



Katalin Lipták, 2019

Volume 5 Issue 3, pp. 80-98

Date of Publication: 21st November 2019

DOI- <https://dx.doi.org/10.20319/pijss.2019.53.8098>

This paper can be cited as: Lipták, K. (2019). *Analysis of the Factors of Social Innovation and Competitiveness in Hungary*. PEOPLE: International Journal of Social Sciences, 5(3), 80-98.

This work is licensed under the Creative Commons Attribution-Non Commercial 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc/4.0/> or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

ANALYSIS OF THE FACTORS OF SOCIAL INNOVATION AND COMPETITIVENESS IN HUNGARY

Katalin Lipták

Ph.D., Associate Professor, Head of Department, University of Miskolc, Miskolc, Hungary
liptak.katalin@uni-miskolc.hu

Abstract

To interpret social innovation, it is possible to attribute the specialty of employment to the peripheral regions. Yet, the latest development of new products, services and new methodologies, driven by social values, initiated and implemented by social players, which interprets new social interactions as a backward process of social development, places social innovation as the main point of employment. Competitiveness is a particular importance not only in terms of world economic but also regional economic and local economic development. In this paper, it was examined the values of the Regional Competitiveness Index (RCI) in Hungary and the best-known social innovations in these regions. The second aim of the research is to explore and compare the relationship between competitiveness and social innovations at regional level in Hungary. As a result of this research it can be stated that the social innovations presented will contribute to improving the quality of life of people living in rural areas and people with disabilities in urban areas through employment.

Keywords

Social Innovation, Competitiveness, Employment, Regions, Hungary

1. Introduction

The regional competitiveness is very important in the literature, more and more paper deals with this topic in different focus. In the paper I compare the definitions of competitiveness and regional competitiveness. I summarized the factors of the competitiveness rankings. I examine the Regional Competitiveness Index and the social innovation potential by the Hungarian regions.

2. Methodology

In this paper I examined the Regional Competitiveness Index (RCI) on NUTS 2 regional level in Hungary. RCI has been measured at regional level in the European Union for years. The specific value is defined along the 11 topics of 3 sub-indexes. The basic dimension includes institutional environment, macroeconomic efficiency, infrastructure, health and public education. The dimension of efficiency includes the higher education and the lifelong learning, the labour market efficiency and the market size. The technological efficiency, the business structure and the innovation belong to the innovation dimension. Based on the latest data of 2016, there is a multi-centred pattern in which the well performing metropolitan and urban areas are the main drivers of the competitiveness. The spill-over effect from these advanced areas can be observed in large parts of Northwest Europe. In the case of some countries, the metropolitan area's tractive force can be observed, like in Hungary, too. I compared the results of RCI and the values of social innovation. Before the analysis I read the most important literatures of competitiveness and social innovation.

3. Competitiveness Concepts and Factors Affecting Them

In the literature part I will examined the most important theories about the competitiveness and the main factors which influences the position of the regions. Competitiveness is a complex economic concept whose definition has been formulated over the years (Lengyel, 2000). The competitiveness of individual countries or regions does not explain exactly with the theory of the comparative advantages of the classical economics (EU, 1999). The comparative competitive advantage applies to a particular segment, sector, and we must realize that there is no country or region that is competitive in all sectors. Comparative Advantage Theory cannot explain the international division of labour that derives from that the resources flow from the less productive sectors to the most competitive areas. Partly because this theory does not take into account the innovation and the development of company networks. Porter (1990) used competitive advantages

instead of comparative advantages, in which he saw the competitiveness of a region, a smaller region or companies. According to recent research, among the factors of corporate competitiveness, the existence of decision-making methods is also important for managers (Molnár - Horváth, 2017).

According to Krugman, competitiveness is not a macroeconomic category; he thinks that the misunderstanding at microeconomic level derives from that most economists incorrectly calls the only one factor of competitiveness, the productivity at national economy level as competitiveness (Lengyel, 2000). According to the other notion the international competitiveness of the macro economy can be interpreted, but its analysis happens some other way than at the microeconomic level, as the national economies do not compete with each other in the same way as undertakings. According to Török (2003), competitiveness can be interpreted at micro- and macroeconomic level. On the micro level it appears as an indicator of the market performance of companies, and at the macro level it serves to characterize the general state of national economies. Its complexity is further enhanced by the transformation of international competition, the intensification of globalization and the steady increase in openness of national economies (Lengyel, 2000).

If we accept the statement that there is competitiveness at national level, we can measure it from an ex post and ex ante approach. The business environment analyses the prerequisite for successful enforce of the ex-ante in the global competition and what the consequences of it has to the future competitiveness of the given national economy. The ex post approach focuses on the past economic performance and its impact on competitiveness. The most important measure of ex-post competitiveness is GDP (income) and its growth rate, as well as per capita GDP (specific income), is determined by labour productivity and employment rate. However, GDP and GDP per capita is also an indicator of economic development, so in the case of countries, competitiveness is a kind of redefinition of economic growth (Lengyel, 2000). In the sense of this that country can be considered as a competitive one, which makes a high and growing standard of living for its citizens, so it has a high and increasing GDP; it has two main factors: high employment and productivity. Therefore the competitiveness is the prerequisite of the economic growth.

The international analysis of the competitiveness regarding the number of the countries involved in the examination we distinguish target countries and non-target countries comparisons. The former measures the competitiveness of the country was taken as a basis of the comparison

with the other countries' competitiveness. The latter does not select the target country, but compares the competitiveness of several countries (Szilágyi, 2008).

The Centre for Economic Research makes target-centred comparison which compares the competitiveness of Hungary with the neighbouring countries' competitiveness. Its results have been published in the Competitiveness Yearbook since 2006. According to these yearbooks, the main factors influencing the competitiveness are:

- foreign direct investment,
- infrastructure,
- research and development and innovation,
- the business environment (labour market regulation),
- human resources (labour market, demography),
- cost factors (wages, exchange rates),
- and the productivity (labour productivity).

Comparisons without a target country are within the scope of international organizations, namely falls within the scope of WEF and IMD. Every year, the World Economic Forum (WEF) publishes the Global Competitiveness Index, the GCI (Global Competitiveness Index), which has studied nearly 150 countries. IMD (Institute for Management Development) presents its World Competitiveness Scoreboard in every year, featuring 57 countries (Szilágyi, 2008).

The WEF splits the twelve factors which influence the competitiveness into three pillars:
Pillar 1 - Basic Requirements Sub-index: Institutions, Infrastructure, Health, Macroeconomics, Primary Education
Pillar 2 - sub-index of efficiency enhancers: higher education, product market, labour market, money market, technology, market size
Pillar 3 - innovation and sophistication sub-index: business sophistication, innovation (Lukovics, 2008).

IMD divides the factors into four groups:

1. Economic performance: domestic economy, international trade, foreign investment, employment, prices
2. Government efficiency: public finances, tax policy, institutional frameworks, laws, social frameworks

3. Business Sector Effectiveness: Productivity, Labour Market, Finance, Management Policy, Business Conduct
4. Infrastructure: general, technology, science, health, education.

4. Regional Competitiveness

According to the neoclassical theory of regional competitiveness, that region is competitive where the per capita GDP is high and employment is also high at the same time. According to new growth theories, competition based on cost advantage is also one of the approaches that measures regional competitiveness in terms of trade and labour costs. There is also an economic geographic approach of the regional competitiveness which focuses on the urbanization situation, agglomeration effects, and economies of scale and transport costs.

The EU's sixth regional report (1999) contained a common concept of competitiveness: the ability of companies, industries, regions, nations and transnational regions to create a relatively high income and a relatively high level of employment, while being exposed to international (global) competition. According to the definition of Imre Lengyel (2000), regional competitiveness is the ability of regions to establish a relatively high income and a relatively high level of employment while being exposed to international competition. Competitiveness has several components, such as political, economic, social, environmental and infrastructural factors. According to Ádám Török (1999), the concept of competitiveness at micro level refers to the ability to gain market position or to stand in the position of competition between individual companies, each other's competitors, and among the national economies from a macroeconomic point of view.

A region can be considered competitive if it has an open economy, high and rising per capita income, a high level rate of employment, or at least not decrease, and it has high regional productivity and GDP. In addition to these factors, many other factors can be involved in the study, in my view; inter alia the development of human resources, the infrastructure elements, the number of companies operating in the region and the number and composition of the population have significance in the definition of the regional competitiveness. Regional competitiveness can also be measured by GDP per capita, which is based on several factors, according to Imre Lengyel:

$$\frac{GDP}{residential} = \frac{GDP}{employed} \times \frac{employed}{workingage} \times \frac{workingage}{residential} \quad (1)$$

The components of equality are:



- GDP per employee means labour productivity,
- the employment rate can be regarded as the complementary of the unemployment,
- the proportion of people of working age within the population can be considered almost constant in time.

Based on this measurement method, regional competitiveness is the sum of labour productivity per capita, the employment rate of the region, and the impact of the working age population. Regional competitiveness means such a sustainable competitiveness which derives from high employment rate and high productivity. Competitiveness can be led back to three categories; these can also be measured well in the case of the regions, the level of employment and the labour productivity. All the characteristics on three levels forms the competitiveness, these are the basic categories (income, labour productivity, employment), the basic factors (attributes directly determining the formers), and the success factors (indirectly influencing the formers). Thus, Lengyel created his well-known pyramid model, in which he placed these factors in a pyramid structure. The ultimate goal is to raise the standard of living of the people living in the region (Lengyel, 2000).

A further step in measuring regional competitiveness is that competitiveness concepts and economic theories that explain it differ in different types of regions (Figure 1). In the case of the production sector region, the average income level is typical, and their competitiveness is based on cheap labour force and cheap sites. In regions with growing economies of scale, the economic growth is high, the population density is moderate and competitiveness is based on the skilled labour force. The knowledge centre regions have the highest innovation milieu, the GDP and the population density are also high, and here appears the Schumpeter-approach based on innovation.

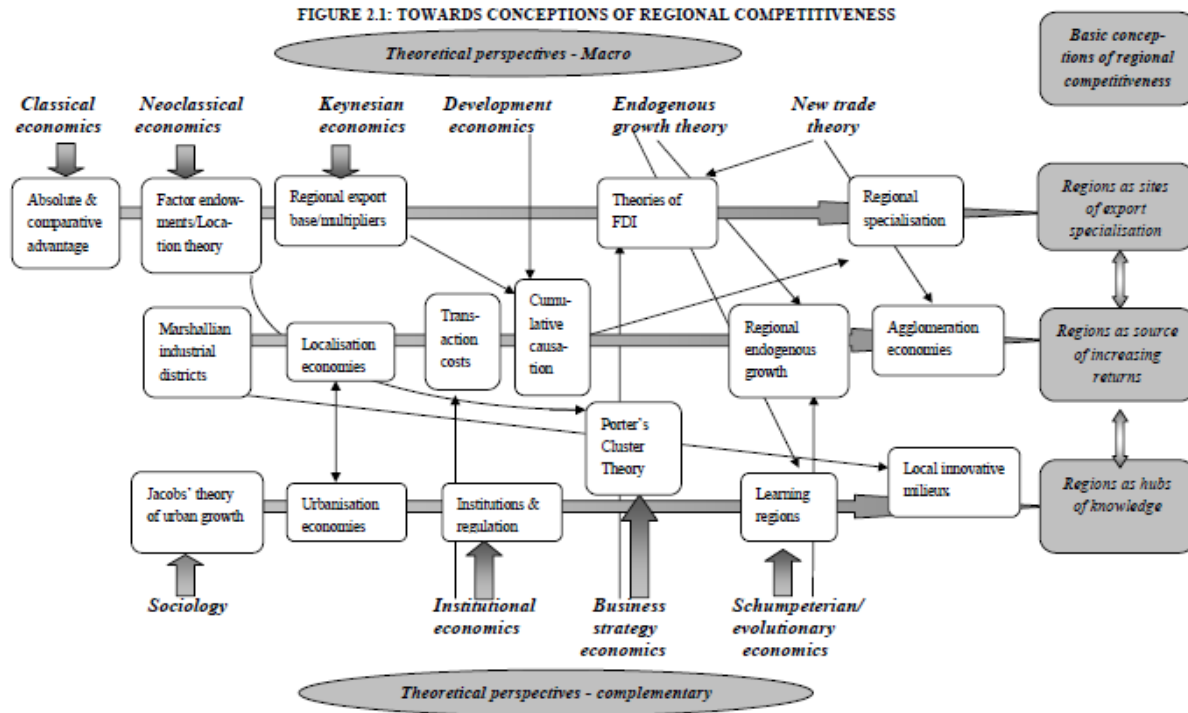


Figure 1: Economic Trends Explaining the Competitiveness of Different Types of Regions
Source: Martin et al. (2005)

4.1 Analysis of the European Regional Competitiveness Index (RCI)

The regional competitiveness index is from the 263 NUTS 2 level regions in 2016 Central Hungary was the 152nd; Central Transdanubia was the 205th; West Transdanubia was the 207th; Southern Great Plain was the 224th; Southern Transdanubia was the 227th; Northern Hungary was 231st; and Northern Great Plain was the 232nd. The values of the sub-indexes and index rankings are shown in the table below (Table 1).

Table 1: RCI Index and RCI Index Rankings (2016)

Region	Basic sub-index	Efficiency sub-index	Innovation sub-index	RCI
Central Hungary	223	145	110	152
Central Transdanubia	226	184	207	205
Western Transdanubia	224	190	206	207
Southern Transdanubia	234	215	218	227
Northern Hungary	236	223	225	231
Northern Great Plain	233	224	237	232
Southern Great Plain	235	202	223	224

Source: European Commission RCI values

5. The Concept and Characteristics of Social Innovation

The definition of social innovation in the literature is not yet uniform (Benedek et al., 2016; G.Fekete, 2015b; Katonáné et al., 2017; Kocziszky et al., 2017; Varga, 2017; Dániel et al., 2018) at the same time all, novel and innovative idea to overcome existing social problems can be considered as social innovation. The first literature appearance of the concept is related to the name of Drucker (1985), who emphasized the importance of social innovations in the 1980s.

G.Fekete (2015a) believes that the social innovation may mean simultaneously the involvement of social resources into the function of the economy (which is a new thing compared to the previous ones) and the new innovative solutions which aim is the satisfaction of the social claims; and developed and disseminated by organizations with primarily social goals. The latter practically includes the former one. According to our today's interpretation, the innovation is social from that: it is guided by social value; the idea comes at least from the civil society, social movements; new social cooperation or new forms are used in their development and implementation; impact on society.

The social innovation sets in a positive process that leads to an improving quality of life and a more favourable economic and social situation for both the centre and periphery.

Kocziszky et al., (2017:16) social innovation provides new or novel answers to a community's problem with the aim of increasing the community's well-being. Varga (2017:614) believes that the social innovation brings new answers to the everyday problems of the given community in order to improve the community's well-being, and as a responsive tool to the challenges; it also leads to novel approach in the treatment of the regional disproportions. In the core areas, the technical innovations provide a solution in the development questions of the quality of life, but on the peripheral areas lagging behind it is necessary to take into account such new innovations, as social innovations. At the same time I do not agree with Varga's statements because the social innovations play a considerable role in the development of quality of life not only in the peripheral areas, but in the core areas, as well. A good example of this will be the scope of activities and the social aim of the foundations of Miskolc which will be presented in the later chapters of this study.

5.1 Social Innovation Potential in the Hungarian Regions

There is no uniform methodology in the literature for the measuring of the social potential innovation. One of the most complex methodologies for measuring social innovation potential was developed by the Economist Intelligence Unit in 2016 at national level.

Table 2: Indicators used by the Economist Intelligence Unit to Measure Social Innovation Potential

Political and Institutional Frameworks	Financing
<ul style="list-style-type: none"> - the existence of national politics is connected to the social innovation - researches dealing with social innovation - the legal frameworks of social undertakings - successful politics realisation - legislation 	<ul style="list-style-type: none"> - the availability of governmental financial sources to the support of the social innovation - simplicity of loan application - total central social expenditure
Undertakings	Society
<ul style="list-style-type: none"> - inclination of taking risks - the entrepreneurial attitude of the population - the easiness and simplicity of starting a business - cluster development 	<ul style="list-style-type: none"> - the culture of volunteering - political participation - civil social activity - confidence in the society - freedom of the press

Source: Szendi (2018)

Based on this, Szendi (2018) elaborated the methodology of the calculation of the innovation potential at settlement level, which can be divided into three pillars and components: economic, social, culture and attitude (Table 2). 14 indicators were used to create the methodology. The actual social innovation potential index can be calculated as the geometric mean of the values of the individual components (where he also applied geometric average for calculating the components). The methodology can also be applied at regional level.

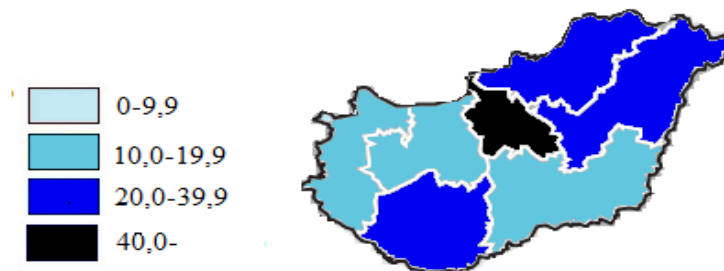


Figure 2: Social Innovation Potential in the Hungarian Regions in 2016
Source: Kocziszky - Szendi (2018), 40p

Looking at the 2016 data, we can see (Figure 2) that the Central Hungarian region has the strongest social innovation potential, which is not surprising, as it is also in harmony with RCI's competitive position (RCI 152). A high GDP rate, a stable economy and a creative community characterize the region, which are the hotbeds of the innovative ideas. The regions of South Transdanubia (RCI 227. place), Northern Hungary (RCI 231.place) and North Great Plain (RCI 232.place) have a medium innovation potential, which proves that the existence of the social innovations is stronger on the more harmful economic and social deprived areas, as the application of them is strongly justified. In regions with weak societal innovation potential, such as the Central Transdanubian, Western Transdanubian and South Great Plain regions, the economic background can be considered to be of medium strength, and their competitiveness is moderate (RCI values are ranked 205th, 207th place, 224th place.), social innovations and ideas are less present here.

It can be stated that the he social innovation potential and competitiveness are in a strong connection with each other. The innovation potential is strong in the mostly and the least competitive regions, the most justified one is the application of the innovations though in the other one since the creative community is given from the beginning. For this reason, I examined regions with low competitiveness and searched for social innovations that can be considered successful, so I had a choice in the North-Hungarian region for a foundation for people with disabilities and settlement manufacturing pumpkin seed oil, furthermore in the South-Transdanubian region onto an agricultural program.

6. Social Innovations in North Hungary

I present the work of the Independent Other Quality of Life Development Foundation (hereinafter referred to as ÖMÉFA), which employs disabled people in one of the county seats of the region. Their aim is to operate a social day-care institution on the one hand and to provide development services for disabled people in order to be able to work in the open labour market. Workshops were run by social institution employment from 2009 until 31 March 2017, and now, due to the change in legislation, it sounds right that they provide a developer employment service. 12 people work in the daytime institution, an institution leader, three therapeutic colleagues, from this one is the professional leader and the others are social nurses and caretaker. The organization also plays a labour mediator role; they have been performing this task with the cooperation of around 600 companies in the whole area of Borsod-Abaúj-Zemplén County for 10 years now.



Within the framework of the service, they operate intermediary offices in Kazincbarcika, Szerencs, Miskolc. It helps greatly to encourage companies to employ people with disabilities, as defined by the statutory rehabilitation contribution paid by employers when the number of employees is above 25 and the proportion of people with disabilities employed is less than 5%. Typical that larger companies visit them. Unfortunately, the lack of the human resources and the head of the institution – that has been utilized his capacity to the maximum – are the reason why there is no time and energy for the promotion of the organization. You can hear about ÖMÉFA at the Martin János Vocational School at parenting meetings, but most likely the potential employees can get to the organization through recommendations between parents and acquaintances. They have a website but they are not active on the internet. As an additional disadvantage to be mentioned that it would be necessary to broaden the range of professions in which they could employ for example a carpenter, or a dried pasta maker, and so on. The President performs "everything", as he said some parents help; few people are motivated to work in a civil organization. There are two finance colleagues apart from the head of the institution from which one is with labour market qualification, disabled and performs the tasks in 6 hours. An external disadvantage that there is usually a small number of professionals, social professionals and the organization cannot pay a favourable wage for employing social workers (they give a minimum wage). It is a risk factor that the supports of the employment projects are changing annually and the availability of them are unpredictable, and it is necessary to submit a tender in every year. As they fundamentally operate from tender money therefore it causes a flutter in the employment. They perform public task, the state norm is available for them, but it could be used only for the maintenance of the institution. This is constant from 2006, it is defined in a sum as 500 thousand Ft/ person / year for the civil organisations, from this they save up for the employees' wages and the public utility charges. ÖMÉFA operates 5 workshops within the social daytime institution. In the sewing workshop it is made puppets and tablecloths, in the weaving workshop they make textile based objects, in the paper workshop they make pictures frames from paper bow and postcards, in the ceramic workshop is made ornamental pieces and household utensils from ceramics using different techniques. The items made in the workshop are unique products; they are made for sale, displayed at fairs, village days or other similar events. Parents can also buy and work on orders. The incomes are reinvested into the employment, they buy raw materials from it, and additional products are made from it. They have permission for the uptake of 80 people in their daytime institution. Their

employees commute from Borsod-Abaúj-Zemplén County, mainly from the districts of Miskolc, Miskolc, Tiszaújváros, Kazincbarcika and Edelény. The number of the employees is stable for 2 years, it is 70 people.

Within the framework of the developer employment service, 16 disabled young people work in the institution for 4-6 hours. If they are in an employment contract with the employee, they will get wage; if they agreed on development contract they will get hourly wage / wage. The organization is also an accredited institution that enables the employment of people with disabilities to work, 22 of them are present at the organization. Asking the manager about the feedback (effect) on the outcome of their activity, he answered to our question with a question at first: "How can this effect be measured?" In fact, we can measure the long-term employment of such a person. ”

With their workforce mediator service they can place 60-80 people annually. We asked the successfulness of the programs, the possibilities of control and feedback. For example, if someone is placed at a company, they call the employees and inquire about the person. The manager told us based on the feedback that they are satisfied with the employees sent to the companies. Indeed, he emphasized that these people are more loyal, they go less on sick leaves, and fluctuation is less among them opposite the healthy colleagues. Advantage that they collaborate with the HR in order to place the right person for each empty position.

Another example is the example of Boldva, a settlement in Borsod-Abaúj-Zemplén County, where cold-pressed pumpkin seed oil is produced and sold with the involvement of public workers. Nowadays, local products are becoming more and more popular all over the country, as despite of the globalization trend it starts to return that we are trying to buy more consciously, we are looking for products and foodstuffs made in our country or possibly in our region, they originate from there. Buying these products not only reflects the consumer's awareness, but can also lead to the recovery of the domestic economy. If we analyse it even in a narrower cross-section, this is a chance for many micro-regions, settlements to join to the economy with its local products. At the same time, local products also play a role in the development of the area, because in order to produce something, it is necessary to produce the raw material, to prepare the product and sell it, all of it entails employment (Burka – G.Fekete, 2017).

Pumpkin seed oil is the primary product in the Boldva oil plant, which was created to produce it. Public employment is a state-supported employment form; its aim is to increase the

number of employment, with it's the reduction of the unemployment. In the framework of the Start public-work program in Boldva it happens with the cultivation, the growing of herbs, oil pumpkin and other agricultural products. It follows that the firm was developed according to the logic that gives jobs to as many people as possible with the growing, harvesting, squeezing and packaging of oil pumpkin. The oil pumpkin is cultivated on their own territory with half mechanical process, contributes greatly to the small-scale utilization of local resources, and transport costs are also reduced and minimized during 'raw material purchases'. Because of the utilization and sales of the by-products, the waste production is also lower. The operational environment appears; a previously abandoned and unused building was renovated for the firm. The firm run by the Boldva local government emphasized the local entrepreneurs as prospective partners. Pumpkin seed oil has been working for a few years, so it is still in its early stages. As a result, employment appears as a positive economic effect, but due to the small number of employees it is not so significant. Incomes originating from the sales get to the local government which is put the money back to the factory, and self-preservation would be the aim in the long term.

7. Social Innovations in South-Transdanubia

The South Transdanubian region (Baranya, Somogy and Tolna counties) is relatively rich in social innovations. The region's spatial structure is very similar to the region of Northern Hungary, the number of small villages is relatively high, and where there are hardly any job opportunities, high employment, poor social potential, low-skilled human resources and low regional income are characterized by the disadvantaged LHH Tamási district. In the following, I review the best-known local economy and social innovations with the aim of an employment development.

Belecska is a village with 365 inhabitants in the Tamási district in Tolna County. The area of the village is 1479 hectares, from which 57 hectares are inland. 70% of the periphery is covered by forest. The quality of the agricultural land is poor with low gold crown values (12-17AK). Classical agriculture takes place, mainly with the production of corn and cereals. The livestock decreased significantly. The settlement has a high proportion of elderly people, social catering and social home-made caretaker is solved. Kindergarten supply can be found in the settlement but primary school no longer (Petrovicsné, 2006).

After the change of regime, the inhabitants of the settlement became unemployed by the dissolution of the TSZ, and the mayor definitely wanted to make it possible for families with small children to have a job locally, because he was afraid of a mass exodus. The mayor's person is also vital at this social innovation, as he was the mastermind, and he kept the interests of the settlement in mind. For more than fifteen years, there has been a purely public employment program based on vegetable and fruit production. Within the framework of the social land program, vegetable and fruit production has started at the end of the '90s from a tender source; they dealt with strawberry growing initially. The strawberry brought in money well, which made it unambiguous that the Belecska vegetable and fruit-growing may have future. As a result, the program has been continuously expanded, which has continued steadily ever since. Production is currently taking place on 25 hectares: on the one hand, the government's own land is involved and on the other hand long-term rentals are also used. Monoculture cultivation based on only strawberries for a short time was soon expanded, which has led to the introduction of many vegetable, fruit and grape varieties; and growing and cultivating additional plants is included in the plans (Németh, 2011).

The system working in Belecska is called a social land program in the press and in the general terms, in the traditional sense it is not a land-work program. The essence of the classic social land-works programs is that those who do not have the necessary resources for agricultural production, those who cannot operate it efficiently, and those who are socially disadvantaged, have the opportunity to provide small-scale housing and livestock farming with the utilisation of individual and community and local resources (Jász-Sarvák-Szoboszlai, 2003: 139). The Belecska program rests on foundations differing from this ideal type. By placing the production and sales within the framework of a non-profit enterprise, the government has created a unique local employment solution that is inseparable from the land, but not a land-work program. It is more appropriate to call the Belek system as a social employment (social economy, community based economy, village economy) program based on the government's enterprise (Németh, 2011).

For the operation of the program, in 2002, because of the administrative problems and the VAT regulations, the Municipal Public Utility Company of the Government of Belecska, which is a sole proprietor of the government, was established. It was transformed into a non-profit Ltd. on 1 July 2009. The program gives job for the locals nowadays, as well. The program provided part-time occupation for 4 people initially, but in 2010 it provides the living of 23 employees in full time position. Belecska supplies itself from vegetables and fruit, and also produces for the regional

market. As a result of the land-work program, the initial 30% unemployment rate fell to a negligible level. The program has significantly reduced the uncertainty of life, it is a very important indirect result that children are born again in the settlement, population decline has stopped; it is essentially stagnant, and in some years the population is growing slightly. As a result of the program, social assistance ceased to exist, unemployment was virtually eliminated in the village, and all this was achieved through community management.

The Belecska case is instructive because most social innovations are not only successful in themselves, but there are also good examples of its adaptation. For social innovations, the practice of transplanting to other areas would be very important, as it is good practice. We can see that even in the settlements of the Tamási district, in the settlements similar to Belecska, it was not possible to take over this relatively simple social innovation. The spontaneous adaptation of the Belecskai program may be hindered by at least some of the essential elements of the program. However, the Belecskai case is not as clear to the other settlements, although the mayor has already introduced the key elements of community agriculture in several social forums, but the knowledge of it is little. Something else is needed for the adaptation, and this is the ambition for self-preservation, which was successfully implemented in Belecska. The other settlements with similar economic and social conditions in the Tamási district do not have land in the outskirts of the countryside, nor do they have any capital for buying or renting land.

According to Németh (2011), there is no any special feature of Belecska behind the achievements of the rural economy program, that is, there are no local factors or resources that might be difficult or expensive to take over or reproduce to prevent other settlements from trying to solve their employment problems in this way, but there is a uniform residence from the local government to create and undertake a firm. In the light of this, the adaptation can only be successful where the leaders of the settlement are capable of the entrepreneurship. In this way, the Belecska-type program is indisputably person-dependent. An important viewpoint is that the government becomes a local development centre through the intensive tendering and the continuous innovations supplying.

Gyulaj, found in Tolna County, is a settlement in a heavy situation with 980 people where gypsies were settled in the 1960s. The Mayor's ideas were in line with the Fate Conversion Program in 2009. At that time, a Fate-turning fate-forming labour market program was organized by the Labour Centre, which provided training and one year of wage-subsidized jobs for the long-



term unemployed. Part of the program was specifically designed to make the governments start producing on their own land, giving the local inhabitants a job and relieving their kitchen. The program has started since 2010 with 10 people in the first round. From the autumn of 2010 further lands were cultivated. The long-term goal is that the government could provide the kitchen with basic vegetables at 100%. Previously grown vegetables (mainly potatoes) have been cultivated in a much larger area; new plants were also involved: strawberries, lettuce and garlic were also put into the ground.

There was a new opportunity at the end of the first year, the production expanded onto some herbs apart from the vegetable plants. The government was contacted by a herb processing company to contract to the production of marigold, lavender and willow herbs. Already in the first year, the local government earned nearly 40 thousand forints from marigold sales. Plans for herbs are taken by the government so seriously that they have also made drying trays for the processing of later and possibly larger quantities. With this in parallel the herbs sector is also expanded since the local government has more or less guaranteed income from it, which can help the program becoming self-sustaining (Németh, 2011).

Expanding the elementary school profile, in 2011 they started at the 9-10 level the agricultural classes leading to a qualification. Students learn gardening on their common land, as their parents, relatives, and neighbours do a similar job on larger government parcels. Later, the government would like to involve the inhabitants of Gyulaj into the program as fully as possible. On the one hand, if it manages to get sources from the social land program, they would like to provide the quantity of the seed and seedlings free for the local people for gardening to help the self-sufficiency of the households. In addition, if it is possible, they would like to involve as many people as possible into the cultivation of certain herb species. This is the form of public employment where value creation is taking place, as the workers feel the agricultural activity their own.

8. Summary

A prerequisite for the realization of social innovation is that a strong local relationship background and an innovator with direct connections beyond the immediate environment are behind the realization of the ideas. If its adoption takes place relatively soon, the spread of innovation is fast and its impact will be permanent. It is the foundation of a sustainable, good



relationship that the innovator has the necessary innovation skills. This includes re-opening, creativity and initiative. These features are not always associated with a single person, so the innovator can be a group. The above-described and successful social innovations are indeed of a sample value and had a positive impact on the settlements where they were implemented. Innovative solutions to previously existing social problems can be adapted to any other settlement, since in many cases it is necessary to strengthen the capacity of the population and a strong, charismatic "local hero", innovator who is mostly the mayor and the idea and the will. It can be stated that the he social innovation potential and competitiveness are in a strong connection with each other. The innovation potential is strong in the mostly and the least competitive regions, the most justified one is the application of the innovations though in the other one since the creative community is given from the beginning. By creating social innovations, the competitiveness positions of the region can be improved with the formation of the social innovations. Further research topic will be deeply analysis about the generating social innovation in rural areas.

Acknowledgement

The described article was carried out as part of the EFOP-3.6.1-16-2016-00011 “Younger and Renewing University – Innovative Knowledge City – institutional development of the University of Miskolc aiming at intelligent specialisation” project implemented in the framework of the Szechenyi 2020 program. The realization of this project is supported by the European Union, co-financed by the European Social Fund.

References

- Benedek, J., Kocziszky, Gy., Veresné Somosi, M., & Balaton, K. (2016). Generating and Measuring Regional Social Innovation. Theory Methodology Practice: Club of Economics in Miskolc. 12 (special issue), 14-25.
<https://doi.org/10.18096/TMP.2016.02.02>
- Burka, N. & G.Fekete, É (2017). The role of cold pressed pumpkin seed oil as a local product in local development processes. (A hidegen sajtolt tökmagolaj, mint helyi termék szerepe a helyi fejlődési folyamatokban), In: Lipták Katalin (ed.): Társadalmi innováció és felelősségvállalás Észak-Magyarországon, Miskolc, pp. 43-54.
<https://doi.org/10.17836/EC.2017.2.032>



- Dániel, Z. A., Antal, B., Balázs, R., & Németh, I. (2018). The impact of social innovation on the social and economic situation of an area. In: Pop, Gheorghe et al. (eds): 14th Annual International Conference on Economics and Business: Challenges in the Carpathian basin: Innovation and technology in the knowledge based economy, Csíkszereda, Románia: Sapientia Hungarian University of Transylvania, pp. 79-87.
- EU (1999). Sixth Periodic Report on the Social and Economic Situation and Development of Regions in the European Union. European Commission. Luxembourg.
- G. Fekete, É. (2015a). The role of the social innovation in local employment. (Társadalmi innovációk a helyi foglalkoztatásban), In: Veresné Somosi M., Lipták, K. (eds.) „Mérleg és Kihívások” IX. Nemzetközi Tudományos Konferencia, pp.274-287.
- G. Fekete, É. (2015b). Social innovations for catching up: South Cserhát - Opening for the future. (Társadalmi innovációk a felzárkóztatás szolgálatában: Dél-Cserhát - Nyitás a jövőre). Miskolc: Miskolci Egyetem Gazdaságtudományi Kar, 211 p.
- Jász, K., Szarvák, T., & Szoboszlai, Zs. (2003). Social development effects of the social land program. (A szociális földprogram társadalomfejlesztési hatásai). Kállai E. (ed.): A magyarországi cigány népesség helyzete a 21. század elején. Kutatási gyorsjelentések. MTA Etnikai-nemzeti Kisebbségkutató Intézet, Budapest, pp. 139-145.
- Katonáné Kovács, J., Varga, E., & Nemes, G. (2017). Fókuszban a társadalmi innováció folyamata a magyar vidéken. Észak-magyarországi Stratégiai Füzetek 14 (1), 6-19.
- Kocziszky, Gy., & Szendi, D. (2018). Regional Disparities of the Social Innovation Potential in the Visegrad Countries: Causes and Consequences. European Journal of Social Sciences Education and Research, 12 (1), 35-41. <https://doi.org/10.26417/ejser.v12i1.p35-41>
- Kocziszky, Gy., Veresné Somosi, M., & Balaton, K. (2017). Experiences and opportunities for developing social innovation. (A társadalmi innováció vizsgálatának tapasztalatai és fejlesztési lehetősége). Vezetéstudomány, 48 (6-7), 15-19.
<https://doi.org/10.14267/VEZTUD.2017.06.02>
- Lengyel, I. (2000). Regional competitiveness. (A regionális versenyképességről). Közgazdasági Szemle, 50 (12), 962-987.
- Lukovics, M. (2008). Measuring the competitiveness of regions. (Térségek versenyképességének mérése). JATEPress, Szeged

- Martin, R. L. et al. (2005). A Study on the Factors of Regional Competitiveness. A final report for The European Commission DG Regional Policy. University of Cambridge, Cambridge.
- Molnár, V., & Horváth, D. D. (2017). Determination of Coefficients of Multi-Attribute Utility Function with Attribute Breakdown. Proceedings of the 12th International Conference on Strategic Management and its Support by Information Systems. Ostrava, pp. 312-319.
- Németh, N. (2011). Examining locally initiated economic development programs. (Helyi kezdeményezésű gazdaságfejlesztési programok vizsgálata). KTI könyvek 14., Budapest
- Petroviczné Takács, R. (2006). The Belecska model. (A belecskai model). Nagyné Varga I., Landau E. (szerk.): Szociális földprogram modellek. Jász-Nagykun-Szolnok Megye Esély Szociális Közalapítvány Regionális Szellemi Forrásközpont, Szolnok
- Porter, M. E. (1990). The Competitive Advantage of Nations. The Free Press, New York.
<https://doi.org/10.1007/978-1-349-11336-1> <https://doi.org/10.1002/cir.3880010112>
- Szendi, D. (2018). Possibilities for measuring social innovation potential at the local level. (A társadalmi innovációs potenciál mérésének lokális szintű lehetőségei). In: G Fekete, É., Nagy, Z., Lipták, K., & Kiss, J. (eds.): Szociális és szolidáris gazdaság a poszt-szocialista perifériákon. Miskolc: Bíbor Kiadó, pp. 243-254.
- Szilágyi, Gy. (2008). Measuring competitiveness in the light of the methodology of international comparisons. (A versenyképesség mérése a nemzetközi összehasonlítások módszertanának tükrében). Statisztikai Szemle 86 (1), 6-19.
- Török, Á. (1999). Competition for competitiveness. (Verseny a versenyképességért). MeH Integrációs Stratégiai Munkacsoport, Budapest.
- Török, Á. (2003). What do we measure? Understanding competitiveness and measuring problems. (Mit mivel mérünk? A versenyképesség értelmezéséről és mérési problémáiról). In: EU-csatlakozás és versenyképesség. Európai Tükör Műhelytanulmányok. A Miniszterelnöki Hivatal Kormányzati Stratégiai Elemző Központjának 93. kiadványa, Budapest
- Varga, K. (2017). Issues of regional social innovation. (A regionális társadalmi innováció kérdései). International Journal of Engineering and Management Sciences, 2 (4), 602-616.
<https://doi.org/10.21791/IJEMS.2017.4.49>.