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SYNERGY OF SOCIAL AND HUMAN CAPITAL IN RURAL DEVELOPMENT – CZECH AND GERMAN CASES

Jakub Husák¹

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- **Abstract:** The paper is focused on specialised organizations for the education and creation of human capital within the rural areas, which are called "Schools for Rural Renewal". Attention is also paid to a relatively new phenomenon in networking and social capital creation within the rural areas which is called "Regional Educational Cooperative" and which could be the inspiration for rural areas in the Czech Republic. The main aim of the paper is to examine the role of these organisations within the process of knowledge creation in rural areas and also to identify the synergy effect of social and human capital. From the methodological point of view, mainly secondary analysis and semi-standardised interviews with actors in rural development are used. How are social and human capitals used in rural areas in the Czech Republic? This paper should provide the answers to these essential questions.
- Key words: development, education, human capital, knowledge, rural areas, rural renewal, social capital
- Souhrn: Článek je zaměřen na organizace specializované na vzdělávání a vytváření lidského kapitálu ve venkovském prostoru, které jsou souhrnně nazývány Školy obnovy venkova. Pozornost je také věnována relativně novému jevu v oblasti vytváření sociálních sítí a budování sociálního kapitálu na venkově, a to tzv. Regionálním vzdělávacím družstvům, které mohou být inspirací také pro venkovské oblasti v České republice. Hlavním cílem článku je zhodnotit roli těchto organizací v rámci procesu vytváření znalostí ve venkovském prostoru a také identifikovat synergický efekt sociálního a lidského kapitálu. Z metodologického úhlu pohledu bylo využito především sekundární analýzy dat a polostandardizovaných rozhovorů s hlavními aktéry rozvoje venkova. Jak je sociální a lidský kapitál využíván v rozvoji venkova, jaké jsou dopady aplikace těchto konceptů ve venkovských oblastech České republiky? To jsou základní otázky, na které by měl přinést odpověď tento článek.
- Klíčová slova: rozvoj, vzdělání, humánní kapitál, znalosti, venkovská území, obnova venkova, sociální kapitál

¹Ing. Jakub Husák, Ph.D., Czech University of Life Sciences Prague, Kamýcká 129, 165 21 Prague 6 – Suchdol, Czech Republic, husak@pef.czu.cz

1. Introduction

The present society is often called a knowledge society and knowledge is one of the most important sources of development. Also education and knowledge creation as parts of human capital are considered as crucial developmental factors of rural areas. The importance of human and social capital is also consistent with an endogenous approach to rural development. This results in a logical common effect which can be described as a focus of society on human resources from the perspectives of knowledge, skills and qualifications. From these facts, the concept of knowledge emerges as the most strategic resource, with learning as the most important process (Lundvall, 1995). Qualifications (qualifications of people living in a particular delimitated area which consists not only of the educational structure, but also of the ability to be self-educated using more or less formalised methods and to use the knowledge and skills gained to increase the quality of life within the area) are therefore regarded as one of the main factors of endogenous development potential, not only from the individual aspect, but also from the regional and societal points of view. These are the main reasons for choosing the topic of this paper, which is focused on the synergy of social and human capital in rural areas of the Czech Republic.

2. Theoretical background

The paper is theoretically based on three main concepts. The first of these is the concept of human capital, including knowledge creation and knowledge typology; the second is the concept of social capital, including networking and the network society, and the third is the concept of endogenous rural development which is fully consistent with the intangible forms of capital mentioned above.

Considering the concept of human capital, it is necessary to mention the learning process and knowledge creation. Within the current postmodern society, knowledge is becoming one of the most important location and developmental factors. Murdoch (1995) claims that the type of available knowledge and information is less important than the significance which is attributed to particular institutional assets. However, other authors (e.g. R. Hudson, A. Malmberg, P. Maskell – see below) consider the type of available knowledge as a crucial developmental factor.

Knowledge is often classified as codified and tacit because there is a significant difference between these basic types. Codified knowledge is possible to be standardized and transferred by instructions, manuals, education, and is possible to be sold as goods. Tacit knowledge (e.g. know-how, skills and competences) is possible to be acquired only directly by one's own experience and participation in a particular activity (Hudson, 1999a). Maskell and Malmberg (1999) also debate about the codification of tacit knowledge, because codified knowledge itself represents an instrument for the production of new knowledge.

These considerations correspond to the theory of learning organization, which considers knowledge as a crucial source of entrepreneurship (Tichá, 2005) and also to the theory of learning regions, which consider knowledge and human capital as the main sources of regional (rural) development (Hudson, 1999b). The concept of knowledge mentioned above is typical of the individual, organizational and regional levels, but current conceptualisation is shifting away from these levels to the whole of society, by use of the term, "learning economy". Nielsen and Lundvall (2006) define the "learning economy" as one in which the ability to attain new competencies is crucial to the performance of individuals, firms, regions and countries.

Recent decades have been characterized by an acceleration of both knowledge creation and knowledge destruction. Information and communication technology has made a lot of information more easily accessible to a lot of people, but it also has made many skills and competencies obsolete. These facts result in the new typology of knowledge, using a combination of two criteria – individual or collective entity and explicit (codified) or tacit knowledge. On this basis, Lam and Lundvall (2006) create the typology of four different forms of knowledge – embrained, embodied, encoded and embedded (Table 1).

	individual	collective
explicit	embrained	encoded
tacit	embodied	embedded

Tab 1. Typology of knowledge. Source: Lam, Lundvall 2006.

Embrained knowledge is dependent on the individual's conceptual skills and cognitive abilities. It is formal, abstract or theoretical knowledge. It is typically learnt through reading books and by formal education. Embodied knowledge is action-oriented. It is the practical, individual type of knowledge which is learnt through experience and training based on apprenticeship relations. Encoded knowledge is shared within organisations through formal information systems. Any member of an organisation can easily gain access to relevant databases using information technology. Encoded knowledge is formed by making explicit as much as possible of tacit knowledge. Embedded knowledge is built into routines, habits and norms that cannot easily be transformed into information systems. Embedded knowledge is produced by an interaction among different members of the organisation. It is relation-specific, contextual and dispersed.

On this basis, it is possible to conceptualise the "learning economy" more precisely as an economy in which individuals, firms and even national economies will create wealth and gain access to wealth in proportion to their capacity for learning. This will be true, regardless of their present level of development and competence (Lam, Lundvall, 2006). The above- mentioned approaches to knowledge and human capital are relatively precise, but usually neglect the process of networking of knowledge, with knowledge being perceived as static (including collective knowledge). However, Hudson (2007) also mentions the significance of knowledge dynamics when claiming that, "it is useful to establish local interregional alliances to cooperate mainly in view of knowledge transfer and knowledge dynamics". This approach is close to the concept of social capital and the network society.

Social capital, as the second theoretical concept of the paper, is mentioned mainly due to its importance for the encouragement of rural development and the extension of the concept of human capital to networks and relations between individuals. Traditionally, social capital is perceived in two senses – as an individual entity according to Pierre Bourdieu (e.g. Bourdieu, 1991) and also as a collective entity according to Robert Putnam (e.g. Putnam, 1993). Putnam's concept of social capital is closer to the conceptualisation of this paper, because Putnam (1993) prefers a cognitive version of the concept which focuses on shared norms, values, trust, attitudes and beliefs. This conceptualisation refers closely to the concept of human capital, knowledge creation, the learning process and to the building and sustaining of social networks, and also to the trust that can facilitate co-ordination and co-operation for mutual benefit. Kostelecký, Patočková and Vobecká (2007) claim that the Putnam's hypothesis about correlation between economic development, social capital and regional development performance has not been confirmed in the Czech Republic. But they also argue that it could be result of different historical development and also geographical location of regions. On the other hand these authors confirm relation between human and social capital in regional sense – so this is one of the reasons to research their synergic effect within the rural areas as a developmental factor.

Social capital is often placed in groups and organisations and is understood as the "glue" that binds people together (Lee, Árnason, Nightingale and Shucksmith, 2005). This type of social capital is usually conceptualised as bonding social capital (defensive). Beside this type also bridging social capital (offensive) is important from the perspectives of this paper. Bridging social capital is formed by relations within the broader area and also outside the locality – regional cooperation and networking could be seen as one of the interesting example (Pileček, 2010). The broader debate could be about using social capital as a source of rural (local) development. Evans and Syrett (2007) claim, that social capital could be considered as heuristic device serving to stimulate investigation of the development of local social economies. Important to this particular endeavour are the features of social capital as both appropriable and capable of reducing transaction costs.

According to other authors, building social capital together with networking and the participation of citizens in local and regional development are crucial factors in the successful implementation of an endogenous approach to rural development, with regard also to the economic and environmental dimensions (Shucksmith 2000; Falk and Kilpatrick 2000). In this context, Atterton (2007) claims that, to encourage networking, there is a fundamental issue that must be addressed before any policy intervention can be successful. It is possible to state that sufficient amount of social capital is prerequisite of development of regions and localities. Stachová, Bernard and Čermák (2009) deal with differences of social capital among the EU states. The volume of social capital in the Czech Republic is slightly below the average and in Germany is this amount higher but with considerable variability (especially between the former western and eastern part).

The importance placed by representatives of local and regional organisations on formal networking contrasted strongly with the importance placed on the informal nature of networking by business owners, leading some businesses to question to what extent organisations can play a role in initiating meaningful business networks. There is a role for policymakers to act as brokers to encourage the formation of extra-local and weak ties and to add an exogenous view to the endogenous model of rural development, which is represented mainly by social and human capital. This consideration is also empirically acknowledged by the ensuing research on regional and local development, which results in the suitability and applicability of a mixture of endogenous and exogenous approaches to regional development (Husák, 2010).

Despite the appropriateness of a mixture of endogenous and exogenous development, the endogenous model of rural development persists, more preferred mainly with regard to the intangible forms of capital as mentioned above. Considering the practical application of endogenous development, its patterns are based mainly, but not exclusively, on locally available resources, making full use of ecology, the labour force and knowledge of an area, as well as on those patterns which have developed locally to link production and consumption. Endogenous development can revitalise and provide a new dynamic to local resources that might otherwise become superfluous. Endogenous development emerges as a self-oriented process of growth and a relatively large part of the total value generated by this type of development on local resources (specifically local knowledge, localised learning, trust, shared norms and other patterns of human and social capital concepts) implies that this type of development can have a positive impact on local interests and perspectives (van der Ploeg, Saccomandi, 1995).

On the other hand, it is not possible to understand endogenous development as a closed economy, despite the fact that the significance of concentration and expansion on regional and local markets is emphasised. Demand on local and regional markets should be covered by local production and should deal with the specific local requirements and needs of a local community (Garofoli, 1992). These practical implications reflect the intellectual basis of endogenous development – mainly the utilisation of social and human resources (represented by social and human capital) and innovations to encourage rural development.

3. Aims and Methods

On the basis of the theoretical concepts mentioned above, the paper is focused on knowledge creation and knowledge dynamics within the particular rural areas of the Czech Republic and particularly on the specialised organisations for education within the rural areas which are called "Schools for Rural Renewal", and their role within the knowledge creation and knowledge dynamics in rural areas of the Czech Republic. Attention is also paid to a relatively new phenomenon in networking and social capital creation within rural areas, which is called "Regional Educational Cooperative" and which could be the inspiration for rural areas in the Czech Republic. Finally, the synergy effect of human and social capital is examined with respect to the patterns of endogenous development as mentioned above. More generally, the paper tries to answer the question: How are the theoretical concepts of human capital, social capital and endogenous development reflected in praxis of rural development in the Czech Republic?

The main aim of the paper is to examine the role of "Schools for Rural Renewal" and "Regional Educational Cooperatives" within the process of knowledge creation in rural areas and also to identify the synergy effect of social and human capital. Attention is also paid to the activity or inactivity of particular Schools for Rural Renewal in the process of education in rural areas, in particular with regard to the process of networking and collective learning within the rural areas of the Czech Republic. The "Schools for Rural Renewal" and "Regional Educational Cooperatives" were chosen for analysis due to their functioning as the only specialised organisations dealing with education for rural areas. They also represent two different approaches to education for rural areas. To compare these approaches in the terms of rural development issues is one of the purposes of the study. Thus, deliberately different organisations were chosen.

From the methodological point of view, mainly a secondary analysis of the database of the Schools for Rural Renewal, their web pages, web pages and materials of a specific Regional Educational Cooperative in Germany and specific implemented projects is used. In addition, semi-standardised interviews with representatives of the Schools for Rural Renewal and a German Regional Educational Cooperative are used – particularly interviews with eight representatives of Schools for Rural Renewal in the Czech Republic, two representatives of Regional Educational Cooperatives in Germany and also with the bearers of the main ideas of both of the organisations. In order to identify the synergy effect of human and social capital and to gain inspiration for education in the rural areas of the Czech Republic, a comparative analysis of the functioning of "Schools for Rural Renewal" and "Regional Educational Cooperatives" is also used. The research was carried out during the years 2010 and 2011 and is focused on whole period of existence of "Schools for Rural Renewal" and "Regional Educational Cooperatives" (using the mixture of analysis of existing documents and semi-standardised interviews).

4. Empirical knowledge

Schools for rural renewal

Schools for Rural Renewal (SfRR) are specialised organisations dealing with the problems of education in rural areas. Some other organisations exist which deal with knowledge dynamics, knowledge creation and the encouragement of human capital in the rural areas of the Czech Republic (e.g. The Ministry for Regional Development, The Ministry of Education, Youth and Sports at the central level, and educational institutions, research institutions, regions and municipalities at the local and regional levels), but SfRR are specialised in rural human capital creation.

38 Schools for Rural Renewal (SfRR) exist in the Czech Republic, covering all Regions at the NUTS 3 level, including the predominantly urban region (Prague) according OECD methodology. The formation of SfRR in the Czech Republic is closely linked to the Rural Renewal Programme and mainly its sixth subsidy, which was focused specifically on education for rural areas and its organisational framework. From this fact, it is also possible to determine the time of the formation of SfRR. The first SfRR were established in 1997 and the most recent SfRR were established in 2007. These ten years can be labelled as the "golden age" of SfRR, due to funding by national sources through the Rural Renewal Programme.

This is the first problem of the existence of the present-day SfRR. Resulting from our research, it is found that it is difficult for SfRR to ensure adequate financial resources for educational projects, because of the termination of funding by national sources. The unstable and unsystematic support of education for rural areas and of SfRR is the main problem of human capital creation in rural areas. Despite this fact, SfRR are trying to play an active role in education in rural areas and to create a broad spectrum of projects and activities promoting human capital.

It is possible to depict the main topics of the activities of SfRR in general. Among the main activities of SfRR are rural development and rural renewal in general, rural renaissance, community coexistence, cognition of new possibilities, mutual communication, education, knowledge dynamics and knowledge creation, motivation, public discussion, information and

advisory services, excursions to successful rural municipalities and also the exchange of experiences, intercommunication and networking (see below).

However, not all SfRR play an active role in education in rural areas. Considering the evaluation of activity and inactivity of SfRR, 26 of these could be classified as active, and 12 could be classified as inactive. Thus, one third of SfRR are inactive and two thirds of SfRR are active in the field of educational activities for rural areas, regardless of the types of activity (the evaluation is based on the presentation of specific SfRR on web pages and semi-standardised interviews with their representatives – generally on information openness as a main prerequisite for their efficiency).

In addition, coverage of the Czech Republic by SfRR differs among the NUTS 3 regions. The highest coverage exists within the Středočeský Region (5 SfRR) and also within the Jihomoravský and Královéhradecký Regions (4 SfRR within each Region). On the contrary, the least coverage exists within the Karlovarský and Olomoucký Regions (1 SfRR within each Region). Also only 2 SfRR exist in the Vysočina Region, as the only Predominantly Rural Region in the Czech Republic, according to OECD methodology.

The number of inactive SfRR is also related to the increasing role of Local Action Groups in education in the rural areas. The problem is that Local Action Groups prepare educational projects, but they also have many different objectives, with education for rural areas being only one of these and often not the centre of their attention. The decreasing role of SfRR results mainly from ill-conceived support by the central authorities, which shift away support from SfRR (which were supported mainly between the years 1997 – 2007) to Local Action Groups (see above). But the question is whether this is the last change in supporting rules, and how Local Action Groups will be supported after 2013. This ill-conceived approach leads to uncertainty for all rural educational actors.

Considering the particular implemented projects, they are focused primarily on technical or procedural education and codified knowledge creation, with less attention devoted to local knowledge, strengthening of local identity of the rural population and creation and support of tacit knowledge (both embodied and embedded). This fact could be seen as the second problem of the practical functioning of SfRR and rural human capital creation. In this context, the activities of SfRR are not consistent with the assumptions of the concepts of localised learning, learning regions or the learning economy (as presented by, for example, Lam, Lundvall, Maskell, Malmberg or Nielsen – see above), which emphasise the role of tacit and local knowledge in rural development and rural renewal.

Despite the fact that the main mission of SfRR is the creation and support of human capital in rural areas, they also try to use their potential in networking and interregional cooperation. Networking and cooperation between SfRR is represented mainly by the Annual Meeting of Schools for Rural Renewal. This Meeting is not only for SfRR, but also for other institutions dealing with the problems of rural development and rural renewal. The problem is that only a minority of SfRR take an active part in this Annual Meeting (e.g. 2 SfRR in 2010 and 4 in 2011). At the same time, networking is a prerequisite of innovative educational activities in rural areas. The lack of cooperation between SfRR leads to a fragmentation of education for rural areas, which could be considered as the third problem of SfRR. On the one hand, they try to promote human capital and knowledge dynamics but, on the other hand, they neglect social capital and networking as other sources of endogenous rural development.

Regional Educational Cooperatives

Regional Educational Cooperatives (REC) are specialised organisations focused on the coordination of education for rural areas, encouraging social capital, intraregional and interregional cooperation between educational actors and development of local responsibility for educational processes. REC is a relatively new phenomenon – the first was established in 2008 in Germany within the NUTS 3 Region Lippe (and others also exist in Germany – e.g. BIGS in South Saxony). However, the idea of a regional organisation specialised in education, coordination of education and networking arose in 2007. These are the main facts that do not

allow to describe the number and spatial differentiation as have been done within the SfRR analysis – REC do not have so great coverage in Germany as SfRR in the Czech Republic.

The main reason for establishing REC was an awareness that education is the essential factor for the social, economic and cultural development of rural municipalities and regions, participation of local inhabitants in political process and the encouragement of local identity. This is one of the main differences between REC and SfRR and their projects – REC try to support local and regional identity, not only to provide technical and administrative education. The framework for REC is also formed by the increasing importance of lifelong learning, the increasing demand for a qualified labour force, the necessity to improve cooperation and coordination between educational actors within regions, and the increasing importance of social capital to promote endogenous rural development.

Among the main aims of REC are the establishment of regional educational organisations, networking among educational experts, coordination of educational activities and promotion of educational projects. An emphasis on networking is another difference between SfRR and REC and, from this point of view, REC could be an example of the synergy of human and social capital in rural development. This is because not only qualifications, education and knowledge are prerequisites of the successful development of rural areas, but also cooperation, knowledge dynamics and transfer of experiences are important. REC, due to their structure and character, are able to offer both education and qualifications as sources of human capital and cooperation, and networking as a source of social capital.

The structure of participants (members) also corresponds to the main mission of REC (see above). Participants are mainly from the NUTS 3 Region, local entrepreneurs, local NGOs, regional universities, professional associations, employment agencies and other regional educational institutions. The structure of a Cooperative's supreme authorities is formed by a General Meeting, Supervisory Board and Executive Board, consisting of representatives of all the participants. The Cooperative was founded by the organisers as an ideal organisational form, mainly due to its flexibility, better possibility of networking and the equality of all participants.

Considering the particular implemented projects, these are focused mainly on the coordination of educational activities, promotion of regional education, lifelong learning, cooperation of local inhabitants with universities and the linking of all levels of education (from primary and secondary schools to universities). The projects are usually financed from regional and supranational sources, using local foundations and also the European Social Fund.

The target groups of the projects also differ from SfRR – the projects are aimed mainly at regional or local inhabitants, students and their parents (especially active cooperation and participation of parents) and representatives of regional educational actors. Generally, the main idea of REC could be expressed as: "Not to think and not to act in the spirit of jurisdiction and individual power, but in the spirit of common responsibility". Primarily, common responsibility for education could be the inspiration for education in the rural areas of the Czech Republic.

Close collaboration with experts from different regions and different disciplines, as well as a clear organisational structure are the main missing prerequisites of the successful existence of SfRR in the Czech Republic. On the other hand, the regional level of REC seems to be fairly distant from local municipalities and local rural inhabitants. The regional level makes cooperation and networking easier, but the local level of SfRR allows a more flexible adaptation to the demands of local inhabitants.

Comparative Analysis

The comparative analysis compares the two different approaches to education, knowledge dynamics and human and social capital creation – generally to rural endogenous development. Many similar characteristics exist between SfRR and REC, but also many differences. A schematic expression of the similarities and dissimilarities between SfRR and REC is contained in Table 2. The comparison of SfRR and REC is focused on eight specific features of both of the organisations (see Table 2). The features were chosen at the basis of semi-

standardised interviews with the main representatives of SfRR and REC, who mentioned these features as crucial factors which influence the educational activities and their results in the field of rural development.

Among the similarities, in particular is a bottom-up approach to rural development which is fully consistent with the endogenous model of development. Realised projects are prepared at the local or regional levels, but financing is rather from national or supranational sources (except of some projects financed by regional sources within REC). The second similar feature is the focus on knowledge dynamics and human capital creation and functioning as specialised educational organisations.

However, many dissimilarities also exist, which lead to the different results of SfRR and REC activities. It is possible to divide the dissimilarities into three main groups. The first is the spatial level of SfRR and REC activities. SfRR operates mainly at a local level – particularly within districts (LAU 1) or municipalities (LAU 2). The local level leads to a closeness to local and municipal problems, with projects being able to respond more flexibly to the demands of the local inhabitants. On the other hand, networking, regional and interregional cooperation are quite difficult. The regional level of REC makes networking and regional and interregional cooperation are the demands of the local inhabitants.

These facts are also evaluated by the advantages and disadvantages of SfRR and REC. The second group is formed by the type of prevailing projects and prevailing target groups of the proposed projects. Considering the target groups of the projects prepared by SfRR, mayors of rural municipalities and members of municipal councils prevail. Rural local people are less represented in relation to the main orientation of the implemented projects. This could be seen as the main problem of the functioning of SfRR. Education is focused mainly on technical and procedural aspects (e.g. "how to prepare development projects", "how to obtain money from the Structural Funds" or "how to manage a rural municipality") and less on the strengthening of local or regional identity.

In this context, the activities of SfRR are not consistent with the assumptions of the concept of endogenous rural development. Projects of REC are focused mainly on the coordination of education within the region, practical regional education, lifelong learning and some projects also have a procedural nature (see above). Practical regional education, in particular, could strengthen local or regional identity. This is also connected with the prevailing target groups which are usually regional or local inhabitants, students and their parents and also representatives of regional educational actors.

The third group of dissimilarities is formed by the participants and members of SfRR and REC and the type of promoted capital which is closely connected to the participants. Participants of SfRR are usually rural municipalities or local NGOs, but only one of these (two basic types of SfRR exist – the first is linked to NGOs with their own legal personality and the second is linked to rural municipalities without their own legal personality). This organisational structure could effectively promote human capital, but networking and social capital creation is quite difficult. Participants of REC are from the NUTS 3 Region, local or regional entrepreneurs, local NGOs, regional universities, professional associations, employment agencies and other regional educational institutions. Usually all the above- mentioned actors are participants (members) of REC. This fact could effectively promote not only human capital but also social capital, including networking, regional and interregional cooperation and the ability of collective action to encourage regional development. From this perspective, REC could be seen as an important example of the synergy of human and social capital in rural development and also an inspiration to rural areas in the Czech Republic.

	SfRR	REC
level	local	regional
type of capital	human	social + human
prevailing projects	technical, procedural	coordination, regional education, procedural, lifelong learning
prevailing target groups	mayors, members of municipal councils	regional (local) inhabitants, students and their parents, representatives of regional educational actors
participants	municipalities, local NGOs	NUTS 3 Region, entrepreneurs, local NGOs, regional universities, professional associations, employment agencies, other regional educational institutions
financing	national (mainly) + supranational	supranational + regional
advantages	local level	networking, conceptual approach
disadvantages	ill-conceived approach, lacking interregional (regional) cooperation	regional level (far away from particular municipalities)

Tab 2. Comparative analysis of Schools for Rural Renewal and Regional Educational Cooperatives.

5. Conclusion and discussion

On the basis of the results presented above, it is possible to formulate some main conclusions regarding the research presented within this paper. SfRR (as the only specialised organisation considering education for rural areas) play an indispensable role in knowledge dynamics and human capital creation within the rural areas of the Czech Republic, despite the fact that nowadays their role is often substituted by Local Action Groups. SfRR provide various types of education. A bottom-up approach is usually implemented, as is consistent with the endogenous model of rural development. The main problem of their functioning is a focus especially on technical and procedural education and codified knowledge creation. Less attention is devoted to local knowledge, strengthening of local identity of the rural population and creation and support of tacit knowledge. An ill-conceived approach could also be classified as a disadvantage of SfRR.

These problems are partly eliminated within REC. REC are organisations at regional level which focus not only on education itself, but also on coordination, networking, cooperation of local and regional educational actors and social and human capital creation in general. From this perspective, REC (which exists as quite a new phenomenon in Germany) could be seen as an important example of the synergy of human and social capital in rural development.

A lack of synergy of human and social capital in the Czech Republic leads to spatial constraints of realised projects and the functioning of SfRR without the use of interregional cooperation and knowledge diffusion. Learning by experience is one of the important means of education and knowledge creation.

Thus, considering the main question raised in this paper: How are the theoretical concepts of human capital, social capital and endogenous development reflected in praxis of rural development in the Czech Republic? – at the empirical basis it is possible to state that praxis of rural development rather reflects human capital and knowledge creation than networking and social capital. This fact is consistent with the differences between the amount of social capital within the regions and localities in the Czech Republic and Germany as is stated above in theoretical background. In consideration of the research presented above, it is not only human

capital but also networking, collective learning, cooperation and social capital and especially the synergy of human and social capital which are important for development of rural areas. The research presented above empirically acknowledges these theoretically underpinned facts and also identifies deficiencies of networking and social capital creation within the presented cases in the Czech Republic in comparison to German cases. The issues of networking, interregional cooperation and also cross-border cooperation, including cross-border knowledge diffusion, are significant for development of rural areas and could be a possible topic for ensuing research in the field of rural development.

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References

- [1] Atterton, J. (2007). The 'Strength of Weak Ties: Social Networking by Business Owners in the Highlands and Islands of Scotland, *Sociologia Ruralis* 47(3), 228-245. Doi: 10.1111/j.1467-9523.2007.00435.x.
- [2] Bourdieu, P. (1991). Language and Symbolic Power. Oxford: Oxford Polity Press.
- [3] Evans, M. & Syrett, S. (2007). Generating Social Capital? The Social Economy and Local Economic Development. *European Urban and Regional Studies*, 14(1), 55-74. Doi: 10.1177/0969776407072664.
- [4] Falk, I. & Kilpatrick, S. (2000). What is Social Capital? A Study of Interaction in a Rural Community. *Sociologia Ruralis* 40(1), 87-110. Doi: 10.1111/1467-9523.00133.
- [5] Garofoli, G. (1992). Endogenous Development and Southern Europe In Garofoli, G., ed., *Endogenous Development and Southern Europe*. Hampshire: Avebury.
- [6] Hadjimichalis, C. & Hudson, R. (2007). Rethinking Local and Regional Development Implications for Radical Political Practice in Europe. *European Urban and Regional Studies*, 14(2), 99-113. Doi: 10.1177/0969776407076290.
- [7] Hudson, R. (1999a). The Learning Economy, the Learning Firm and the Learning Region: A Sympathetic Critique of the Limits to Learning., *European Urban and Regional Studies*, 6(1), 59-72. Doi: 10.1177/096977649900600105.
- [8] Hudson, R. (1999b). What makes economically successful regions in Europe successful? Implications for transferring success from west to east. *Economic Geography Research Group Working Paper No. 99/01*. University of Cambridge.
- [9] Husák, J. (2010). Regional Policy of the European Communities and Cross-border Cooperation within the South Bohemia Region. *Agricultural Economics Czech*, 56(6), 292-300.
- [10] Kostelecký, T., Patočková, V. & Vobecká, J. (2010). Kraje v České republice existují souvislosti mezi ekonomickým rozvojem, sociálním kapitálem a výkonem krajských vlád? Sociologický časopis 43(5), 911-943.
- [11] Lam, A. & Lundvall, B. A. (2006). The Learning Organization and National System of Competence Building and Innovation. In Lorenz, E. & Lundvall, B. A., eds., *How Europe's Economies Learn: Coordinating Competing Models* (pp. 109-139). Oxford: Oxford University Press.
- [12] Lee, J., Árnason, A., Nightingale, A. & Shucksmith, M. (2005). Networking: Social Capital and Identities in European Rural Development. *Sociologia Ruralis* 45(4), 269-283. Doi: 10.1111/j.1467-9523.2005.00305.x.

- [13] Lundvall, B. A. (1995). The Learning Economy Challenges to Economic Theory and Policy. BETA Working Papers, No. 95/14 (pp. 1-23). Strasbourg:University Louis Pasteur.
- [14] Maskell, P. & Malmberg, A. (1999). The competitiveness of firms and regions: ubiquitification and the importance of localized learning. *European Urban and Regional Studies*, 6(1), 9-25. Doi: 10.1177/096977649900600102.
- [15] Murdoch, J. (1995). Actor-networks and the evolution of economic forms: combining description and explanation in theories of regulation, flexible specialization and networks. *Environment and Planning A*, 27, 731-757. Doi: 10.1068/a270731.
- [16] Nielsen, P. & Lundvall, B. A. (2006). Learning Organizations and Industrial Relations: How the Danish Economy Learns. In Lorenz, E. & Lundvall, B. A., eds., *How Europe's Economies Learn: Coordinating Competing Models* (pp. 161-177). Oxford: Oxford University Press.
- [17] Pileček, J. (2010). Koncept sociálního kapitálu: pokus o přehled teoretických a metodických východisek a aplikačních přístupů jeho studia. *Geografie* 115(1), 64-77.
- [18] Ploeg, J. D. van der & Saccomandi, V. (1995). On the Impact of Endogenous Development in Agriculture. In Ploeg, J. D. van der & Dijk, G. van, eds., *Beyond Modernization: The Impact of Endogenous Rural Development* (pp. 10-27). Assen: Van Gorcum.
- [19] Putnam, R. (1993). *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton: Princeton University Press.
- [20] Shucksmith, M. (2000). Endogenous Development, Social Capital and Social Inclusion: Perspectives from LEADER in the UK., *Sociologia Ruralis* 40(2), 208-218. Doi: 10.1111/1467-9523.00143.
- [21] Stachová, J., Bernard, J. & Čermák, D. (2009). Sociální kapitál v České republice v mezinárodním srovnání. *Sociologické studie 09:5*, Praha: Sociologický ústav AV ČR.
- [22] Tichá, I. (2005). Intelektuální kapitál: mikroekonomická past a jak z ní ven" In *Sborník prací z mezinárodní vědecké konference Agrární perspektivy XIV* (pp. 1125-1128). Praha, Czech Univerzity of Life Sciences.