all offer a suitable day activity, therapy or place to live to many different client groups. The first experiences of different target groups working in community gardens and on city farms are positive. It has been indicated that green environments including farms can contribute to health in different ways: recovery from stress and attention fatigue; encouragement to exercise; facilitating social contact; encouraging optimal development in children; and providing opportunities for personal development and a sense of purpose (Gezondheidsraad 2004). These mechanisms of beneficial influence of nature on health can take place in all indicated green settings. The integration of different fields like agriculture and care with different goals and terminologies, the development of FH initiatives in many different European countries, the extensive practical experience in this emerging field and the need to develop a common language and unifying concepts explaining the health-promoting mechanisms show the urge to develop a European network.

RECOMMENDATIONS FROM THE MEETING HELD IN MARCH 2005 FOR A RESEARCH AND POLICY AGENDA

*Research*

- Develop a multidisciplinary scientific network that coordinates a joint programme and develops projects in this new field.
- Develop a common underlying conceptual framework defining the content of FH and explaining the health-promoting mechanisms.
- Initiate a European survey in the field of FH to get a clear picture of the number, size and diversity of social projects in agriculture.
- Initiate common multidisciplinary research projects including among others agronomists, sociologists and psychologists.
- Compare different methodologies to study the effects of Green Care and other FH projects for the well-being and development of clients.
- Integrate qualitative and quantitative research methods, compare results of different target groups and stimulate the use of control groups.

- Develop a common methodology to quantify and compare the economic, social and ecological performances of FH initiatives.
- Compare the impact of FH initiatives in rural and urbanized regions and determine the contribution to rural and urban challenges like revitalizing the rural area, social cohesion, preserving the landscape, inclusion and diminishing feelings of insecurity and annoyance.

#### *Policy*

- Create awareness of the potential contributions of FH initiatives to challenges in different areas like health care, agriculture and welfare.
- Facilitate initiatives that try to connect urban demands and rural qualities.
- Facilitate farmers, clients and health-care organizations that initiate innovative FH projects.
- Stimulate that all European countries can learn and benefit from the experiences in countries that are most experienced in FH.

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