

Applied Social Scientific Methods for the Measurement of Local Innovation Potential

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SUMMARY

The study introduces a methodological tool for measuring local social innovation potential and its application in five settlements in the Abaúj region of northeastern Hungary. When working on the local innovation potential (LIP) index we present in this study, we drew upon existing theories and models of social innovation. The complexity of LIP index comes from the fact that it builds upon both qualitative and quantitative data and research methods. Therefore it is simultaneously based on social scientific methods that are traditionally considered “soft” and “hard”. The LIP index is can take into account local specificities and characteristics into account and is thus suitable for presenting a fine-tuned description of the current situation and characteristics of a settlement, together with its future potential and directions for development.

Keywords: social innovation, social innovation potential, spatial segregation, regional development, applied social research

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INTRODUCTION

In the North Hungarian region both social and regional disadvantages are more concentrated than the Hungarian average. These disadvantages and their regional and social inequalities offer a real challenge for the researchers of social sciences. The results of scientific research on regional and social processes show that disadvantages can only be lessened by innovation, especially by encouraging and spreading social innovation. Compared to technological innovations, social innovations concentrate on the rejuvenation of human potential. They are not created in scientific labs but in everyday workshops. Theories are drawn for practical experiences and the emergence of social innovation typically arises out of widespread social consensus. In the 21st century the ever-renewing social sciences, and especially sociology, are facing a challenge: social innovation cannot be developed without them.

The study gives a short summary of the notion of social innovation. It is followed by the introduction of our methodological tool for measuring local social innovation potential and its application in five settlements in the Abaúj region. When working on the local innovation

potential (LIP) index we present in this study, we drew upon existing theories and models of social innovation. The complexity of the LIP index comes from the fact that it builds upon both qualitative and quantitative data and research methods. Therefore it is simultaneously based on social scientific methods that are traditionally considered “soft” and “hard”.

As a starting point we focused on the fact that settlements and communities can be multifaceted, meaning that the LIP index should also be. The LIP index is fitting to take local specificities, local characteristics into account and by doing so it is able to take for presenting a fine-tuned description of the current situation and characteristics of a settlement, together with its future potential and directions in development.

THE SOCIOLOGICAL MODEL OF SOCIAL INNOVATION

In the history of sociology – besides other approaches – the notion of surveying, describing and reforming and influencing social processes has always been present. The founding father of sociology, Auguste Comte, concluded that the duty of social sciences is to provide accurate data,

to facilitate change and to act as a form of mediator between social activism and science (Comte 1979). The evolutionist Herbert Spencer point of view was that sociology can even change evolution (as he described social development in the terms of biological evolution) for the better (Spencer 1898).

The first social scientific descriptions of the notion of innovation come from Emile Durkheim and Max Weber. Durkheim argued that in order to maintain a healthy society, social changes should come slowly. Rapid changes result in anomie. In the 1900s Durkheim focused on theories of innovation, but – as Némedi points out – he failed to give a systematic description of it on the individual and social level (Némedi 2010). Weber worked on the relationship between the rise of capitalism and the Protestant ethic. Therefore, his works can be considered as forerunners of thinking of economic innovations (Weber 1982).

The history of sociology shows that the discipline has always sought to survey, describe and change or influence social processes, or even required its followers to do so. Practical application and applied sociology have always been present. We believe that if sociology wishes to preserve its place and role among the sciences it must work toward constant renewal and innovations. This demand reflects the social-economic challenge of regular innovations. The classic notion of innovation in the field of economics has been identified by Schumpeter (1934). According to his view there are five types of innovation: (1) introduction of a new product or new product quality; (2) introduction of a new method of production; (3) opening up of a new market; (4) conquest of a new source of raw materials or other inputs ; and (5) the creation and application of a new organizational structure in an industrial sector.

Besides economic innovations social innovations have come into focus – especially in the last decade, when balancing regional-social disadvantages became an important social and economic challenge. There are several social scientific definitions of innovation (Szendi 2018). They agree on emphasizing the novelty factor and also on the correlation between innovation, well-being and the quality of life (Howaldt et al. 2014; G. Fekete 2001; Kocziszky & Szendi 2018; Nemes & Varga 2015). The definitions also point out the need for communal solutions,

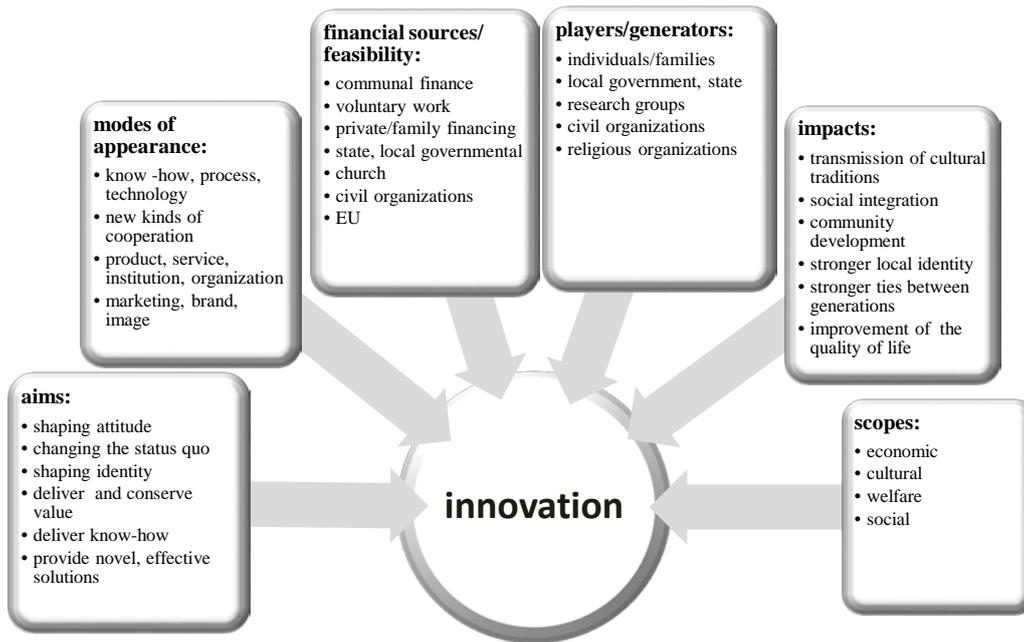
for participation and for the joint effort of different sectors (state, nonprofit and religious) in finding the novelty factor of innovation.

Social innovation tends to work toward changing the status quo. In order to do so an innovative and problem-solving turn of mind is a must. There are different ways and forms for an innovative initiative or product to come to life, but the process cannot skip any of the following steps: mapping problems and their causes, critical examination of already existing solutions and points of view, finding the domain of intervention, initiating innovation and, by the end, evaluation. Social innovation may have many forms: strategies, concepts, ideas, know-how, organizational changes, co-operation or projects.

The model in Figure 1 illustrates the complexity of innovations. In terms of its modes of appearance, innovation can be a new technology, product or service or, in institutional form, a new brand. In terms of financing, innovation can be financed by the community, by volunteer work or by individual and civil sources. It has four scopes and its impacts and aims are complex.

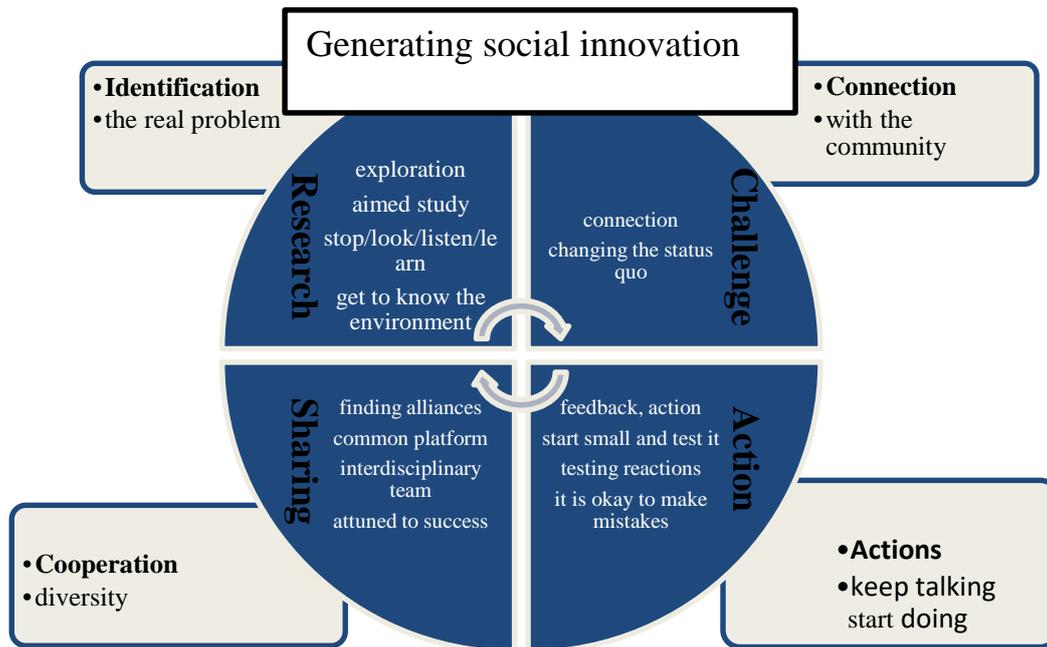
The steps of generating social innovations (figure 2) follow the steps of social science research.

There are several models to measure the innovation potential of settlements. These models regard the essence of innovation in different components (or dimensions) and the applied indicators vary significantly as well. One of the most complex models was developed in 2016 by the Economist Intelligence Unit (2016). They compared different countries based on their innovation capacity. Items used to measure the capacity of innovation included both qualitative and quantitative data on the political and institutional environment, financing, entrepreneurs and society. Castro Spila et al. (2016) suggest measuring social innovation by determining the regional vulnerability rate in social, economic, institutional and environmental terms. This model has not been tested in research yet. Others (i.e. Péntzes 2014; Szendi 2018) use only statistical data available through national surveys to measure social and economic innovations (like number of entrepreneurs/100 persons, net income/person; the rate of the population with higher education degrees, etc.).



Source: The authors

Figure 1. The complex model of innovation



Source: The authors

Figure 2. Steps of generating social innovation

LOCAL INNOVATION POTENTIAL: TERRITORIAL DEVELOPMENT USING SOCIOLOGICAL TOOLS

This part of the article introduces the principles and guidelines along which the LIP model has been developed (in regard to previously existing models). We also examine the applicability of the model for five settlements in the Abaúj area of North Hungary (Büttös, Fáj, Fulókercs, Szemere and Hernádpetri).¹

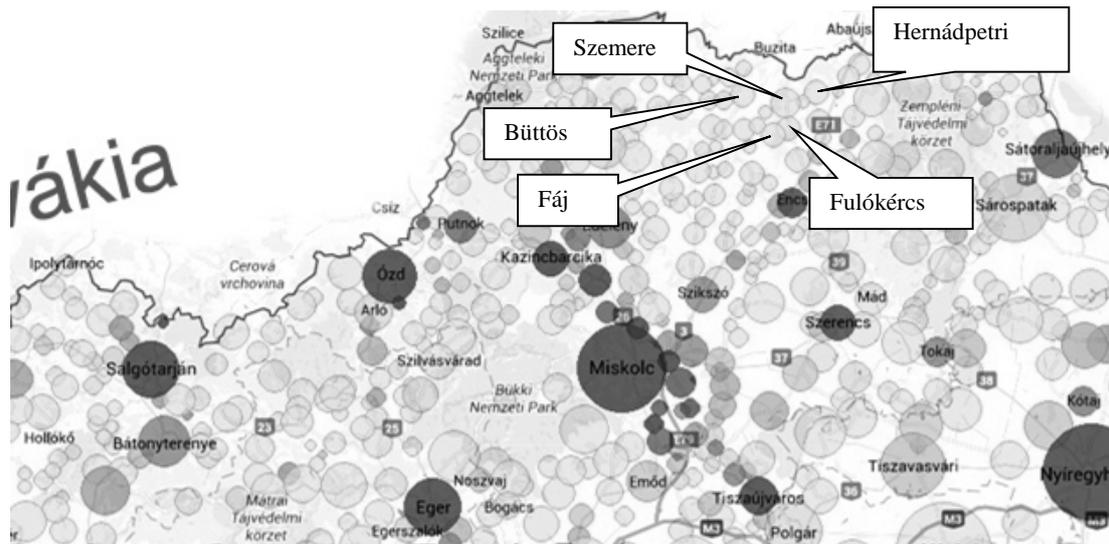
The Settlements

Büttös² is a cul-de-sac village situated in the valley of the Rakaca Stream, in the district of Encs. Its population is 189 (in 2018). The settlement is aging (aging index in 2016: 390.9). It is under the jurisdiction of the regional clerk's office in Krasznokvajda. Medical assistance is offered by the family doctor's office in Krasznokvajda. The settlement does not have a kindergarten or school; Children attend kindergarten and school in Krasznokvajda, taking the bus provided by the village.

The village is surrounded by apple orchards, although the apples cannot be processed in the village; after harvest the fruit travels hundreds of kilometers to be processed. No grocery stores, cafes or bars can be found here. In the last five years 8-10 houses were purchased by Slovak citizens. The settlement does not have a church, only a belltower that is part of the former school building. Currently 32 people work as public workers in Büttös. Farm products produced by in the public work programme are sold in the village, providing some income to the local government.

Fáj is situated in the district of Encs, 50 km from Miskolc. It has all the characteristics that Ladányi & Szelényi (2004) (and others) list as typical of aging, fringe communities with a high proportion of Roma inhabitants, which is also true in regard to another settlement in the study, Hernádpetri. In terms of socio-demographical data Fulókercs is similar as well, but this particular settlement is special in some regards, as we will mention later in the study.

These settlements started to decline in the 1970s. This resulted in an incomplete society without local intellectuals. As a consequence a lonely, declassed local society was formed with depression, hopelessness and no future as its main characteristics.



Source: The authors

Figure 3. The research sites, all in the Abaúj area of Borsod-Abaúj-Zemplén County in northeastern Hungary, near the border with Slovakia

¹ The data was collected in the framework of the Felsőoktatási Kiválósági Pályázat [Quality in Higher Education Grant] by a research group formed at the Faculty of Arts, University of Miskolc, using quantitative and qualitative methods (surveys, statistics, interviews and field notes). The research project is named "Creative Region".

² László Faragó's analysis of Büttös, 2018 (unpublished manuscript)

Fáj has a population of 457 (2018). In the national census of 2011 3% of the inhabitants declared themselves as Roma, although estimations run much higher. In times past, the settlement belonged to the Fáy family. Their memory is gone, only the classical mansion built in 1750 remains. Since the 1990s the building is in trust of The National Trust of Monuments for Hungary. It has a joint local government with Szalaszend. The village has a Roman Catholic church.

Fulókércs³ has a population of 415 (2018). The village is mostly inhabited by Roma. Therefore the process of aging cannot be found here. Out of the 113 households of the village 60% (71 households) have running water, 29 houses are connected to the gas supply system. In the framework of the current housing programme 6 social rental units are being built.

Fulókércs has a kindergarten with 51 children and a primary school up to the fourth grade. From fifth grade children travel to school in...

Two of the inhabitants are college graduates, 10 people graduated from secondary grammar schools and 30 persons finished vocational training. Some of the youngsters attend secondary school in Encs, Tokaj, Debrecen and Szikszó. Since 2012 a special afternoon school for children with special needs has been operating in the settlement.

The centre of the village is the "House for the Elderly", as locals tend to call it, in which a soup kitchen and also a library operate. The community house is full of life and events. The village has a Calvinist church and a nice football field with dressing rooms. In terms of local transportation the village has little to offer. The village bus runs hundreds of kilometers every day. Besides its two grocery stores, the village also has a nicely renovated family doctor's office, but without a doctor, as no one wishes to run it. A health visitor is available regularly. Currently 100 people work in the public work programme breeding livestock, producing crops and renovating buildings. The 2-3 acres of cultivated land provide the villagers with almost everything. The inhabitants are hard-working people. Several civil organizations have tried to help, some of them with success. The mayor is Roma and has a very good reputation in the village.

Hernádpetri⁴ is a small, cul-de-sac village in the northeast of the Cserehát region, near the Slovakian border. In 2018 its population was 259. In terms of public transportation the village is hard to access: only the bus between Hernádpetri and Encs are available. The village is inhabited mainly by Roma, with only a few non-Roma households to be found. The number of ruinous houses is striking. Several households lack running water. Electricity is supplied on a prepaid basis. Its late baroque

Roman Catholic church, built in the 18th century, is regarded to be in a dangerous state and is not in use.

Basic grocery items are hard to come by as the only grocery store of the village keeps rather hectic hours of operation. Medical assistance is available once a week, and serious illnesses or emergencies are treated in Encs. With no kindergarten and elementary school in the village, the children attend primary school in nearby Hernádvecse. Most of the inhabitants are undereducated and job opportunities are scarce.

Szemere is situated 5 kilometers north of the Slovakian border, in the district of Encs. It is 18 km from Encs and 60 kilometers from Miskolc. Since 2013 the settlement has a joint local government with Szalaszend. The nearest train station is 13 kilometers away, in Méra, with access to main roads. The only form of public transportation is that of the bus with a few services daily. More than half of the inhabitants are ethnic Hungarian (58%), 42% are Roma. Its population was 417 in 2018. A little more than half of the population belongs to the age group of 18-54. The proportion of elderly people (above 60) is 11.67%. Outward migration is common, with only a few newcomers settling in the village. The low number of local intellectuals is a serious problem.

While five registered entrepreneurship at the village is 5, only one local person is employed. In 2011 and 2012 76 people worked in the public work programme. The local government is the largest employer; entrepreneurship cannot provide job opportunities for the locals. In the framework of the public work programme a pig farm was established that provides meat for the local soup kitchen. They have also built greenhouses, received some state-owned agricultural fields and purchased bio furnaces. As part of the public work programme a small number of people produce pasta and baked goods, also for the local soup kitchen and for the children in school. A fruit processing unit has also been established in which they process apples and make apple juice. In 2015 a Social Agricultural Collective was formed for producing juice. It employs six persons. The local government provides help for the elderly and food for those in need. Ever since February 2001 the village has offered a village coordinator service⁵, which was welcomed by the locals. The inhabitants rely on the service and use it on a regular basis. The village coordinator currently uses a Volkswagen minivan to transport villagers. Although the settlement does have a doctor's office, the position is vacant. Medical services are provided in Szalaszend; people seeking medical help need to travel on their own or use the village coordinator's transportation service. There are two grocery stores in the village (one is part of the grocery store chain 'Coop', the other is in private ownership) and one bar (more like a *café*).

³ Virág Havasi's analysis on Fulókércs, 2018 (unpublished manuscript)

⁴ Attila Papp Z.'s analysis of Hernádpetri, 2018 (unpublished manuscript)

⁵ The village coordinator service is a social service provided for the inhabitants in disadvantaged settlements. Among others, it includes transportation services and administrative help.

There is a post office as well. Once there was also a community center in the village. Its building is now used by the school. The lack of community center is prominent in the village. The settlement has both a kindergarten and an elementary school.

The Local Innovation Potential – the Basic Model

The basic model has been formed by building on previously existing models. We wanted it to have more pillars (as, in an ideal case, settlements also have more than onestrength to draw upon) and to reflect one of the most important characteristics of innovation: diversity. We also wanted the model to be suitable for applying quantitative and qualitative methods and approaches and for building on different data sources. It was also important to form a model whose indicators are available and measurable in every settlement in focus. We observed the criteria of validity and reliability and also the need for a standardized measurement tool. The model rests on four pillars: (1) local courage (LC); (2) human resources potential (HR); (3) economic potential (EP) and (4) cultural and natural “resources” (CNR).

The first pillar appears in the model because we wanted to put on emphasis on the fact that social innovations tend to come from a grassroots perspective and usually offer a novel kind of solution to existing social problems or challenges. Compared to the innovation measurement tools introduced above, it is a new component. Other studies did not identify such processes as local courage.

The second pillar or component (HR) is a well-established component of measuring innovation potential. The operationalization differs but human resources are usually part of any measurement of innovation capacity.

The same can be said about the third component, economic potential.

In terms of the CNR we applied the approaches of the Collection of Hungarian Values and focused on the cultural and natural resources of the settlements.⁶ These strengthen local identity and help to form bonds.⁷ This is also a common component of models measuring local innovation capacity and is usually referred to as a common environmental factor. The CNR component we are suggesting is more than that. We believe that in order to balance disadvantages we need to draw upon the cultural resources and strengthen local identity, among other factors.

Within each pillar we listed the dimensions and the possible indicators by which we can measure them. When forming the model we built on the concept that correlations revealed by quantitative data and their hidden meaning can further be examined by qualitative approaches. Thus part of our data comes from statistics, documents (decrees, strategies and reports), another part comes from survey data, while the rest comes from qualitative interviews and fieldwork notes. The source of our data and its qualitative or quantitative nature is indicated in Figure 3.

Each dimension or component is measurable by seven indicators. The maximum value of a dimension/component is 35. All seven indicators are measured on a five-point scale. In order to standardize the index we transformed the dimensions (with their maximum value of 35) to a 100-point scale (where 35 means 100 per cent). The value of the components of the LIP has been calculated accordingly. The maximum value of LIP index is thus 140 (4 pillars, each with 7 indicators, each measured on a five-point scale). The maximum value of 140 is then transferred to a 100-point scale to arrive at a standardized LIP index.

<p>1. Local courage (LC)</p> <ul style="list-style-type: none"> ➤ co-operation (qualitative, interview) ➤ good practices in education (qualitative, interview) ➤ grant activity (quantitative, amount of received EU grants/person 2012-2018) ➤ novel solutions - economic (qualitative, interview) ➤ participation in community events (quantitative, survey – percentage) ➤ participation in the work of NGOs (quantitative, survey – percentage) ➤ number of non-profit organizations (quantitative, TeIR⁸ – percentage)
<p>2. Human Resources Potential (HR)</p> <ul style="list-style-type: none"> ➤ proportion of higher education graduates (quantitative, TeIR – number of higher education graduates/100 persons) ➤ percentage of “active individuals” (quantitative, TeIR – percentage of 18–54-year old population) ➤ abortion rate (quantitative, TeIR – percentage of abortions in relation to births between 2011 and 2013) ➤ infant mortality rate (quantitative, TeIR – percentage in relation to the average of 2001–2013) ➤ aging (quantitative, the proportion of elderly (65+) to other age groups) ➤ local knowledge (quantitative, survey – percentage) ➤ vehicles (quantitative, TeIR – number of passenger cars/100 persons)

⁶ www.hungarikum.hu

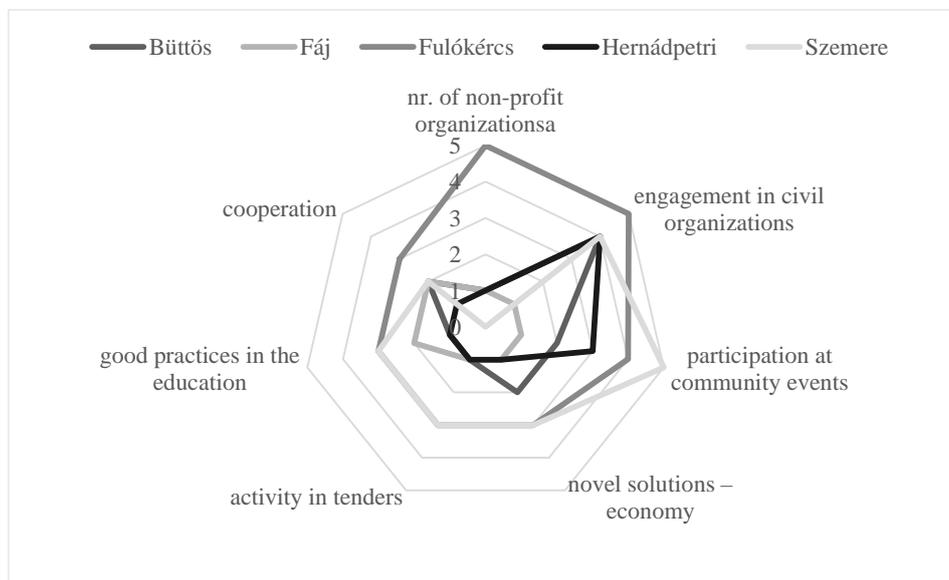
⁷ www.hungarikum.hu

⁸ TeIR: Országos Területfejlesztési és Informatikai Rendszer (National Territorial Development and Informatics System): <https://www.teir.hu>

<p>3. Economic potential (EP)</p> <ul style="list-style-type: none"> ➤ number of entrepreneurship (economic sector, types) (quantitative, TeIR - /100 persons) ➤ Net income per person (quantitative, survey – per person) ➤ infrastructure (quantitative, TeIR) ➤ unemployment rate (quantitative, TeIR – percentage of unemployed in the age group of economically active citizens) ➤ local tax (quantitative, TeIR – local tax income /100 persons) ➤ employment rate (quantitative, TeIR – proportion f employed to citizens in active age) ➤ migration (quantitative, TeIR – migration balance)
<p>4. Cultural and natural resources (CNR)</p> <ul style="list-style-type: none"> ➤ natural values (qualitative, interviews, observations) ➤ values of the built environment (qualitative, interviews, observations) ➤ intellectual property (qualitative, interviews, observations) ➤ artifacts (qualitative, interviews, observations) ➤ local artists, groups (number of groups and individuals; types of groups) ➤ famous people (qualitative, interviews, observations) ➤ local traditions (quantitative, survey – percentage)

Source: the authors

Figure 4. The basic model of Local Innovation Potential (LIP)



Source: the authors

Figure 5. Results for the local courage (LC) indicators)

Adaptability of the Model in the Settlements of Focus

The results of the local courage index for the five settlements of Abaúj are shown in Figure 4.

As shown in Figure 5, the most significant item of the local community activity is the engagement in civil organizations. It is the most defining factor in the measurement of activity among the inhabitants. This item is especially strong in Fulókércs. As we have already pointed out in the description of the settlement, Fulókércs has a strong, solid community with the current mayor as its driving force. Participation in local community events is a similar item that is especially high in Szemere. While Szemere is different from Fulókércs in several ways, they are also similar as both settlements have mayors who are

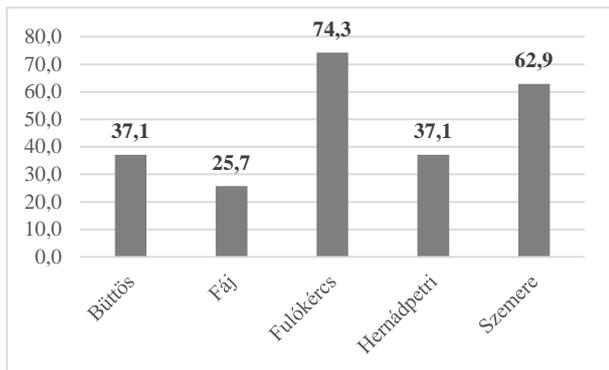
in the centre of local community life. It is an interesting characteristic of Szemere that the local intellectual elite are not necessarily local: i.e. the cultural life is organized by the head of the kindergarten, who lives in Miskolc, while the schoolmaster lives in Szemere. There is only a small group of decision-shaping intellectuals in Szemere. In Fulókércs this group is replaced by an active Roma community with strong community ties. These are suitable to form a base of presenting and delivering patterns.

The figure also shows that in terms of LC two settlements have significant roles. These two settlements are geographical neighbours, and one is populated by almost only Roma while the other only has a minority of them.

Büttös, described as an aging and poor village, also has a community that is active in civic organizations. We have to note, though, that due to its aging population the number

of non-profit organizations is low. We can conclude that the social activity of the locals does not have organizational frameworks, they rather engage in spontaneous activities. The same is true in Szemere: although there are no civic organizations, the population still live an active community life.

Hernádpetri is a many-folded settlement in many terms. Community activity is not high; it shows a rate characteristic of communities called cultures of poverty. Meanwhile, thanks to civil organizations coming from outside, from time to time there are integrative, community development programmes aiming to compensate disadvantages.



Source: the authors

Figure 6. Values of the local courage (LC) dimension

Figure 6 shows the LC index at the five settlements. The figure confirms our findings: Fulókércs has the highest rank in local courage, followed by Szemere. Fáj has the lowest index: out of the 7 indicators 5 of them received 1 point only.

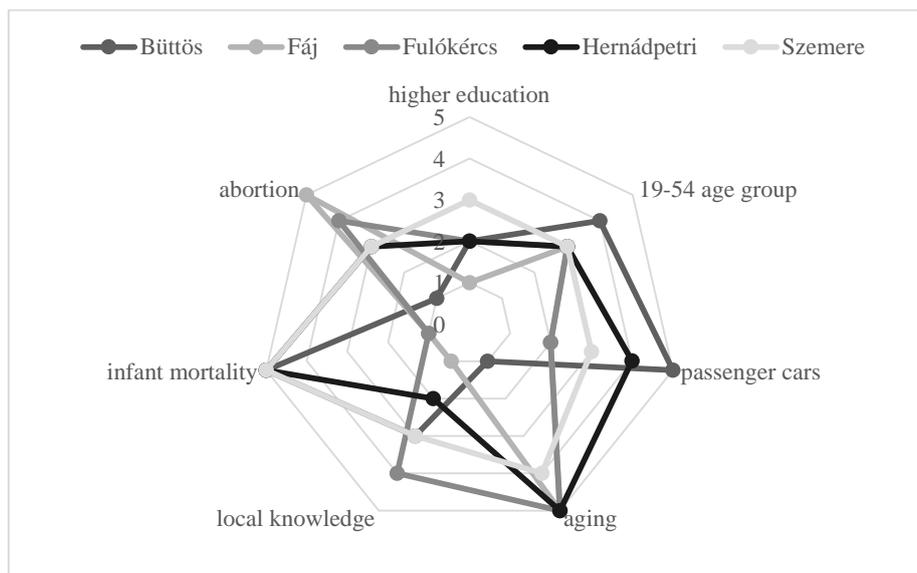
The next component of the local innovation potential is the human resources potential (HR).

Looking at Figure 7 we can immediately note that the human resources potential does not vary to the extent seen in the case of the local courage index. In that indicator Szemere and Fulókércs achieved higher results. Szemere shows good results in terms of human resources potential as well, neck to neck with Hernádpetri.

We have mentioned earlier that Hernádpetri is a many-folded settlement. This is due to the fact that the village has a high proportion of Roma inhabitants: the village has a more favourable age structure (aging rate in 2015: 31.11/5), while the number of higher education graduates is very low (1.7% in 2016), it has a negative migration potential and the settlement does not have any educational institutions. The proportion of the 19-54 age group the number of passenger cars are relatively high, both of which can be regarded as a sign of vitality, (as well as the need for locals to have cars due to the lack of proper public transportation). The village has a very favourable aging rate: the number of elderly is low compared to the number of children. The infant mortality rate is also favourable in Hernádpetri. As we have already pointed out, several development projects have been initiated in the village by outsiders. Therefore, the fieldwork showed some resistance toward new projects among the locals.

Szemere also shows favourable results in this indicator. Among the villages in focus Szemere has the highest proportion of higher education graduates, while the aging and infant mortality rates are also good.

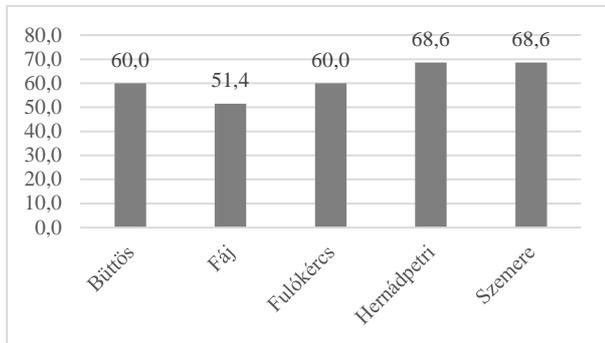
Fulókércs achieved good results in terms of local courage and, as we can see, its local knowledge level is significant as well. This means that the locals have skills and knowledge in many forms, i.e. sewing, embroidery, folk art, crafts, wood-carving, metal-working, etc.



Source: the authors

Figure 7. The "pattern" of human resources potential (HR) indicators

Figure 8 shows the value of the component for each settlement. Hernádpetri and Szemere have the highest value of human resources, followed by Fulókércs and Büttös. Fáj falls behind the others.



Source: the authors

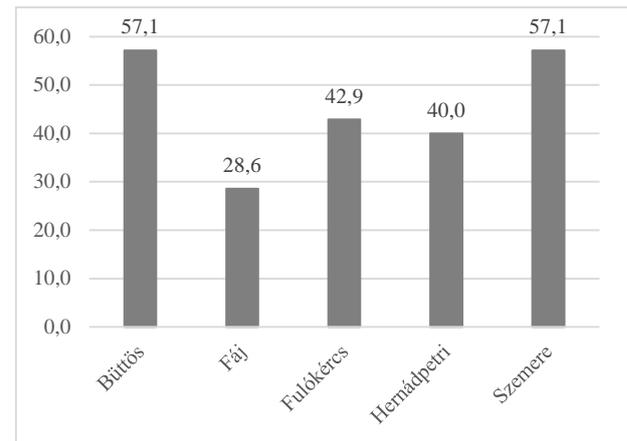
Figure 8. The values of human resources (HR)

The third pillar of local innovation potential is the economic potential (EP). As we can see in Figure 9, Fáj and Hernádpetri have lower EP scores, while Fulókércs, Büttös and Szemere have higher economic potential.

As we can see, only Büttös receives any local tax income – this is a common pattern in the region. Büttös tends to produce better results in terms of employment and unemployment as well (employment rate: 40.6%; unemployment rate: 4.5% in 2016). In Büttös more and more Slovakian citizens are purchasing properties and

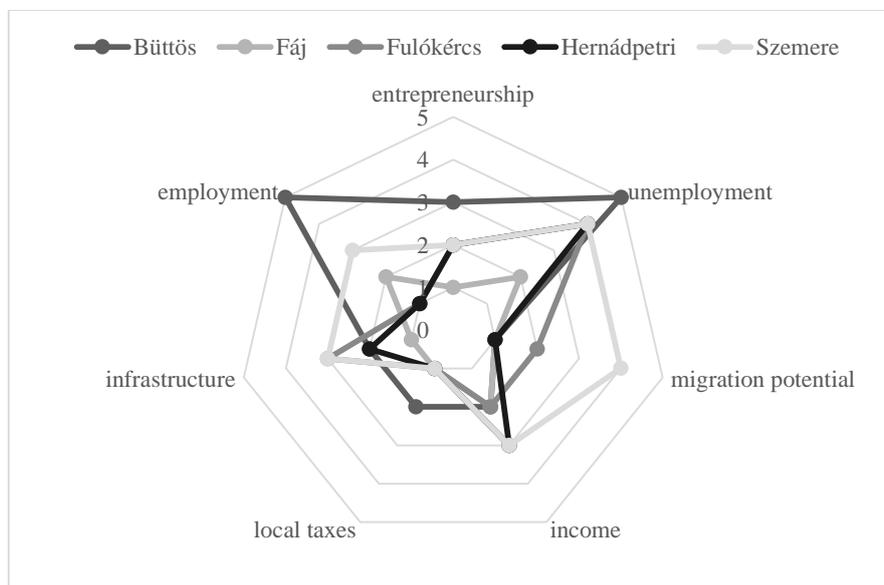
renovating houses, which may in the future lead to a resort-like settlement. In terms of the economic potential, the data from Fáj is alarming. The lack of entrepreneurs, local taxes and modern infrastructure together with high outward migration is very unsettling. Fáj's results for local knowledge are low, the number of higher education graduates is low, the local courage is non-existent.

Looking at the EP index (Figure 10) it is clear that Szemere and Büttös are in the most favourable position, followed by Fulókércs and Hernádpetri. Fáj has the lowest rank in this dimension as well.



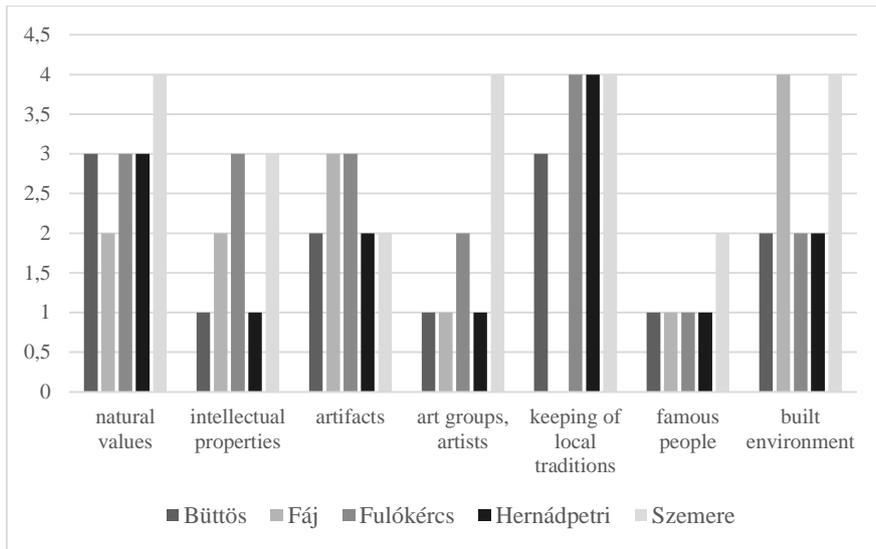
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Figure 10. Economic potential index



Source: the authors

Figure 9. Economic potential



Source: the authors

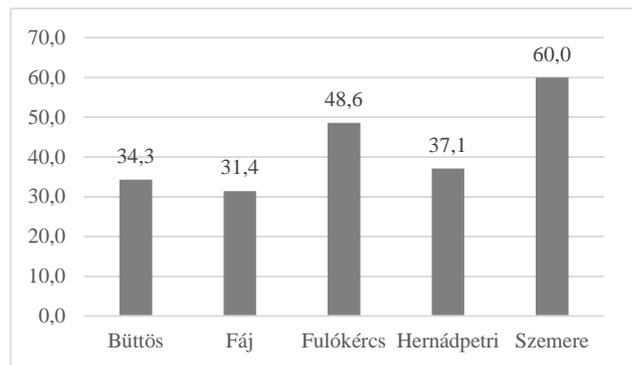
Figure 11. Scores on CNR index indicators for the settlements

The final pillar of the LIP index is the cultural and natural resources (CNR).

Figure 11 shows more elaborate correlations. The well-known belief that the inhabitants of Abaúj live in a beautiful natural environment but have a harsh life has been proven. A significant number of people keep local traditions, especially in Fulókércs, Hernádpetri and Szemere (in Fáj none of the interviewees could name any local traditions). In terms of the built environment the Fáj mansion in Fáj (which, according to our latest information has been dropped from the National Programme for preserving historic mansion and castles) and the Pallavicini mansion in Szemere (that houses the local kindergarten) shall be mentioned. Most of the artistic activity in Szemere is connected to the local elementary school, where a specialization in folk-dance and arts is offered.

As Figure 11 shows, Szemere achieved better results than the other four settlements in regard to the cultural and natural resources index. Our qualitative research shows that the CNR index is high due to the mayor and a group of individuals who are active in keeping the local traditions alive, encouraging artistic activities, organizing local community events and working hard toward keeping the mansion and its park in good condition. The local

government offers accommodation for travellers in the major of the former village clerk, Lajos Perlik.

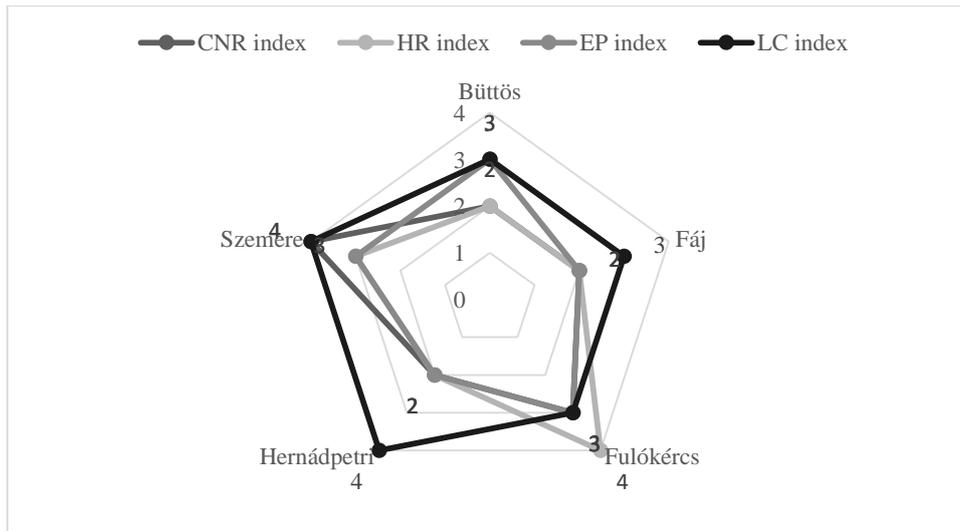


Source: the authors

Figure 12. The values of CNR index by settlements

In relation to the CNR index (Figure 12) Fáj is in last place among the settlements studied, with Szemere leading and Fulókércs in a relatively strong position.

Finally, we present the local innovation potential (LIP) index that has been calculated for the five settlements (Figure 13).



Source: the authors

Figure 13. The "Pattern" of local innovation potential (LIP)

Among the settlements in focus, the local innovation potential in Szemere is the highest. Here two pillars of the LIP are especially strong (CNR and HR). Fulókércs, with its high local courage, follows Szemere falling behind by only one point. Büttös and Hernádpetri share the third place, although – as pointed out above - these two villages are rather different in many aspects. Fáj has the lowest cumulative index, partly because of its unfavourable socio-demographic, geographical and economic conditions (and probably requires immediate intervention).

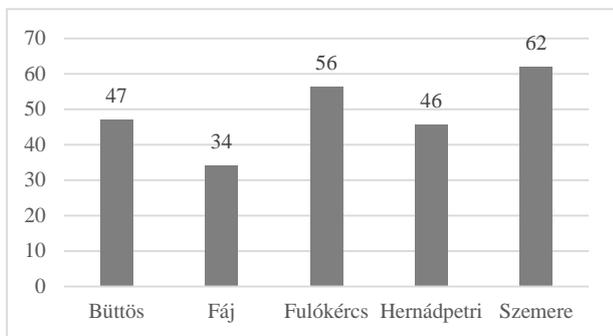
unfavourable. Büttös and Hernádpetri are contradictory, which is clearly shown in their result of local innovation potential.

SUMMARY, CONCLUSIONS

The study aimed to form an aggregated, integrated index based on the results of fieldwork and survey that is capable of showing the local innovation potential and the possible directions for future developments. We also wanted to show that two settlements of similar socio-demographic and geographical backgrounds can vary significantly, can show very different patterns. And, on the other hand, we wanted to show that two settlements that are very different at first glance (and at second as well) can face similar challenges and fall into one category.

In the future we would like to test our index further, to compare it to other indexes, to broaden the research and to fine tune our index. As our index is partially based on qualitative data, broadening the perspective has its limits (we cannot do research in thousands of settlements), but regional research is possible.

In our view, as an aggregated index containing small mosaics, the LIP index shows the colours, the similar patterns but also the existing shades and nuances of settlements. It is built on both qualitative and quantitative data, on "soft" and "hard" social scientific methods. It aims toward systematic analysis by creative and innovative approaches. It does not fail to mention that social realities and worlds depend on the point of view taken. They can only be shown from the perspective of parallel universes and opinions. The picture will never be homogenous or, at least, it will never be identical.



Source: the authors

Figure 14. The values of local innovation potential (LIP) by settlement

Figure 14 shows the value of LIP for each settlement. As our analyses allowed us to presume, Szemere has the highest local innovation potential, followed by Fulókércs and Büttös. Szemere achieved high points in all components used for the measurement of LIP, while Fáj has low points in all of them. Fulókércs is a leader in local courage, an outstanding community that is able to provide community well-being even if the economic conditions are

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