

CHAPTER 18

FARMING FOR HEALTH IN SLOVENIA

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Abstract. The agricultural situation and the social protection system in Slovenia are discussed first. Then, four typical patterns of the use of agriculture for therapeutic purposes are described (activities within the institutions, decentralization of the institutions, initiatives within the representative clients' organizations, and individual farmers' initiatives). Based on the results of the feasibility study at the national level a provisional SWOT matrix of health/care farming is drafted. Modelling and implementation of health/care farming have to be carried out with professional correctness by a multidisciplinary team (agronomists, social workers, economists, defectologists etc.) and with a great deal of social prudence. Relevant criteria, economic viability and quality of life of all involved have to be met. Therefore, the implementation of social services as a supplementary on-farm activity should be gradual and backed by building up partnerships between the participants: clients and farmers, while the role of the state has to be orientated to arranging and determining the scope of and the conditions for health/care farming.

Keywords: therapeutic agriculture; multifunctionality; social services; care farm; supplementary activity

INTRODUCTION

Slovenia declared independence from Yugoslavia in June 1991. Successful macroeconomic recovery and major progress towards international integration marked Slovenia's first decade of independence. Nowadays the GDP per capita on the purchasing-power parity basis is \$18,300 in a country with 2,011,473 inhabitants. In the first half of 2004 it joined NATO and the EU.

Slovenia's development pattern has laid emphasis on services (64% of the total GDP) and manufacturing (33% of the total GDP). Agriculture presents low shares of the national income (3% of the total GDP), employment (4%), and foreign trade (4% of the total export and 9% of the total import). The active agricultural population amounts to 32,649 people (4% of the total active population).

Farming sector

Of the total area of 20,273 sq km, 30% is dedicated to agriculture while 63% is formed by wooded areas. Great varieties in climate, relief and soil types have determined five typical patterns of farming, adjusted to the regional conditions: *Jan Hassink and Majken van Dijk (eds.), Farming for Health, 249-269.*

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Alpine, Pre-alpine, Karstic, Pannonic and Mediterranean. This permits a wide diversification of agricultural production. However, about 70% of the total agricultural land has limited productive capacity due to unfavourable natural conditions together with rising costs and prices. Table 1 and 2 give some quantitative information about Slovenian agriculture.

Table 1. Agricultural land and labour, Slovenia, 2000 (Dermulc et al. 2002)

	<i>Total</i>	<i>Share of family farms (%)</i>
Total utilized agricultural area, ha	485 879	93.89
Total economic size of all agricultural holdings, ESU	402 804	85.14
Total agricultural labour	107 809	96.26

Table 2. Structure of family farms, Slovenia, 2000 (Statistical Office of the Republic of Slovenia 2004)

Utilized agricultural area (UAA)			Economic size (ESU)		
	<i>Number of farms</i>	<i>Structure (%)</i>		<i>Number of farms</i>	<i>Structure (%)</i>
Total	86 320	100.00	Total	86 336	100.00
< 2 ha UAA	22 997	26.64	< 2 ESU	40 708	47.15
2 - < 5 ha UAA	30 380	35.19	2 - < 4 ESU	22 673	26.26
5 - < 10 ha UAA	22 053	25.55	4 - < 8 ESU	13 900	16.10
>=10 ha UAA	10 890	12.62	>=8 ESU	9 055	10.49

86,000 Family farms with an average size of 5.3 ha of used agricultural land represent the largest part of agricultural resources. Only about 2.5% of them earn parity income per worker from agriculture (Kovačič and Udovč 2002). Furthermore, the employment preferences of farmers and their partners are outside the agricultural sector. However, a supplementary on-farm activity significantly increases the probability of on-farm employment for farmers but not for their partners (Juvančič 2002). The economic pressure from the increasing market competition leads to intensive marginalization of agricultural resources. The subsidies mitigate farmers' income problems to some extent (Rednak et al. 2002) but the solution lies in a higher efficiency of farming, and in particular in the diversification of the target markets. As services are the fastest growing sector of the economy, many farmers search for new opportunities for the use of agricultural resources in farm tourism, wood processing, maintenance of rural amenities etc. as supplementary on-farm activities.

The idea that farms might be included in the system of social services for people with disabilities is a complete novelty. Although the definition of supplementary

activities within the Agricultural Act (*Zakon, o kmetijstu* 2000) is rather wide, the decree on this subject (*Uredba o vrsti, obsegu in pogojih za opravljanje dopolnilnih dejavnosti na kmetiji* 2001) is stricter and does not provide room for such activities. This decree has to be changed in order to include care farming. Therefore, a proposal of such a system has to be drawn up as a precondition for further development of health/care farming on Slovene farms.

This raises the issue whether farmers are interested in starting such an activity or not. Exploratory research (Sojar 2003; Vadnal et al. 2004) on farmers' readiness to start health/care farming pointed out that there is a particular group of farmers who are willing to start this new activity: holders of smaller farms, aged 45 to 55 years, who used to be part-time farmers but became unemployed due to the reconstruction of the industry. At their age, they can hardly find a new job, and are obliged to make their living on the farm.

Social protection

The social security system in Slovenia includes unemployment compensation and assistance, health care and sickness benefits, family and maternity/parental benefits, social assistance, as well as old-age and disability pensions. The right to social security is related to employment. Social benefits and allowances are financed mainly from contributions paid by employers and employees. However, social assistance and family benefits are citizen-centred as well as means-tested. Social-security expenditures represent about 26% of the GDP (Vagac and Haulikova 2003). The Ministry of Labour, Family and Social Affairs is responsible for all policy making.

Significant changes have been made in all areas of social security in recent years. Special attention has been devoted to the protection of people with low incomes. Some of the important services provided by the social assistance are childcare, care for the elderly and care for other dependent family members.

In the past, there was a relatively well-developed institutional care for the elderly and others who could not care for themselves. In recent years, however, other, non-institutional forms of care have developed, above all home-help services. Home help is currently provided to 5,000 elderly people (almost 1.8% of all elderly people) and 400 people with disabilities. The providers of institutional care are old people's homes (mainly public), while the main providers of home help are local social-work centres. There are a limited number of special welfare institutions and centres for protection and training (Table 3 and 4).

Severely mentally and physically disabled adults, who are not in institutional care, get the right to a personal or family assistant, thereby easing the burden on family members. Family assistants can be registered unemployed people, people who have a part-time employment, people who are no longer on the labour market, or people who have moved from full-time to part-time employment. Family assistants have the right to payment in the form of a minimum income (in case of inactive or unemployed people) or to an amount equivalent to the payment they have

foregone through giving up their full-time job (in the case of people with part-time employment) (Ignjatović 2004).

Table 3. *Special welfare institutions and centres for protection and training, Slovenia, 1994-2003 (Statistical Office of the Republic of Slovenia 2004)*

Year	Special welfare institutions ¹			Centres for protection and training ²		
	Number	People in care		Number	People in care	
		All	Average per institution		All	Average per institution
1994	7	1 842	263	37	1 316	36
1995	6	1 602	267	39	1 427	37
1996	6	1 613	269	39	1 552	40
1997	7	1 702	243	39	1 648	42
1998	7	1 685	241	44	1 880	43
1999	7	1 679	240	44	1 947	44
2000	7	1 690	241	40	1 976	49
2001	7	1 713	245	43	2 158	50
2002	7	1 706	244	44	2 265	51
2003	7	1 697	242	45	2 463	55

¹ Special welfare institutions provide special forms of institutional care for mentally and physically handicapped adults

² Centres for protection and training provide special training and care for mentally and physically handicapped adults

Table 4. *People in care of special welfare institutions and state centres for protection and training by state of health – levels of handicap and/or degree of disability¹, 31 December 2003 (Statistical Office of the Republic of Slovenia 2004)*

Special welfare institutions	Number	Centres for protection and training	Number
All	1697	All	2463
Chronic mental illness	471	Moderate degree of mental disability	1560
Moderate, severe and profound degree of mental disability with additional mental problems	335	Moderate degree of mental disability with additional physical handicaps	327
Severely behaviourally and personally disturbed	228	Severe degree of mental disability with additional physical handicaps	272
Physical problems	205	Mild degree of mental disability with additional physical handicaps	160
Dementia	203	Mild degree of mental disability	34
Moderate degree of mental disability	132	Physical problems	32
Chronic alcohol-related psychoses	123	Head injury	78

¹ Mild degree of mental disability: IQ = 50-70; Moderate degree of mental disability: IQ = 35-50; Severe degree of mental disability: IQ = 25-35; Profound degree of mental disability: IQ = below 25

The role of the state in the area of social care in Slovenia is changing from ensuring the provision of public services to arranging and determining the scope of and the conditions for the provision of these services. Equal importance is devoted to the assurance of the necessary minimum standards and the supervision of the provision of these services. In the long term, privatization of the state assets that are used to provide public services is anticipated; it will be carried out wherever it would ensure greater rationalization while simultaneously adequately protecting the public interest.

However, the very first steps to be taken in this field are in compliance with the economic interpretation of privatization, as well as with the understanding of this phenomenon among social workers. Consequently, the transfer of production of services from public and/or state institutions to private ones was enabled (*Nacionalni program socialnega varstva do leta 2005 (NPSV) 2000*). As the institutionalization of health/social care is the main pattern of relations between the political system and the health/social services, a deinstitutionalization seems to be the desired outcome. Since the sociological interpretation of the privatization (reorientation of social values and behaviour from collectivism to individualism) is put in the rear, the final outcome of the process is uncertain: whether the coalition of politicians and professional providers, with no influence from the users' part, will prevail over the coalition of providers and users or not (Rus 1990).

Mental-health care

Hospitals and asylums are the prevailing forms of the institutionalized mental-health care system, with exception of the widespread and easily accessible outpatient psychiatric clinics. The main Slovene mental-health problems are: high alcohol abuse, high suicidal index, increasing outpatient clinics visits and overcrowded hospitals (Švab 2003).

Regarding the care provided to patients with severe mental illness, the Slovene mental-health system can be characterized as follows (Švab and Tomori 2002):

- services for patients with severe mental illness are predominantly institutionalized;
- non-governmental organizations (NGOs), which provide social support, employment and housing are growing in number;
- there is no community psychiatry available;
- privatization of services is rapidly increasing; this does, however, not contribute to their outreach, the comprehensiveness of treatment and the registration of patients. These matters were better organized in the previous (socialist) system.

The psychosocial rehabilitation movement in the country plays a very important role in mental-health reform. Its main objective is to buffer the consequences of economically triggered de-institutionalization through the establishment of rehabilitation services with the involvement of the users in the process of reform.

Care for persons with mental disabilities

The Act on Social Security for Persons with Mental and Physical Disability (*Zakon o družbenem varstvu duševno in telesno prizadetih oseb* 1983) was introduced in 1983 and is still valid. According to this law, these persons are entitled to the status of invalids and are as such entitled to various kinds of care. It has also significantly contributed to their financial situation through the ratification of invalidity benefits and other types of help, as well as by granting care allowances to all persons older than 18 years having a mental disability.

Until 1960 providing help to persons with mental disability or persons with various mental illnesses, together with other social groups of clients had been imperative. This was reflected also in placing these clients into various old and abandoned castles or other inappropriate facilities. A big step forward was made in 1963 with the establishment of a parents' organization. Its contribution to the development of the integrity of care for the persons with mental disabilities and their families was of huge importance. The development of the first forms of care for persons with moderate and severe mental disability started between 1965 and 1975. The parents' organization itself was the founder of the first day-care centre in Ljubljana in 1965, providing protection and employment possibilities for adults with a disability. Introducing such day-care centres in other Slovenian towns accelerated the process of providing care for persons with a disability. In the period that followed, the integration and the formation of smaller groups located in the vicinity of hometowns became a priority issue as well. The qualitative changes led to the period of individualization, inclusion, normalization and integration in its broadest sense (Sožitje 2002).

According to the National Report on the Social Standing of Mentally Handicapped in Slovenia (Sožitje 2001), 55% of the adults (out of approximately 7,000) are unemployed and/or without proper occupation, while 83% of them have no access to permanent occupational training. The high unemployment rate of this population segment is mainly the result of the economic transition and the reconstruction of the manufacturing industry, which used to be the main provider of simple jobs. As all other categories of disabled people share the same fate, the rate of unemployment of the disabled in Slovenia is, relatively speaking, very high (Svet Evrope 1997).

Only recently, the new Act on Professional Rehabilitation and Employment of the Disabled (*Zakon o zaposlitveni rehabilitaciji in zaposlovanju invalidov* 2004) was ratified in order to increase their employment level and to improve their employment ability and social integration. The reorientation from a passive to an active policy is based on the profound institutional change and consists of a mix of measures (quotas, subsidized, supported and sheltered employment, etc.). The impact of these new possibilities on the normalization of the disabled citizens is to be assessed in the future.

ACTUAL SITUATION IN HEALTH/CARE FARMING

Horticultural and animal-assisted therapies have been an important part of the activity-based therapies in the early days of Slovene psychiatry (Kostnapfel 2004). However, they have been progressively replaced by other therapeutic activities, and nowadays they are not practiced any more. The same is true for the development of activity-based therapies for other target groups of patients and the disabled.

As health/care farming or horticultural and animal-assisted therapies are not in the interest of the professionals, few references on this subject can be found. Therefore, informal inquiries and fieldwork were needed to determine the actual situation in the field of health/care farming in Slovenia.

The search for information revealed that there are numerous, yet isolated cases of the use of agriculture for therapeutic purposes. They can be divided into four typical categories:

1. Activities within the institutions.
2. Decentralization of the institutions.
3. Initiatives within representative clients' organizations.
4. Individual initiatives of farmers.

At the moment only a qualitative description of the categories is possible. To gain better insight into the developments in this field, the institutions (Figure 1), the representative clients' organizations as well as the agricultural extension officers will be consulted through a special survey at the beginning of 2005.

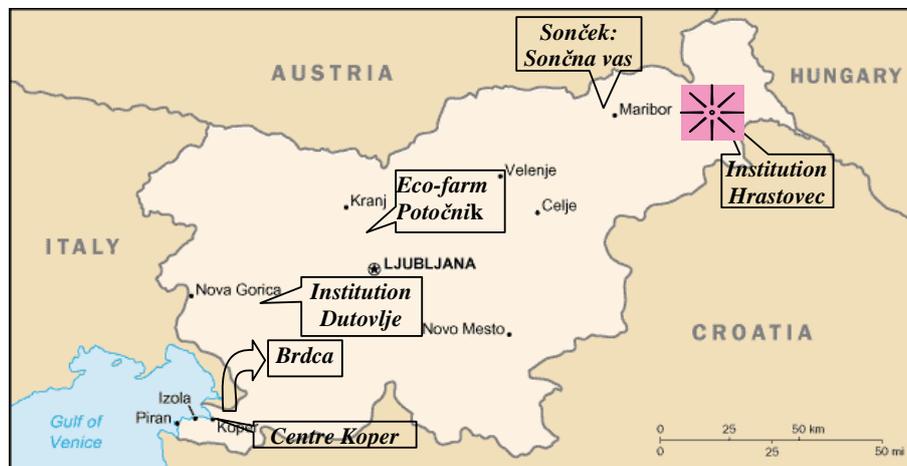


Figure 1. Map of the health/care-farming institutions in Slovenia

*Activities within the institutions**Special welfare institution Dutovlje*

When the institution was founded in 1985, the clients cultivated the two fields owned by the institution. They produced enough vegetables to make the institution self-sufficient in this sphere. They also maintained the surrounding park. However, the number of clients involved in this activity was rather low, from 5 to 15. Some of them showed interest in farming, others were encouraged by the therapists; some were capable of independent productive work and needed only initial instructions. Others needed more support from the instructors and were only capable of carrying out simple tasks (picking potatoes or carrying crops, baskets, tools etc.).

In the early days the clients of the institution originated from farms and rural communities, and they were therefore familiar with farm work. Nowadays, the majority of the clients have no experience with farm work as they are mainly of urban origin. Furthermore, the level of their disability is higher in comparison to the prior generations of clients.

In order to ensure a better quality of life of the clients, as well as a better use of all available resources within the institution, the programme *Living with nature* was launched recently (SVZ Dutovlje 2004). The programme consists of maintaining the surroundings (park, flower and healing gardens), and horse riding. As a sinkhole (funnel-shaped hole occurring in the Karstic region) that has been neglected for years is situated just in front of the institution, the reconstruction and maintenance of this landscape amenity is included in the programme.

Thirteen protégés, those with mental illness as well as those with mental disabilities, are included in the programme. Some of them have a very good hand at using tools, e.g. the scythe that demands a lot of skill and coordination of movement.

Scythes and sickles in the hands of clients have an additional meaning and/or significance. The use of these traditional farming tools disproves the traditional, still prevailing common opinion that 'madmen' are dangerous to themselves and to the others (Kostnapfel 2004).

*Decentralization of the institutions**The institution for people with mental and nervous disorders Hrastovec*

The institution was founded in 1948 as an asylum for both psychiatric patients and the mentally handicapped. The old, magnificent castle and its clients faced the first changes in the second half of the sixties. Nursing services and occupational therapies were introduced in the year 1965. Welfare workers arrived at the institution six years later, followed by physiotherapists and psychologists in 1976. Special education was introduced in 1981. Nowadays the institution hosts about 600 clients.

Hrastovec, which used to be notorious, is now undergoing the process of decentralization. The provision of supervised small dwelling communities in urban and rural environments is the preferred model. The members of the communities

with agricultural facilities are encouraged to farm. Three out of seven dwelling communities have such possibilities.

DC Jasmin was founded in October 2000. Although it lies in an urban environment, its members produce champignons and sell them to the institution at the market price. Vegetables produced in the garden serve their needs. Mushroom and vegetable production along with needlework keep nine members of the community and the supervisor busy. The farm Žiberci was bought; it started to operate as a dwelling community and as a health/care farm in April 2003. Four clients and the supervisor produce and sell vegetables and fruit. At the same time Rožengrunt farm began to operate in the same way. Five clients and three caretakers are stationed at the farm. Although the clients have profound disabilities, they are encouraged to keep the farm clean, to take care of small animals (chickens, rabbits) and to cultivate their vegetable garden.

In the case of this institution the programme of health/care farming is in its first stage. Although there is no representative evaluation available, the reports of both the professionals and the clients themselves on the impacts of plants and domestic animals on their well-being are favourable. An increase in self-dependence and self-confidence, as well as gaining experience and the acquisition of skills were the most often quoted positive effects. This can surely be an argument for the acquisition of farms. The purchase of a farm, its adjustment to the clients' abilities and needs, and the outset of the farming operation are very costly. The majority of similar institutions are in no position to raise the funds needed. On the other hand, this type of health/care farming might be applied in the case of revitalization of the abandoned farms in order to preserve landscape amenities.

Centre for Protection and Training Koper

This centre is one of the 45 centres that provide day care for about 2,200 mentally disabled. As the majority of them are overpopulated, 3 – 5% of all requests are rejected every year.

Centres for day care and protection of the mentally disabled have been facing the problem of being overcrowded since the early 1990s. One of the consequences of restructuring the economy was the decline of labour intensive industries where people with a mild degree of mental disability could find work and where they had been actually employed. They shared their destiny with other redundant workers. However, they were not included in the programmes of active employment policy. The solution was quite simple: the majority of them, younger ones in particular, were reclassified to a higher degree of disability since the status of a person with a moderate degree of mental disability enables them to get invalidity benefits and to enter the programmes for the disabled.

In order to fulfil the programme of individualization and normalization of care for their clients, the centre's management started to search for new activities. As three out of six units of the centre are situated in rural areas, they tried to implement the 'green programme' for clients with preferences for plants and animals. The existing budget provided only one option: finding a farmer who would be willing to accept the clients to his/her farm and to cooperate with the professionals from the

centre. As there is no network of farmers who might be interested in such activities, the search was quite informal. However, the quest “do you know somebody who might...” was successful and they launched an experimental programme on the goat-breeding farm Brdca during the 2003 season. Four male clients who opted for this programme worked with the farmer twice per week, four hours per day. Evaluation of the programme pointed out that all outlined aims had been met. The clients said that it was “nice to work in nature”, that it was “good that they helped each other”, that they “met Tomaž [farmer] and others”. They were “quite satisfied with everything; no criticism”. As the season 2003 was a very hot one, they complained about the heat. Two of the clients were disappointed with the pay and they decided not to continue the programme the following year. They would have “joined the programme with a better pay” (the professionals argue that the fees that the clients get in the case of pure therapeutic work are an issue). Two clients decided to stay with the ‘Brdca’ programme and were more than happy to introduce newcomers to the farm in the 2004 season (VDC Koper 2003).

The farmer, who prepared the activities and worked with the clients, stated that the programme corresponds very well to his service-oriented farm. Along with goat breeding, the farm offers an educational programme for school children – workshops on production and processing of goat milk. Furthermore, the farmer provides services in the field of landscape maintenance. The maintenance of Karstic woods offers a lot of activities suitable for the clients of the centre.

The financial arrangement between the centre and the farmer is quite interesting: the centre covers the farmer’s contributions to the compulsory national pension and disability insurance scheme (15.5% of a minimal pension base, i.e. 100 euro/month in 2004). Moreover, the centre provides all needed appliances (tools, overalls, gloves etc.) and the farmer is reimbursed his expenses for preparing a hot meal for the clients.

In this case, all partners involved showed interest in the programme. The clients faced new challenges, they were included in the usual farm activities and in the everyday life of the village. The centre got the opportunity to provide the clients with a wider range of activities, and opened up to the community. Nevertheless, room shortage in the centre was eased at least a bit. The farmer earned an additional income, and got the opportunity to test the programme in order to decide on incorporating it into his development plans.

Due to the novelty of health/care farming, the cooperation between institutions and farmers seems to be the best initial solution. It allows everyone to learn about the activity *in situ* and gradually to accustom the farmer to the client, as well as the client to the farmer and the farm. As farmers are very well aware of the great responsibility, professional guidance and supervision provided by the institution might make it easier for farmers to decide to provide on-farm health/care services. It seems that the major threat to such an arrangement is the institutionalization of a health/care farm through a plain transfer of methods from the institution to the farm.

*Initiatives within representative clients' organizations**Sonček – Cerebral Palsy Association of Slovenia*

Sonček – Cerebral Palsy Association of Slovenia (founded in 1983) with more than 4000 members has been very active in the field of creating 'green programmes' for their target clients since its beginning. The first green programme of organic farming in combination with eco-tourism was launched in the village of Elerji in the early 1990s. The programme had been inspired by the experiences of Camphill communities. Production of organic vegetables, seedlings, ornamental flowers and saplings of fruit and forest trees was aimed to generate income, which would be used to finance other activities of the organization. Due to the lack of knowledge on farming and farm management, the programme had difficulties to meet the expected economic gains. Therefore, the aim of the programme was redefined and it became one of the rehabilitation and occupational programmes for the clients. The most popular activity at the moment is horse riding. Due to a lack of staff with agricultural skills other possibilities are used only to a minor extent.

Encouraged by the results of the first rural Sonček centre, another farm was bought in 2001. In this case, Farm Sončna vas (Sunny village) was incorporated into the initial rehabilitation programmes for the clients. The acquisition of the farm enabled two new programmes: holidays on the farm, and farming as an occupational activity. As the farm had been abandoned and neglected it demands a lot of repairing (buildings), as well as restoring (24 ha of gardens, orchards, fields, meadows and forest). Due to the available funds, the full operation of the farm is expected within a period of five years. Therefore, the investment in the needed tourist infrastructure has priority.

*Individual initiatives of farmers**Eco-farm Potočnik*

The eco-farm is practising bio-dynamic farming on 7 ha of arable land and produces cereals (wheat, barley, spelt, maize, buckwheat), potatoes and vegetables. There are nine heads of cattle on the farm, four milking cows and five fattening animals. They fatten 2-3 pigs also.

The Potočnik family has experience with mentally disabled persons. Their son had Down's syndrome. Unfortunately he was killed in a car accident twenty years ago at the age of 9. Since then, they have kept in touch with the special elementary school, which their late son had attended. A special 'green' programme has been developed for the pupils. It consists of several on-farm activities that are adjusted to their abilities. Older pupils are engaged in work that demands more strength (feeding and attending the animals, cleaning the stable), while the younger pupils are occupied with husking maize, shelling beans, milling cereals, etc.

The highlight of the programme is a workshop on spelt production and processing. The children keep watching the spelt growing throughout the year, and after the harvest they mill it and bake spelt bread. The total cost of the programme (ca 3 euro/pupil/day) is paid to the farmer by the school.

An early introduction of children with a mental disability to a farm and farm work significantly increases the likelihood that they will be willing to take part in agriculture-based activities as adults (Košmelj and Vadnal 2003). Such programmes are therefore very valuable for the future development of health/care farming.

FEASIBILITY STUDY ON HEALTH/CARE FARMING

The Municipality of Ljubljana is traditionally very supportive to the surrounding rural and agricultural areas. At the same time, the city's strategy of sustainable development lays great emphasis on the welfare of the townsmen with special needs. Therefore, it was the Municipality of Ljubljana that sponsored the very first research on feasibility of health/care farming in Slovenia for the period 2002-2004.

The basic presumption of the research was that health/care farming as supplementary on-farm activity will contribute to the economic viability of the farms in surrounding rural areas, as well as to the welfare of the citizens of Ljubljana with special needs, the mentally disabled in particular.

The purpose of the research was to find out whether the parents/guardians of the mentally disabled (potential demand), as well as the farmers (potential supply) would be interested in taking part in the system of social services for the mentally disabled (protection and training) provided by farmers as an on-farm supplementary activity. Group interviews were held to get the required information.

The research hypotheses were:

- Several lines of agricultural production (production of ornamental flowers, vegetables, herbs and mushrooms, horse riding, small-animal breeding etc.) are included as an indispensable component in the occupational therapies for the mentally disabled.
- In accordance with the principle of normalization, the inclusion of farmers in the therapeutic programmes based on agriculture will make better use of the therapeutic potential of agriculture and of agricultural resources, as well as contribute to a higher quality of life of the clients.
- Parents/guardians of the mentally disabled might be reluctant to the idea of health/care farming due to its novelty, and due to the poor public image of agriculture and capabilities of farmers.
- Farmers might be adverse to this novelty due to the low social awareness of the capabilities and well-being of the people with special needs, and due to the common prejudices against the mentally disabled.

The results of the feasibility study revealed that all potential partners, parents/guardians and farmers, accept the possibility of incorporating farms into the system of social care for the mentally disabled.

The quantitative modelling of the network of health/care farming resulted in the estimation that about 100-150 farms would be sufficient to meet the needs of Ljubljana. Through uniting the functions and/or services of social care, approximately ten farms would be designed for visits, which asks for minor adjustments to (dis)abilities of the mentally disabled. Approximately 30 farms would provide permanent residence and occupation (including a short-term stay),

which requires major adjustments, while approximately 50 (up to 100) farms would deal with daily occupancy as well as training.

The majority of the farmers estimated that there are no or only slight chances for provision of social services on their farm. About one third of the farmers would be ready to start health/care farming. There are two main reasons why farmers are reluctant to provide activities and/or care for the mentally disabled. First, they are convinced that having these people on the farm is too risky and they are afraid of the responsibility. Second, farmers are discontent with the legislation on the supplementary activities due to its rigidity and strictness. They fear that in the case of health/care farming regulations will be even more impractical and bureaucratic. Only one of the interviewed farmers expressed the opinion that special institutions are the best solution for taking care of the mentally disabled.

The Ljubljana case study, which was derived from the discourse on the new developmental paradigm of agriculture and social care, provided evidence for new possibilities for the efficient use of agricultural resources, irrespective of whether they are public or private goods, in the field of social services. However, the modelling and implementation of the emerging possibilities for farmers and people with disabilities have to be carried out with professional correctness by a multidisciplinary team (agronomists, social workers, economists, defectologists etc.) and with a great deal of social prudence. Relevant criteria, economic viability and quality of life of all involved have to be met. This is not an easy task at all.

In addition, neither parents nor farmers have knowledge of, or experience with, health/care farming. Nevertheless, they do accept the idea of incorporation of farms into the general provision of social services for the mentally disabled. However, the decision to participate in health/care farming will not be easy for either of the groups. The parents of the mentally disabled as well as the farmers are very well aware of the great responsibility for all involved. Therefore, the implementation of social services as a supplementary on-farm activity should be gradual and backed by building up partnerships between the participants: parents, mentally disabled and farmers (Figure 2).

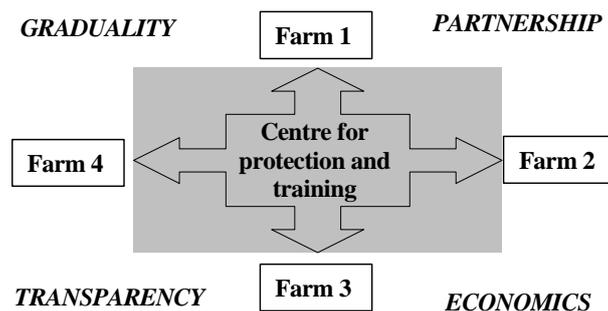


Figure 2. The feasible model of introducing health/care farming in Slovenia: partners and principles

The mentally disabled, their parents or guardians and farmers have to get an opportunity to learn about the activity *in situ*. It is important that they can examine how the person with a mental disability accustoms him/herself to the farm, as well as how the farmers get accustomed to the clients on the farm. As parents have experience with centres for care and training, it would be reasonable to start health/care farming with their support and help. The centres would include regular visits to the farms in their programme. There, they would perform the activities that would gradually result in the inclusion of the mentally disabled in the everyday on-farm routine. However, there is another crucial issue. Differences in preferences of parents and their mentally disabled offspring may arise. From the point of normalization, it is of the utmost importance that the mentally disabled can speak for themselves. Therefore, a system of mediation is needed to prevent violations of the interests of the mentally disabled.

CONCLUSION

System of health/care farming as supplementary on-farm activity in Slovenia

On the basis of the Municipality of Ljubljana case study, the Ministry for Education, Science and Sport, Sožitje, the Slovene Association for Persons with Mental Disability, and the Agricultural and Forestry Chamber of Slovenia were prepared to fund the study at the national level. So far the existing results enable us to draft a general model (Figure 3) as well as a provisional SWOT matrix (Table 5) of health/care farming in Slovenia that might be useful as guidance for further activities. A systematic study of health/care farming has an intrinsic value: it enables the gradual build up of the network of initiatives, people and institutions.

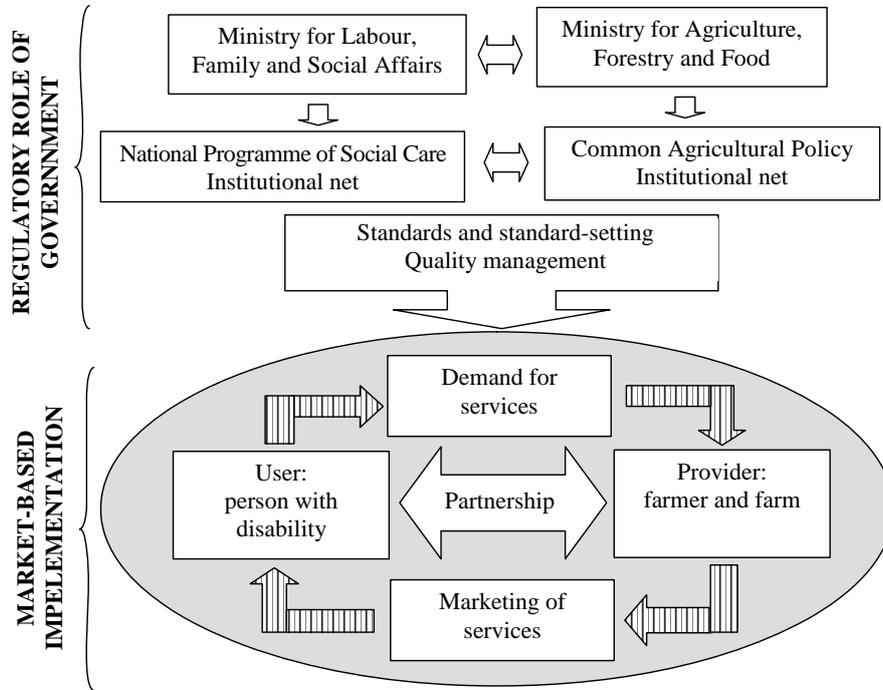


Figure 3. Socially acceptable and economically viable model of the provision of social services as an on-farm supplementary activity in the case of Slovenia

Table 5. SWOT matrix of health/care farming in Slovenia

	<p>OPPORTUNITIES</p> <ul style="list-style-type: none"> • National programme of social care (privatization, introduction of a voucher system) • Common agricultural policy (support to a multifunctional agriculture) • Increasing public awareness of human rights of the disabled 	<p>THREATS</p> <ul style="list-style-type: none"> • Domination of the existent institutions • Institutionalization of a care farm (plain transfer of methods from an institution to a farm) • Over-standardization • Contrariety of the environment
<p>STRENGTHS</p> <ul style="list-style-type: none"> • Multiplication of the therapeutic impacts of agriculture • Variegation of the activities for the disabled • Progress of the normalization • Better quality of life of the disabled • Lower costs of social care • Diversification of the income resources of a farm • Higher employment of farm resources • Improvement of the farmer's income 	<p>STRENGTHS/ OPPORTUNITIES</p> <ul style="list-style-type: none"> • Personal design of an independent life for the disabled • Business plan of a farm • Network of normalization 	<p>STRENGTHS/ THREATS</p> <ul style="list-style-type: none"> • Gradual inclusion of the institutionalized disabled on a farm • Development of a partnership between the disabled, farmers and institutions • Standardization of care farming in compliance with normalization • Support of civil society
<p>WEAKNESSES</p> <ul style="list-style-type: none"> • Care farming is unknown • Potential partners – the disabled and the farmers are unknown to each other • Apprehensions of hazards • Inadequate skills of the disabled • Inadequate skills of the farmer • Inadequate agricultural technology • Possibility of mistreatment of the disabled 	<p>WEAKNESSES/ OPPORTUNITIES</p> <ul style="list-style-type: none"> • Personal design of an independent life of the disabled • Contract on mutual relations • Development and implementation of 'good practice' (social work and farming) • Development and implementation of training schemes • Promotion of care farming among target publics (the disabled and farmers) • General promotion of care farming 	<p>WEAKNESSES / THREATS</p> <ul style="list-style-type: none"> • Self-advocacy • Standards of performance • Multi-disciplinary system of supervision

FUTURE CHALLENGES

The results of the SWOT matrix show that the further development of health/care farming in Slovenia should be placed within the 'system – awareness – practice (SAP) triangle' (Figure 4).

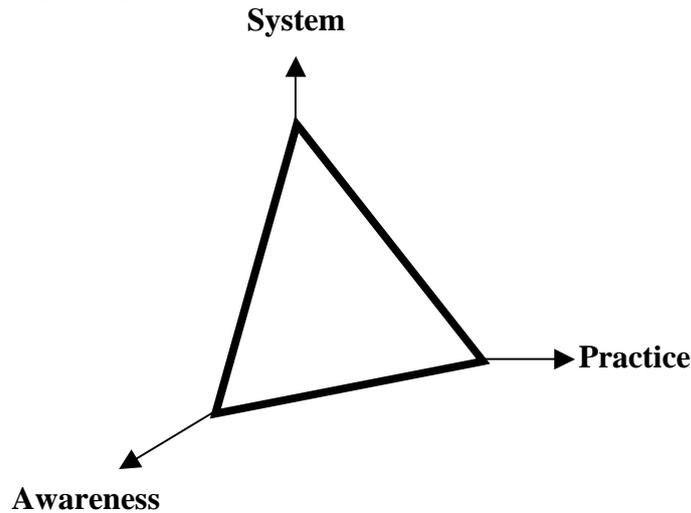


Figure 4. Framework of the future development of the health/care farming in Slovenia - SAP triangle

The dimension 'system' asks for incorporation of health/care farming into the National Programme of Social Care 2005-2008. The Ministry of Labour, Family and Social Affairs has already expressed its interest and contacted the Ministry of Agriculture, Forestry and Food Industry for cooperation. The dimension 'awareness' asks for promotion activities, aimed at clients, farmers, professionals and the public at large. It is essential that health/care farming is understood and accepted as an issue of the sustainable development of the country. As health/care farming is a novelty in Slovenia, the Semenarna Ljubljana Group (seed-producing and -trading company) is willing to sponsor health/care farming by including it into its regular promotion activities, as well as by providing health/care farms with materials that are needed for working with clients (seeds, seedlings, tools etc.). The dimension 'practice' is the most demanding and consists of the development and implementation of a 'good practice' of social work and of farming, as well as of the development and implementation of training schemes for clients, farmers and therapists. Building up an operative 'practice' at a reasonable cost and in good time requires a joint action at both the national and the international level.

RELEVANT ORGANIZATIONS AND PERSONS

1. Clients' organizations

Name		Person	Address	
Sožitje - zveza društev za pomoč osebam z motnjami v duševnem razvoju Slovenije	Sožitje - The Slovene Association for Persons with Mental Disability	Tomaž Jereb, director	Samova 9/II, 1000 Ljubljana Slovenija Website: http://www.zveza-sozitie.si	Tel.: +386 1 43 69 750 Fax.: +386 1 43 62 406 E-mail: info@zveza-sozitie.si
Sonček - Zveza društev za cerebralno paralizo	Sonček - The Slovene Association of Societies for Cerebral Palsy	Jože Primožič, director	Rožanska 2 1000 Ljubljana Slovenija Website: http://www.zveza-soncek.si	Tel.: +386 1 534 26 43, Fax: +386 1 568 60 75 E-mail: zveza@soncek.org
Šent - Slovensko združenje za duševno zdravje	Šent - The Slovene Society for Mental Health	Nace Kovač, director	Cigaletova ulica 5 1000 Ljubljana Slovenija Website: http://www.sent-si.org	Tel.: +386 1 23 078 30 Fax: +386 1 23 078 38 E-mail: info@sent-si.org

2. Farmers and farmers' organizations

Name		Person	Address	
Kozjereja Brdca	Goat-breeding farm Brdca	Tomaž Ferluga	Vrhopolje 6240 Kozina, Slov.	Tel: Gsm: +386 40 342 200
Kmetija Kepec	Kepec farm	Vinko Kepec	Zalog pod Sveto trojico 5 1233 Dob, Slov.	Tel.: +386 1 724 91 13
Kmetija Potočnik	Potočnik farm	Silva Potočnik	Brezje 66 4234 Brezje Slovenija	Tel: +386 4 533 82 79
Turistična kmetija Pecel	Tourist farm Pecel	Peter Malenšek	Maline 17 8333 Semič Slovenija	Tel: +386 7 30 67 022 Fax: +386 7 30 67 778 Gsm: +386 40 620 556 E-mail: peter.malensek@siol.net
Zveza kmetic Slovenije	Slovenian Association of Farming Women	Marija Horjak, president	Celovška 43 1000 Ljubljana Slovenija	Tel.: +386 1 434 00 48 Fax: +386 1 434 00 50 E-mail: zvezakmeticslovenije@siol.net
Kmetijsko gozdarska zbornica Slovenije	Agricultural and Forestry Chamber of Slovenia	Peter Vrisk, president	Miklošičeva 4 1000 Ljubljana Slovenija Website: www.kgzs.si	Tel.: +386 1 24 16 300 Fax: +386 1 24 16 350 E-mail: kgzs@kgzs.si

3. Institutions

Name		Person	Address	
Zavod Hrastovec – Trate	Institute Hrastovec- Trate	Josip Lukač, director	Hrastovec 22, 2230 Lenart v Slovenskih goricah Slovenija Website: http://www.hrastovec.org	Tel.: +386 2 729 35 10 Fax.: +386 2 729 35 66 E-mail: zavod@hrastovec.org
Center Dolfke Boštjančič	Centre Dolfka Boštjančič	Valerija Bužan, director	Naselje Draga Slovenija 1292 Ig Website: http://www.center-db.si	Tel: +386 1 420 26 00 Fax: +386 1 286 35 47 E-mail: center.draga.ig@center-db.si
Varstveno delovni center Koper	Centre for Protection and Training Koper	Irena Fister, director	Ulica 15. maja 8 6000 Koper, Slov. Website: http://users.volja.net/nevij	Tel: +386 5 62 62 851 Fax: +386 5 62 75 601 E-mail: vdckp@siol.net
Varstveno delovni center Tončka Hočevar	Centre for Protection and Training Tončka Hočevar	Tatjana Podlipec, director	Vodnikova 56 1107 Ljubljana, p.b. 68, Slovenija Website: http://www.vdc-tonckehocevar.com	Tel: +386 1 583 88-50 Fax: +386 1 515 28 75 E-mail: vdc.rac@siol.net
Socialno varstveni zavod Dutovlje	Social welfare institution Dutovlje	Zmaga Prošt program manager	Dutovlje 128 6221 Dutovlje Website: http://www.svz-dutovlje.si	Tel: +386 5 764 01 14 Fax: +386 5 708 41 00 E-mail: svz.dutovlje@siol.net
Skupnost socialnih zavodov Slovenije	The Association of Social Institutes of Slovenia	Boris Koprivni kar, president	Letališka cesta 3c 1122 Ljubljana Slovenija Website: http://www.ssz-slo.si	Tel: +386 1 520 80 00 Fax: +386 1 20 81 06 E-mail: sssz@siol.net

4. Researchers

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Jan Ulaga	Center Dolfke Boštjančič	Centre Dolfka Boštjančič	Naselje Draga Slovenija 1292 Ig Website: http://www.center-db.si	Tel: +386 1 420 26 00 Fax: +386 1 286 35 47 E-mail: jan.ulaga@guest.arnes.si
Irena Borštnik	Center Dolfke Boštjančič	Centre Dolfka Boštjančič	Naselje Draga Slovenija 1292 Ig Website: http://www.center-db.si	Tel: +386 1 420 26 00 Fax: +386 1 286 35 47 E-mail: irena.borstnik@guest.arnes.si
Simona Terčak	Center Sonček Vrtiče - Sončna vas	Centre Sonček- Sunny Village	Spodnje Vrtiče 8 2201 Zgornja Kungota, Slov. Website: http://www.zveza-soncek.si/Center_soncek_vrtice.htm	Tel.: +386 2 656 06 00 E-mail: zveza@soncek.org

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