

## **Role of social innovations on farm multifunctionality**

Rolle sozialer Innovationen auf die Multifunktionalität eines Betriebes

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### **Zusammenfassung**

Forschungsziel ist die Operationalisierung des Konzepts der Multifunktionalität innerhalb einer proaktiven Agrarpolitik. Intrinsische positive Externalitäten der landwirtschaftlichen Produktion sowie alternative Ansätze zu ihrer Einbindung in die marktorientierte Entscheidungsfindung werden im Zusammenhang mit dem Angebot von Sozialdiensten am landwirtschaftlichen Betrieb untersucht. Ergebnisse zeigen, dass vier Konzepte verbunden werden sollten, um sowohl die ökonomische Umsetzbarkeit als auch die soziale Akzeptanz von Sozialdiensten zu sichern: die Multifunktionalität der Landwirtschaft, die Normalisierung von Personen mit besonderen Bedürfnissen, die neoklassische Effektivität und die Gestaltung der Privatisierung. Weiters zeigen sowohl Landwirte als auch Eltern/Vormund von geistig behinderten Personen Interesse an der Teilnahme an einem Pflegeprogramm, das auf einer Koalition von Landwirten als Dienstleister und Behinderten als Leistungsempfänger aufbaut.

**Schlagerworte:** Landwirtschaft, Multifunktionalität, Sozialdienste, zusätzliche Aktivität am Betrieb

### **Summary**

The aim of the research is the instrumentalisation of the concept of multifunctional agriculture within the proactive agricultural policy. Intrinsic positive externalities of agricultural production as well as alternative approaches to their incorporation into the market-based decision making are studied by the research on the provision of the

social services as a supplementary on-farm activity. Results show that four basic concepts: the multifunctionality of agriculture, the normalization of the peoples with special needs, the neoclassical efficiency and the type of privatization, should be combined in order to provide economic viability as well as social acceptability of the provision of social services as supplementary on-farm activity. Furthermore, farmers as well as parents/guardians of mentally handicapped persons are interested to take part in agricare programs, based on the coalition of the farmers as providers and the mentally handicapped as users.

**Keywords:** agriculture, multifunctionality, social services, farm, supplementary activity

## 1. Introduction

The liberalization of Slovene agricultural trade during the 90-ties caused a fall in the prices of agricultural products, while at the same time the prices of agricultural inputs rose (OECD, 2001a). Research on economic viability of Slovene farms revealed that only about 2.5 % out of all earn parity income per manpower from agriculture (KOVACIČ and UDOVČ, 2002). The economic pressure from increasing market competition leads to intensive marginalisation of agricultural resources. To some extent the subsidies mitigate farmers' income problems (REDNAK et al., 2002) but their solution lies in a higher efficiency of farming exclusively. There are two basic ways to increase the economic efficiency of a farm within market-oriented economy: economy of scale and/or diversification of target markets (SAMUELSON, 1975). In case of small scale farming, the first solution can be applied at a reasonable social cost in a long-term period (GARDNER, 1995). The effects on efficiency from diversification of target markets can be achieved sooner, but it involves a short-term increase of private costs due to reorientation from the traditional uses of agricultural resources to the new ones. As services are the fastest growing sector of economy, new opportunities for the use of agricultural resources should be investigate in this field. Yet, among different services that can be provided by farmers and farms (e.g. farm tourism, maintenance of rural amenities, etc.), social services for people with disabilities as a supplementary on-farm activity (LANDBOU & ZORG, 2000) become an

interesting issue in the search for the new social contract between agriculture and society in the European Union.

The aim of the research is the instrumentalisation of the concept of multifunctional agriculture within the proactive agricultural policy through modelling the provision of social services for the mentally disabled as a supplementary on-farm activity. The initial hypothesis is that the paradigms of multifunctional agriculture as well as the concept of normalization or inclusion of the mentally disabled provide new possibilities for efficient use of agricultural resources in the field of social services, irrespective of whether they are public or private goods.

## 2. Applied methods

The research procedure consists of a mix of methods of qualitative and quantitative research. At first the activity based research (TOŠ and HAFNER-FINK, 1998) that consists of three phases: identification and description of relevant concepts and paradigms – discourse on social services as a supplementary on-farm activity – designing the guidelines and activities was performed. Then, by means of a group interview, 30 groups of parents - participants of rehabilitation programs organized by the national Association of Societies for Helping Mentally Disabled – *SOŽITJE* were surveyed during the period from June to August 2002. The interview was designed as a combination of cognitive and conative approaches. Two sets of indicators were used: one for the parents themselves (geo- and socio-demographic, experiences with farming/gardening, willingness and terms to enter target activity, anticipated allocation of voucher), another for their mentally disabled offspring (degree of mental retardation, actual dwelling and employment situation, occupation and training, experiences with farming/gardening, anticipated advantages and disadvantages of target activity). After the group interview parents were asked to fill in a questionnaire, which served as the starting point for individual interviews. If both parents were present, they were asked to fill in a single questionnaire. Only in the case of three families with two mentally disabled offspring, questionnaires were filled in separately for each offspring by one of the parents. Thus, the number of 361 parents willing to fill in the questionnaire refers to the same number of mentally disabled. During the winter 2002-2003 the pilot

study on farmers' opinions on the feasibility of provision of social services for the mentally disabled as an on-farm supplementary activity was carried out. 40 farmers, chosen according to the expert opinion of local extension officer, were asked to take part in the interview. 29 out of them were ready to participate in the study that was carried out by the combination of cognitive and conative approaches, too. Three sets of indicators were used: for the farm family (socio-demographic), for the farming (land use) and for the farmer's view on the target activity (readiness, extent and terms).

### 3. Results

#### 3.1 Relevant concepts and paradigms

##### 3.1.1 Multifunctionality of agriculture

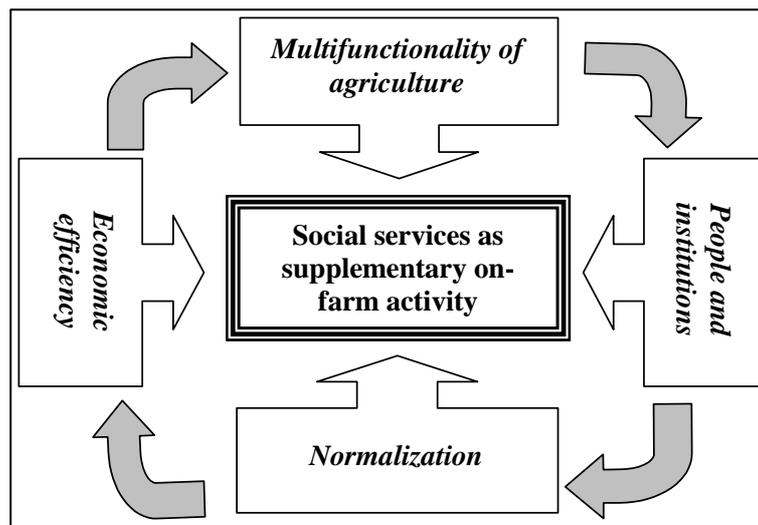


Figure 1: The net of problems with reference to the provision of social services as an on-farm supplementary activity

Multifunctionality of agriculture refers to the many secondary functions agriculture performs. (FAO 1999; OECD, 2001a; OECD, 2001b). Producing agricultural commodities for the market

simultaneously produces many non-commodity outputs. For some of these outputs markets do not exist or function poorly. Therefore, rural viability (TERLUIN, 2003), environmental quality, as well as landscape amenities (VOs and MEEKES, 1999; TOPP and MITCHELL, 2003), etc. are positive externalities of agricultural production. Yet, the role which agriculture and rural communities can play in social reintegration of historically excluded social groups, e.g. people with disabilities, is totally neglected when the multiple functions of agriculture and rural amenities are discussed, although the agri-care is intensively practiced (AHTA, Camphill, Delta Society, Sonček- Slovene Association for Cerebral Paralysis, Šent – Slovene Association for Mental Health, etc.)

### **3.1.2 Normalization**

The concept of normalization of people with disabilities stresses that each person has to be treated according to his/her individual particularities and characteristics (individualization), as well as that he/she has to be included in the »normal« society by support of all needed services (interdisciplinary and holistic treatment) (STRASSMEIER, 1998). The implementation of the so-called Scandinavian model of normalization pointed out that in the process of deinstitutionalisation in the case of people with mental disabilities the crucial point is the normative solution on balance between safety and freedom, as well as between protection and independence. The right solution to this problem allows »soft« reconstruction of the welfare state social engineering to the modern paradigm of individualization and participation (KEBBON, 1997).

### **3.1.3 Economic efficiency**

The discussion on the nature of the externalities provided by multifunctional agriculture and on their economic instrumentalisation is based on the marketability arrow (ANDERSON, 2000; CAHILL, 2001; MULLARKEY at all, 2001)

The location of public goods and externalities in the excludability/rivalry diagram can be modified through institutional and management/marketing approaches. Therefore, transformation of public goods and externalities into private or quasi-private goods can take place.

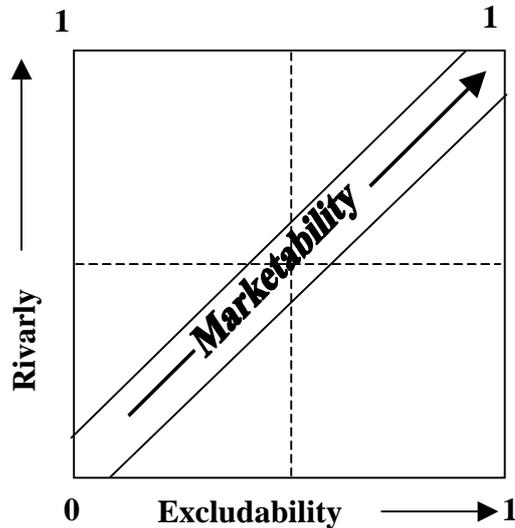


Figure 2: *The marketability arrow: from public to private goods*  
(MERLO and BRIALES, 2000)

### 3.1.4 People and institutions: deinstitutionalisation and privatization

The relation between public and private good is extremely relevant in terms of the privatization of social services. (PESTOFF, 1992, OLOONEY, 1993) as the property rights are the condition *sine qua non* for the market-based approaches to social care.

As the institutionalization of the social care for people with disabilities used to be the main pattern of relations between the political system and the social services, the normalization nowadays means deinstitutionalisation first of all. The understanding of the deinstitutionalisation is threefold: as deetatisation, as decentralization and as deregulation. The same holds for privatization as a regulatory principle of vertical organization of social services. The economic interpretation sees the phenomenon as a transfer of production of services from public and/or state institutions to private institutions (private companies, voluntary sector, etc.). The sociologic interpretation of the phenomenon is based on the reorientation of

social values and behavior from collectivism to individualism. Social workers understand the privatization of social services as a transition from the governmental to the non-governmental allocation of the services (RUS, 1990).

*Table 1: Privatization of social services with regard to changes in administration: individual and superindividual privatization (RUS 1990: 282)*

Changes in administration	Target groups	
	Providers	Users
Changes in property rights	Denationalization	Individualization
Changes in supervision	Deregulation	Voucher

Too large autonomy of providers of services may result from denationalization and voucher, while deregulation and individualization may lead to irresponsible autonomy of users of services. Furthermore, also individualization provides room for partnership; it increases the possibility of uncontrolled social discrimination, which leads to social disintegration of autonomous users into anarchic collectivity. Therefore individualization has to be backed by a controlling regulation and a redistributive role of the state that will assure the citizens universal access to social services and a certain level of equality, which is a precondition for social fairness (RUS, 1990).

### 3.2 Market based provision of social services for mentally disabled as supplementary on-farm activity.

The social services for people with disabilities (so-called agric-care) should be provided by farmers as a supplementary on-farm activity. In this case people with disabilities would be in a steady contact with a usual social environment and would also be included into the everyday on-farm routine of the farmer's family, which would give them an opportunity for the individual treatment. On the other hand, the farmer would derive from such activity an additional income from positive externalities of farming on well-being of people with disabilities. At the same time, the implementation of agric-care as an on-farm supplementary activity means the diversification of target markets for on-farm resources and multiplies sources of income.

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

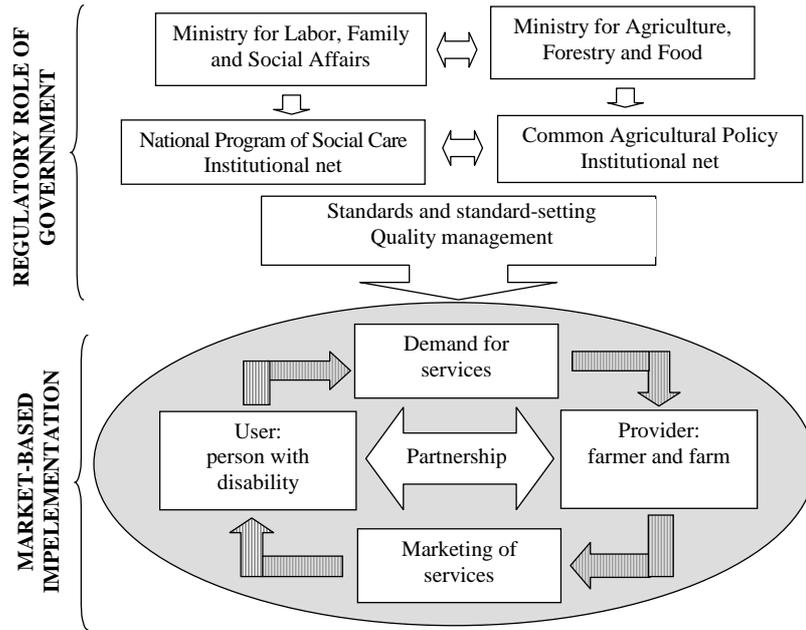


Table 2: Determination of parameters of »coalition« between providers – farmers and users – persons with disabilities

Parameter	Farmer	Person with disabilities
Preference	Willingness and readiness	Willingness and readiness
Aim	Business	Personal
Capacity	Resources, production and technology	Mental, physical and social
Task	(Co)execution, planning, management, supervising	Watching, cooperation, independent execution
Relationship	Partnership	Partnership
Term	Contract: "sells" of services	Contract: "purchase" of services

### 3.3 Case studies

#### 3.3.1 Demand for social services as on-farm supplementary activities

As there is no care farming in Slovenia, the idea of incorporating farms and farmers into the system of protection and training of persons with mental disability was quite new to the respondents – parents or guardians of those persons. The majority of them, 67 %, opted for suggested answers: 54 % were willing to include their mentally disabled offspring in everyday on-farm activities (19 % unconditionally, 35 % under certain conditions) while 13 % were against it (5 % out of all respondents expressed their strong opposition).

Table 3: Willingness of the parents of mentally disabled offspring to include him/her into everyday on-farm activity, %, (N=361) Slovenia

Willingness	Degree of mental disability					All
	mild	moderate	severe	profound	unknown	
Willing	2.80	10.80	1.90	1.70	1.70	18.80
Willing conditionally	3.30	20.50	7.80	2.20	0.80	34.60
Unwilling	-	3.00	2.50	1.10	0.80	7.50
Unwilling under any condition	0.80	1.70	1.70	0.60	0.60	5.30
Indecisive	2.20	10.00	1.40	0.60	1.10	15.20
Already living on a farm	0.80	2.20	1.70	2.20	0.60	7.50
Unknown	0.60	3.00	1.10	1.70	4.70	11.10
All	10.50	51.20	18.00	10.00	10.20	100.00

The parents consider employment of a mentally disabled offspring as a crucial factor contributing to the quality of his/her life. Due to the poor opportunities to find a proper job or activities for their adult mentally disabled offspring, one third of the parents see protected employment as the most suitable way to include their offspring in everyday on-farm activity.

Table 4: Forms of on-farm activities preferred by the parents of the mentally disabled, %, (N=361), Slovenia

Forms	Degree of mental disability					All
	mild	moderate	severe	profound	unknown	
Protected employment	4.70	19.40	5.50	3.30	0.80	33.80
Periodical leisure activities	2.50	11.90	3.90	1.70	0.80	20.80
Daily care	0.80	9.40	2.20	0.80	1.10	14.40
Dwelling community	1.90	7.20	0.80	0.30	1.10	11.40
Other	0.80	3.60	-	0.60	-	5.00
All	10.50	51.20	18.00	10.00	10.20	100.00

The farmer, to whom the parents would entrust their mentally disabled offspring, has to be trained adequately and has to have personal experiences with mentally disabled. Yet, first of all, he/she has to be “a good sort of a person”. The parents expect the farmer to respect and to understand the mentally disabled, as well as to bear with them. As the parents have no practical experience with care-farming, they would like to have professional attendance on a farm for their mentally disabled offspring.

The agricultural lines of production, which the parents assessed as the most adequate ones for their mentally disabled offspring, corresponded with the lines they already had had experience with: vegetable and ornamental flower production, followed by fruit and herb production. More than half of the interviewed parents thought that involvement with plant production has a favourable impact on the well-being of the mentally disabled. Being in the open air, 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 by the parents. Even when the frequency of contacts with animals was lower, the experiences with regard to the impact on the emotional state, behaviour and mood were the same. These impacts were described as soothing, stimulating, enlivening and strengthening one’s self-confidence.

Out of 13 different sources of risk, the parents perceived two groups as the most threatening: those that originated from farming itself (injuries caused by agricultural machinery and tools, poisoning with agricultural chemicals, injuries caused by animals) and those that

originated from farmers' behaviour (verbal abuse, physical abuse, slave labour). Although the parents were aware of all the relevant risks of farming, the fear of mistreatment predominated. They believed the appropriate personal attitude of the farmers towards the mentally disabled to be the most important characteristic. Respect, understanding and patience were the most frequently mentioned attributes. Positive experiences with mentally disabled persons were more important for the parents than the experience in farming and farming skills. Farmers should receive special training for working with the mentally disabled. The training should be organized by Sožitje (55 %), and centers for protection and training (57 %) i.e. organizations and institutions they are familiar with.

The preliminary rough estimation on needed therapeutic on-farm posts was calculated on the base of the parents' preferences on assigning voucher.

*Table 5: Estimation of potential demand for social services for mentally disabled as on-farm activity in Slovenia*

<b>Degree of mental disability</b>	<b>Number of persons (estimation)</b>	<b>Share (%) of parents, that would prefer to assign a voucher to a farm</b>	<b>Demand (number of persons)</b>	<b>Number of on-farm therapeutic posts needed *</b>
Persons with moderate degree of mental disability	10,000	18.4	1,840	920
Persons with sever degree of mental disability	1,750	10.8	189	95
Persons with profound degree of mental disability	1,750	8.3	145	73

\* Two persons with mental disabilities per one therapeutic on-farm post

### 3.3.2 Farmers' view on social services as on-farm supplementary activities

As active farming was the principal criteria of choice, the surveyed farms are larger than an average farm in the region. They use 11 ha of agricultural land and 8 ha of forests. Two third of farms used more than 10 ha total land, while only 18 % of all farms in the region falls into this size group. As the majority of households consist of two (41 %) or three (31 %) generations, the most frequent combination of income sources is farming, employment and pension. Yet, only five of them are engaged in a supplementary activity (truism, processing).

As to the parents, the idea of social services for people with disabilities was new to the farmers, too. Yet only one farmer could not decide whether to start such an activity or not. All the others were able to make up their mind. About one third of the farmers would be ready for starting the care-farming. The majority of them estimates that there are no or slight chances for provision of social services on their farm. Therefore, the ration between the farmers who think that they might start agric-care for mentally disabled as an on-farm supplementary activity and those who would not is about 1: 3.

There are two main reasons why the farmers are reluctant to provide activities and/or care for the mentally disabled. First, the farmers are convinced that having these people on the farm is too risky and they are afraid of the responsibility. Secondly, the farmers are ignorant of such a possibility. Interviewed farmers share a common discontent with legislation on the supplementary activities due to its rigidity and strictness. Furthermore, many of them indicated the reason that nobody has thought of introducing care-farming in Slovenia as yet. Only one of them expressed the opinion that special institutions are the best solution for taking care of the mentally disabled.

If a farm provided social services for the mentally disabled, the mistress would be in charge in most of the cases or the responsibility would be shared between her and the farmer. The farmers would be ready to take care from one up to three mentally disabled clients, irrespective of their sex. Yet, people with mild or moderate degree of disability are preferred. Furthermore, the majority of farmers think that the clients would be trained adequately prior to their coming to the

farm. The same holds for the farmers. They have to get special training to deal with the clients.

A very interesting issue in the discussion with the farmers was the question, how much earnings they expect from providing social services for the mentally disabled. Only few could of them were ready to quote the exact sum. In the case of providing activities the expected earnings range from 20,000 SIT up to 90,000 SIT per month (1: 4.5). The Dutch farmers, who are engaged in the care-farming earn 36 EUR per day (8,000 SIT). If the Slovene care farmer would earn only half of the Dutch farmer earnings, the monthly gross income would be about 110,000 SIT, i.e. the sum that exceeds the highest quoted target earnings.

#### **4. Conclusion**

Case studies that were derived from the discourse on the new developmental paradigm of agriculture and social care provided the evidence for the new possibilities for the efficient use of agricultural resources in the field of social services, irrespective of whether they are public or private goods. Yet, the modelling and the implementation of emerging possibilities for farmers and people with disabilities have to be carried out with professional correctness of the multidisciplinary team (agronomists, social workers, economists, defectologists etc.) and with great deal of social prudence. Relevant criteria, economic viability and quality of life of all involved have to be met. It is not an easy task at all. The Slovene experience shows that even in the less affluent societies is not impossible to perform this activity.

In addition, neither parents nor farmers have knowledge or experience with care-farming, however they do accept the idea of incorporation of farms into the general provision of social services for mentally disabled in Slovenia. Yet, the decision to participate in the care-farming will be not easy for either of the groups. Parents of mentally disabled, as well as 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 participants: parents, mentally disabled and farmers.

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 mental disability accustoms to the farm, as well as how the farmers get accustomed to the client on the farm. As parents have experiences with centres for care and training, it will be reasonable to start the care-farming with their support and help. The centres would include into their programs regular visits to farms, performing there the activities that would gradually result in the inclusion of the mentally disabled in the everyday on-farm routine. Yet, there is another crucial issue. Differences in preferences between parents and their mentally disabled offspring may arise. From the point of normalization, it is of utmost importance that the mentally disabled can speak for themselves. Therefore, the system of mediation is needed to prevent violations of interests of the mentally disabled.

### Acknowledgements

Our warmest thanks go to all the parents, as well as the farmers who shared their experiences, observations and opinions with us. The Ministry of the Republic of Slovenia for Education, Sport and Science, the Association of Societies for Helping Mentally Disabled – SOŽITJE, Slovenia, and the Agricultural – Forestry Chamber of Slovenia, sponsor the research on the social services as a supplementary on-farm activity in Slovenia.

### References

- Anderson K. (2000). Agriculture's 'multifunctionality' and the WTO. *Australian Journal of Agricultural Resources* 44(3): 475-494.
- Cahill C. (2001). The Multifunctionality of agriculture: what does it mean?. *EuroChoices*, Spring: 36-40.
- FAO. (1999) International Conference on Agriculture and Land Use Opens in Maastricht to Study the Many Functions of Agriculture in Society and the Economy. <http://www.fao.org/WAICENT/OIS> (February 6, 2001).
- Gardner B. L. (1995) Changing economic perspectives on the farm problem. In Peters G. (ed): *Agricultural Economics*. Aldershot, Brookfield, E. Elgar Publishing: 92-131.
- Kebbon L. (1997) Nordic contributions to disability policies. *Journal of Intellectual Disability Research* 41: 120-125.
- Kovačič M., Udovč A. (2002) Struktura kmetij in njen vpliv na dohodkovni položaj kmetov v Sloveniji. *Sodobno kmetijstvo* 35(2): 67-74.
- Landbouw & Zorg. (2000) *Kwaliteitssysteem Zorgboerderijen*. De Glind, Landelijk Steunpunt voor landbouw & zorg: 53 p.

- Merlo M., Briaies E. R. (2000) Public goods and externalities linked to Mediterranean forests: economic nature and policy. *Land Use Policy* 17: 197-208.
- Mullarkey D., Cooper J., Skully D. (2001) Multifunctionality and agriculture. Do mixed goals distort trade. *Choices*, 1st Quarter: 31-34.
- OECD. (1994) *The Contribution of Amenities to Rural Development*. Paris, OECD: 154 p.
- OECD. (2001a) *Pregled kmetijske politike. Slovenija*. Pariz, OECD-Center za sodelovanje z nečlanicami: 184 p.
- OECD. (2001b). *Multifunctionality: Towards an Analytical Framework*. Paris, OECD: 160 p.
- OZN. (1994) *Standardna pravila za izenačevanje možnosti invalidov*. Ljubljana, Urad vlade Republike Slovenije za invalide: 52 p.
- Rednak M., Volk T., Zagorc B., Golež M. (2002) Stanje v slovenskem kmetijstvu 2000. In: Erjavec E. (ed.) and Juvančič L. (ed): *Učinki reforme slovenske kmetijske politike. 1. konferenca DEAS*. Ljubljana, Društvo agrarnih ekonomistov Slovenije: 7-26.
- Rus V. (1990) Alternativne oblike privatizacije družbenih dejavnosti *Teorija in praksa* 27(3/4): 277-283.
- Samuelson P. A. (1975) *Ekonomska čitanka*. Zagreb, Nakladni zavod Matice Hrvatske: 632 p.
- Strassmeier W. 1998. Modeli obravnav odraslih oseb z težjo motnjo v duševnem razvoju. In: Golob. A. (ed.): *Naša pot. Vseživljenjsko učenje: zbornik strokovnih prispevkov v obdobju 1994 - 1998*. Draga, Center Dolfke Boštjančič: 112-130.
- Terluin I. J. (2003) Differences in economic development in rural regions of advanced countries: an overview and critical analysis of theories. *Journal of Rural Studies*, doi:10.1016/S0743-0167(02)00071-2 (15. marec 2003).
- Topp C. F. E., Mitchell M. (2003) Forecasting the environmental and socio-economic consequences of changes in the Common Agricultural Policy. *Agricultural Systems* 76(1): 227-252.
- Toš N., Hafner-Fink M. (1998) *Metode družboslovnega raziskovanja*. Ljubljana, Fakulteta za družbene vede: 199-202.
- Vos W., Meekes H. (1999) Trends in European cultural landscape development: perspectives for a sustainable future. *Landscape and Urban Planning* 46(1-3): 3-14.
- AHTA - The American Horticultural Therapy. <http://www.ahta.org>. (January 25, 2003).
- Camphill Communities. <http://www.camphill.org.uk> (January 25, 2003).
- Delta Society. The Human - Animal Health Connection. <http://deltasociety.org>. (January 25, 2003).
- Sonček - Zveza društev za cerebralno paralizo Slovenije <http://www.zveza-soncek.si> (January 25, 2003).
- Šent - Slovensko združenje za duševno zdravje. <http://www.sent-si.org>. (January 25, 2003).

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