

APPROACHING THE ROLE OF SOCIAL INNOVATION IN THE CARPATHIAN REGION

Case studies from Hungary and Romania.

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Abstract

Initiatives promoting social innovation in rural areas have become the subject of a growing field of research. While the precise definitions of what constitutes social innovation in the rural context remain unclear, the general trend in literature emphasizes locally sourced and tailored responses to local problems. This paper evaluates the existing literature on rural social innovation in order to develop criteria, which are used to define such projects in the Carpathian mountain region. Following the establishment of these criteria, the paper surveys three case studies of such practices in the region: BioSzentandrás (HU), a community garden employment program, Pogány-Havas (RO), a microregional association, and Eco Ruralis (RO), an NGO fighting for peasants' rights. To establish the relevance of social innovation as a conceptual tool for study in the Carpathians, projects' features are identified and analyzed. Finally, there is a brief discussion of each projects' achievements and potential takeaways that might be applicable to further actions and study going forward. The projects show that SI initiatives have the potential to lead to more inclusive, sustainable and environmental aware communities.

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Contents

1.	Int	troduction	4
	1.1.	Research Design and Methodology	4
	1.2.	Research Structure	5
2	Th	neoretical Background	6
	2.1.	Social Innovation	6
	2.2.	The Carpathian Region	8
3	Pre	esentation of the Case Studies	11
	3.1.	BioSzentandrás	11
	3.2.	Pogány-havas	14
	3.3.	Eco Ruralis	16
4. Analysis of the Case Studies			
	4.1 Io	dentification & discussion of the SI principles	19
	4.2. I	Discussion of the role of SI in the Carpathian Region	22
5	Po	licy recommendations	24
6	Co	oncluding remarks	25
7	Bibliography		26
8	Depictions and tables		30
9	Appendix		

1 Introduction

Rural areas, such as most of the Carpathian Region, are faced by a multitude of challenges including the lack of social and technical infrastructure¹, remoteness and low population densities, unemployment, migration, land use changes and climate change. These problems are complex, and their solution involves many stakeholders from different spheres (public, private and civil sector).

Social Innovation (SI) is increasingly brought up as an alternative to traditional policy instruments to meet societal demands. It is about using local assets to meet a social goal, such as employment or environmental sustainability. It will be illustrated in the paper, how various initiatives that could contribute to the classification of social innovation projects have favorable impact on the various levels and, ultimately, on the Carpathian Region as a whole.

In terms of the work of the United Nations (UN), SI offers opportunities for rural areas to enact change fulfilling multiple Sustainable Development Goals (SDGs). SI allows communities to develop locally tailored economic solutions to existential problems of demographic shifts in rural areas, working towards Goal 1 of eliminating poverty and Goal 8 on decent work and economic growth. Enriching local networks also bring about more diverse production and idea and resource sharing in rural communities, including the integration of groups currently outside classic market access, addressing Goal 10 on reducing inequalities and Goal 12 on responsible production and consumption. Finally, rural areas, particularly in remote mountain areas, are essential parts of the shift towards more environmentally sustainable development, and local solutions respectful of low impact solutions preserving biodiversity and sensitive ecosystems address Goals 13 and 15 on climate action and consideration of life on land.

1.1. Research Design and Methodology

This paper examines three projects in the Carpathian Region that use social innovation and endogenous resources to solve local, regional or national problems. The overlying research question is:

How can social innovation projects contribute to the sustainable and inclusive development of the Carpathian region?

To answer this question, we formulate a set of sub-questions:

- A) What is social innovation in a rural development context?
- B) Why is there need for innovative solutions in the Carpathian Region?
- C) What makes rural development projects social innovation projects?

¹ Technical infrastructure, such as roads, sewers or utility lines, as well as social infrastructures, meaning, for instance, hospitals, schools and prisons can be both referred to as "built infrastructure" (Benedict & McMahon 2001: 6).

The sub-questions A and B are approached through a review of the literature. The results are presented as the theoretical background; they form the framework for the following case studies.

In order to answer question C, we reviewed three projects in Northern Hungary and Romania: BioSzentandrás, a community garden employment program, Pogány-havas, a microregional association that advocates a better relationship between humans and nature while protecting cultural heritage, and EcoRuralis, a Romanian NGO fighting for peasants' rights and livelihoods.

The projects were chosen for being good practice examples while being very different. By choosing three initiatives that differ in the number of participants, main topics, size of the impact area etc., we wanted to be able to show and compare the variety and flexibility of Social Innovation across different contexts.

The initial selection of 10 projects was based on self-descriptive information available online, for showing elements of social innovation as we had previously defined in the literature. We sent out emails and asked for participation. These 10 projects were contacted with a request for interviews. While initial response was limited, which may have been in part due to language barriers (non-English speaking projects are common in the Carpathians) we finally managed to make contact with three projects representatives.

Using a literature-based interview guide, the information was obtained through semi-structured interviews (see Fontana & Frey 2005) that took place via Skype. It was later complemented by publicly available textual information (websites, newspapers and scientific journal articles).

It is the aim of this paper to highlight important features of SI projects, show how they were formed and what impact they had so far. Unfortunately, it is beyond the scope of this study to measure the effectiveness of the initiatives in terms of economic or social output.

1.2. Research Structure

This paper is organized as follows: Section 2 discusses the theoretical background: First, we will outline the concept of Social Innovation (Section 2.1) and develop five criteria, which in our opinion constitute SI and shape the following interpretation. In Section 2.2 we will present the Carpathian Region. This chapter shows the main characteristics and challenges of one of Europe's biggest mountain chains.

In the third section, we will present the case studies. Each case study corresponds to a level of action: a local, a regional and a national initiative are included. Section 4 corresponds to the analysis of the case studies. In this section we will highlight important elements of social innovation that are reflected in each of the initiatives and discuss our findings. Finally, our policy recommendations are drawn in Section 5, which is followed by concluding remarks.

2 Theoretical Background

2.1. Social Innovation

The discussion regarding social innovation (SI) goes back to the works by Max Weber and Emile Durkheim, who argued about social regulations and social order against the background of technical changes during industrialization (Moulaert 2009: 12f; European Commission 2011: 31). The term re-emerged in the 1990s again to deal with societies' "consequences of economic restructuring", this time due to digitalization (European Commission 2011: 30f). Increasingly, the concept of SI has been not only used to describe processes of societal transformation but also "innovation in the conceptualization, design and production of goods and services that address social and environmental needs and market failures", including social entrepreneurship, capacity building and strategies of organizational management (Nicholls & Murdock in Caulier-Grice et al. 2012: 6).

One can find a variety of definitions of SI, ranging from very general concepts, such as "new ideas that work in meeting social goals" (Mulgan et al. 2007: 8), to complex definitions introducing different aspects and requirements. At this point, we emphasize the rather broad definition by Caulier-Grice et al., which states that "social innovations are new solutions (products, services, models, markets, processes etc.) that simultaneously meet a social need (more effectively than existing solutions) and lead to new or improved capabilities and relationships and better use of assets and resources. In other words, social innovations are both good for society and enhance society's capacity to act" (2012: 18).

Additionally, we want to highlight another definition, stating that SI is about "the reconfiguring of social practices, in response to societal challenges, which seeks to enhance outcomes on societal well-being and necessarily includes the engagement of civil society actors" (Kluvánková et al. 2017: 1).

Social innovation can be found in all sectors: public, private and voluntary sector. Particularly, the importance of the civil society (the voluntary sector) must be highlighted, as it is often the prime mover of social innovation (Jenson & Harrisson 2013: 16). In accordance with Moulaert et al. (2005), social innovation needs innovative governance to allow the inclusion of (often marginalized) non-traditional actors. SI is, therefore, also about community development, self-governance and political empowerment (Bock 2012: 59).

In this context, we have identified five criteria that constitute SI. The elements are derived from literature and selected for their relevance to rural development projects:

Social innovation, as we understand it, is about projects, programs and ideas, that offer new solutions and ²

- (1) respond to (local) needs/challenges; A,B,D,E,F,G
- (2) strive to achieve a social goal; A,B,D,E,F,G
- (3) apply better use of existing resources and assets; A,E
- (4) change relationships and create networks and A,B,C,E,F
- (5) involve civil society. E,F,G

New solutions in the context of social innovation can be anything ranging from "new services, new products, new markets, new processes; new platforms, new organizational forms, new business models (Caulier-Grice et al., 2012: 24-25) to new coordinating and governance mechanisms (OECD 2011: 13).

Mulgan et al. point out that there is a growing "gap between the scale of the problems we face and the scale of the solutions on offer" (2007:7). Todays' social, environmental and demographic challenges, such as climate change, ageing populations, migration, and unemployment, are highly complex and involve many stakeholders, which makes them so-called "wicked problems" (Caulier-Grice et al. 2012: 5). The role of SI is acknowledged by the European Commission as follows:

"Firstly, solutions must be found, in a time of major budgetary constraints, to deliver better services making more effective use of available resources. Second, the traditional ways in which the market, the public and the civil sector have provided answers to social demands are no longer sufficient. In this context, social innovation represents an important option to be enhanced at different levels (local, regional, national, European) and sectors (public, private, civil) as its purpose is to innovate in a different way (through the active engagement of society itself) and to generate primarily social value." (European Commission 2011: 30)

As highlighted, SI in the European context is seen as a way to increase the effectiveness of public spending, which is justified by recent budgetary constraints. Still, it must be mentioned, that budgets are not given but made by political-administrative systems and are, therefore, always a manifestation of (political) priorities and agendas (OECD 2015:1) The second reason stated is that traditional policy instruments and their application are often inadequate to offer sufficient solutions, SI is increasingly seen as a response to new social problems and global challenges (European Commission 2011: 7, 33).

7

² A) Caulier- Grice et al. (2012); B) Murray et al. (2010), C) Moulaert et al (2005), D) Mulgan 2010, E) Jenson & Harrisson 2013, F) OECD (2011), G) Kluvánková et al. (2017)

Nowadays, one can find research on social innovations in many different fields and disciplines: entrepreneurship, governance analysis, welfare economics and spatial development, just to name a few (Choi & Majumdar 2015). In the framework of this paper we will predominantly focus on the latter, with a focus on rural regions. SI is about improving "societies' capacities to solve their problems" (Mulgan et al. 2007: 7). This makes it especially valuable for rural regions that are often marginalized and economically less productive.

The European Union highlights the importance of social innovation for neo-endogenous regional development³ through programs such as LEADER (micro-regional action groups, supporting local projects) or research platforms like SIMRA (Social Innovation in Marginalized Rural Areas, which is part of Europe's Horizon 2020 program).

While rural areas were often left aside in the centralized model of command and control, they can play an important role in the new "systems where innovation and initiative are dispersed to the periphery and connected by networks" (Caulier-Grice et al. 2012: 22).

In a rural context, policy has considered social innovation through services "offered to rural businesses and the rural population as well as to local public administrations [...] raising the capacity towards animation activities of local groups which may also include geographically

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disadvantaged communities and marginal groups." (European Commission 2011: 53, 74). "Through new approaches, territorially specific assets, such as local knowledge or culture, can be more effectively used" (Kluvánková et al. 2017: 14). Examples are (sustainable) tourism, local food networks, and social farming (Kluvánková et al. 2017: 14).

1 HUNGARY

WESTERN CARPATHIANS

(Budapes

Image 1. Carpathian Mountains, own depiction

ROMANIA

Bucares

UKRAINE

2.2. The Carpathian Region

(a) Introduction to the Region

The Carpathian Region is shared by eight Eastern and Central European countries and can be divided into three

main sections (see Image 1): Western Carpathians (Austria, Czech Republic, Poland, Slovakia, Hungary), Eastern Carpathians (southeastern Poland, eastern Slovakia, Ukraine, Romania) and Southern Carpathians (Romania, Serbia) (Kondracki, 2014)

With a length of 1,500 kilometers, the Carpathian Mountains cover an area of 210,000 square kilometers and are one of the Europe's largest mountain chains, known for their biologically rich

³ Different from pure endogenous theories the neo-endogenous approach values external sources and actors to support local and regional development, which are 'recruited' by local entities (Juppenlatz 2012: 5f).

and diverse ecosystems, including vast virgin forests, which are home to large predators such as bears, wolves and lynxes (Werners et al. 2014: 12).

Besides its natural treasures and ecological value, the Carpathian Region is home to over 50 million people, constituting a major economic and cultural living environment (Borsa et al. 2009: 19). Still, the region is far from being homogenous: the western parts, especially those in Slovakia with the capital Bratislava, and in Poland, where the mountain tourism economy is very strong, are economically better off than the Eastern and Southern Carpathians, particularly in Romania (HAS Centre for Regional Studies 2007: 17-21).

In 2006 the Carpathian countries (with the exemption of Austria) and several international organizations, including most importantly the United Nations Environment Programme (UNEP), established "The Framework Convention on the Protection and Sustainable Development of the Carpathians", which is better known as the Carpathian Convention (CC) (Werners et al. 2014: 14). The CC has the purpose to ensure the protection and sustainable development of the mountain region by providing a common vision and a trans-national platform for cooperation between the involved countries. The general objectives are (1) to improve the quality of life, (2) strengthen local economies and communities and (3) to conserve natural values and cultural heritage (Bauer 2017: 9)

(b) Challenges of the Carpathian Region

There are only a small number of urban communities within the Carpathian Region, most of the area is classified as rural. In the proper mountains the population density of 10 to 25 people per square kilometer is very low (HAS 2007: 10). Where the settlement structure is dispersed also the level of service delivery is often limited. The distances to the next physician or school can be very long and only a few larger, rural villages are connected to public transport systems (Utveckling 2013: 23). In addition, there are many settlements without connection to public utility networks. For instance, only 33% of the rural Romanian population, of which a major share lives in the Carpathians, is connected to the water system, and 10% to the sewage network (Utveckling 2013: 7f).

Limited access to public services and poor infrastructure contribute to trends such as depopulation, high unemployment and economic inactivity⁴ (HAS Centre for Regional Studies 2007). A lack of jobs and very low income in the primary sector, especially in rural Romania and Northern Hungary, lead to migration into better-developed urban regions and other European countries.

As younger people are more mobile, this contributes also to the over-aging of resident population (Streifeneder et al. 2015: 17).

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⁴ Unemployment rates only include those people, who ever participated in the economic system, therefore ever had an officially recorded employment. Inactivity means that a part of the working age population never entered the labour market, "because they retired early, or they are women in the households or they stopped to look for employment". Moreover, subsistence farmers and those who worked only in the informal sector are part of this group. (HAS Centre for Regional Studies 2007: 18)

Connected with the difficult socio-economic situation, one can observe a growing trend of land abandonment, as there is lack of interest in working in the primary sector. Often the knowledge on farming practices, such as traditional haymaking, risks being lost as a result. At the same time, some better accessible and suburban parts of the Carpathians are facing an intensification of agriculture, frequently connected with foreign investment and land grabbing⁵ (Werners et al. 2014: 14).

Both these trends negatively affect the traditional landscape and the region's biodiversity. Bösze et al. explain the interconnection of agriculture and biodiversity as follows: "biodiversity, through functional ecosystems, can provide essential services for agriculture, such as pollination, pest control, etc., whereas by adopting nature-friendly practices, agriculture can help maintain valuable habitats such as grasslands and mosaic landscapes." (2014: 26) A similar problem is (illegal) deforestation, which one can find especially in Romania, destroying old forests with extraordinary natural features (Borsa et al. 2009: 44).

One of the region's main challenges in the coming years will be climate change as mountainous regions, ecosystems as well as communities are especially sensitive to its impacts (Werners et al. 2014: 5). The predicted rise in temperatures and changes in the precipitation rate will affect the potential for different types of agriculture (negatively and positively), and the occurrence of extreme weather events, such as flooding or drought, will increase (Alberton et al. 2017).

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⁵ Land grabbing is a process in which (mostly foreign) companies invest in fields and other agricultural holdings "to capture control of physical resources as well the power to decide how and for what purposes they will be used". As a response the price for farmland increases which makes it often too expensive for local small-scale farmers (Bouniol 2013: 146).

3 Presentation of the Case Studies

In the following section three projects are presented. Each case study is structured in four components: Context & implementation of the project, current situation, project aim & progress as well as the outlook. We start with the local level of action, followed by the regional and national examples. It must be mentioned that the level of action is not clearly definable and not congruent with the level of impact, as spillover effects can occur.



→ Corresponding SDGs:













Image 3, SDGs addressed by BioSzentradrás, (UN 2018)

(a) Context & implementation of the project

Hernádszentandrás is a village in Borsod-Abaúj-Zemplén County in northeastern Hungary with a population of 434 inhabitants (KSH 2011). After 1989, the region was in a disadvantaged situation: many people lost their jobs leading to a high unemployment rate and with a Roma ethnic minority population of 40% they struggled with social integration (Kantoáné Kovács et al. 2016: 25).

As the state failed to offer a solution, the village, under the leadership of the mayor Üveges Gábor, sought an alternative way to tackle these problems: Hernádszentandrás managed to apply for a EU tender for the establishment of a community-led garden and received HUF 28 million (about 90,000 EUR) (Pozitív Nap 2012). In cooperation with the Biokontroll Hungária Ltd., and a bio-

expert from the Szent István University in Gödöllő, the BioSzentandrás project started in 2009 (Nagy 2018). Initially, there was a group of 27 local volunteers, with different age and ethnic affiliation, who started working in the so-called "Bio-Team". They attended one and a half years of agricultural training on the weekends and started to cultivate on their own parcels as well in the 8000m² large community garden (Pozitív Nap 2012; Kantoáné Kovács et al. 2016: 25).

In the first year the harvest was fully consumed by the participants, in the second they started selling more than half of vegetables and fruit for which the organization established a Non-Profit Limited Liability Company ⁶ (Kelen 2012:138).

(b) Current situation

The initial project finished in May 2012, but the work of BioSzentandrás went on and was intensified. Nowadays, the co-operative manages two and a half hectares of bio-cultivation and one hectare of orchard. They produce not only more than 25 types of vegetables and fruits, but also spices such as lavender. The farm contains heated greenhouses, irrigation systems and a small facility for further processing (Pozitív Nap 2012; Centrum Environmentalnych Aktivit et al.)

The produced goods are sold on the market, distributed among the volunteers and through community-supported agricultural (CSA) networks. In the last years they established regional cooperations, for instance BioSzentandrás became one of the main suppliers of the well-known restaurant Anyukám Mondta in Encs, as well as four other restaurants, bio-shops and bakeries. Moreover, they sell their processed goods, such as tomato sauce or lavender filled pillows, through an online store (Centrum Environmentalnych Aktivit et al.; Szpociński & Szparkowska 2018).

Although their innovative marketing and extensive branding contributes to turn the initiative more and more into a real business, BioSzentandrás, which is owned by the local authority, has not yet achieved to be financially self-sustaining. A recent report states that only half of the annual operating costs of HUF 20 million are covered by market revenue (Nagy 2018). So far, the initiative is relying on different funding sources, for instance a program for the employment of unemployed villagers in social enterprises by local authorities (Kantoáné Kovács et al. 2016: 25)

Under the "Open Garden" program everybody can participate in the gardening and learn about organic agricultural practices. Moreover, BioSzentandrás runs information campaigns, for instance in schools, to teach about the importance of high-quality foods (Nagy 2018).

(c) Project aim & progress

BioSzentandrás was funded to tackle unemployment by using existing resources, such as good soils and the local market. It contributes to the fight against poverty in the region, not only as an employment program, but also through the establishment of cooperation.

⁶ A Non-Profit Limited Liability Company, in Hungary is "a subtype of Limited Liability Company exclusively dedicated for social and other not-for profit enterprises" (European Commission 2014: 20).

Next to regional networks and CSA, the project helps to foster social inclusion within the village. As an example, 10 out of 27, from the original Bio-Team were part of the local Roma minority. As reported by Kantoáné Kovács et al. 2016, BioSzentandrás ameliorated the community spirit and the appearance of the whole village changed, as many villagers started to cultivate their private gardens as well, which is promoting self-subsistence as well.

Next to this, organic farming itself plays an important role in the project. High quality foods should be accessible also for people with lower incomes. The fruits and vegetables that grow in the community garden are produced without the use of chemical fertilizers or pesticides and are organic-certified by the Biokontroll Hungária Ltd. (Nagy 2018). Not only that organic food production is more environmental-friendly than conventional agriculture, but also the market for organic food is a very fast-growing market in Hungary, guaranteeing the needed demand (Garbor & Vargas 2015).

The initiative seems to have positive effects on the local demographic development as well. A recent article states, that not only the migration from Hernádszentandrás had been curbed, but also the population of the village started growing again (Nagy 2018).

So far, the case of BioSzentandrás received countrywide recognition and is often mentioned as a best-practice example for rural development and endogenous growth (Szirmai 2015: 84; Pozitív Nap 2012). In 2013 Hernádszentandrás won the European Territorial Innovation Prize and in 2015 they were one of the finalists of the Social Innovation Tournament by the European Investment Bank (Kantoáné Kovács et al. 2016: 25; European Investment Bank Institute, & Fondazione Cariplo 2015).

(d) Outlook

BioSzentandrás is aiming at becoming financially self-sustaining by 2020 (Garbor & Vargas 2015). Moreover, it is planned to increase the cultivated area in the coming years. It was reported in 2015 that they were in negotiation with local landowners in order to expand their fruit and vegetable production up to 8-10 hectares. In addition to production growth they also want to increase the number of employees that are paid through BioSzentandrás revenue rather than through local employment programs and (inter-)national tenders (Szirmai 2015: 84).

BioSzentandrás is currently involved in a process they call "franchising": helping other communities with a similar background to establish their own gardening programs. BioSzentandrás provides technical support as well as sale channels. They pass on the knowledge to interested municipalities to "help them to find their own way" and lead by example (Garbor & Vargas 2015).



→ Corresponding SDGs:















Image 5, SDGs addressed by Pogány-havas, (UN 2018)

Context & implementation of the project

The Pagan Snow Cap Association (English for Pogány-havas) is a regional development organization, for the Csik and Gyimes regions - which are located in the Eastern Carpathians of Transylvania, Romania. It was founded in 1999 as a part of the Harghita County Council⁷'s initiative for micro-regional development strategies for the next 15 years. Pogány-havas' micro-regional membership consists of six local governments (Csíkáplfalva, Csíkszentmihály, Csíkszépvíz, Gyimesfelsőlok, Gyimesközéplokand Gyimesbükk) and the Harghita County Council. Together with NGOs, local entrepreneurs and scientists they are forming common goals towards economic, ecological and social sustainability in the region (Pogány-Havas Kistérség 2018a).

The underlying mission of the Pogány-havas association is to assure that people improve their quality of life by living in harmony with nature. The main area of action is the development of the local economy, with a special attention to agriculture, ecotourism and environmental conservation (Rodics & Knowles 2011: 1).

⁷ The Harghita County Council is "responsible for the public administration activity on the county's territory based on the principle of local autonomy" (Harghita County Council 2018).

b) Current situation

Currently Pogány-havas administers the regions' two Natura2000⁸ sites. In this function the association is responsible for "maintaining favorable conservation status of protected species and habitats, with the participation of local communities" (Pogány-havas Microregion Association 2013). The protected areas shelter a wide variety of plants and animals that are present on the mountain hay meadows territories and grasslands. As a part of the project, local farmers are educated about the importance of traditional farming practices, which not only help securing their living conditions but also contribute to the preservation of rural landscapes (C. Vali, personal communication, 4 October 2018).

Another project encompasses the preservation of local building culture. It aims at knowledge building and transfer among the local population and local authorities in order to improve the characteristic appearance of villages in the region. The project is designed to maintain cultural heritage in the county, while enhancing the socio-economic situation in the rural areas, thus forming adequate conditions for the development of tourism (Pogány-havas Kistérség 2018b).

As an NGO, the Pagan Snow Cup Association is not making profit in general. It finances its activities through public funds - the EU, the local government, or the local authorities. Members of the association - local councils of the villages - pay a membership fee of 3 Euros per inhabitant. This amount of money is later used for establishing a one-year action plan, which includes projects and actions that respond to the needs of the local community. Thus, Pogány-havas organizes events for villages (festival organizations, swimming lessons), educational activities to maintain cultural diversity (traditional dances, folklores, songs, poems). The local population often organizes these activities. Moreover, the association actively engages volunteers in assisting ongoing projects and welcomes international support provided by universities through the ERASMUS study program. Additionally, the association participates in organizing and managing external projects, for which they charge management fees (C. Vali, personal communication, 4 October 2018).

(c) Project aim & progress

Pogány-havas aims at supporting the sustainable well-being of the rural population by promoting and protecting the region's natural and cultural values. Most of the region's inhabitants are actively involved in family farming, which is the area's most significant economic activity. In order to increase farmers' income, Pogány-havas organizes training programs as well as study tours and helps by filing grant applications for farmers. Moreover, the association encourages the development of new dairy products and helps farmers' associations to increase the quality of their milk through ownership of milk collection and testing equipment (Rodics & Knowles 2011:5).

Another goal of Pogány-havas is to encourage tourism in the region. The association has been publishing tourist information & guides in various languages, organizing tourism round-tables for

15

⁸ Natura2000 is a European network of protected areas. The two sites administrated by Pogány-Havas are:

¹⁾ Depresiunea și Munții Ciucului (Csîk Basin and Csîk Mountains) Special Protected Area (ROSPA0034) and

²⁾ Munții Ciucului (Csík Mountains) Site of Community Interest (ROSCI0323)

local entrepreneurs and has founded the Csík-Gyimes Naturpark to promote the area as an ecotourism destination (Rodics & Knowles 2011:5). Furthermore, actions aimed at preserving traditional character of villages, such as remodeling and rebuilding older buildings & barns, are meant to positively affect the development of tourism in the area (C. Vali, personal communication, 4 October 2018).

(d) Outlook

The association will continue to support the local rural population in the future. According to Csongor Vali, general manager of Pogány-Havas, the primary goal of the association now is to successfully implement the ongoing Natura2000 project and publicize activity reports on the importance of biodiversity conservation and of sustainable land use management of mountain hay meadows. Mr. Vali believes that this information would be valuable not only for the region but for the EU in general (C. Vali, personal communication, 4 October 2018).



Image 5, location of Eco Ruralis, own depiction

→ Corresponding SDGs:













Image 6, SDGs addressed by Eco Ruralos, (UN 2018)

During the negotiation of the European Common Agricultural Policy⁹ in 2008-2009 it was observed that Romanian farmers and the civil society were lacking a channel, through which they could participate in the debate. Eco Ruralis was founded to fill the void of representation for farmers', especially small-scale farmers', interests nationally (A. Szocs, personal communication, 4 October 2018). Moreover, the organization addresses pressing problems of the rural population, such as land loss (due to land grabbing or unworked land), demographic decline and difficult economic realities, through a gradually evolving list of initiatives (Horlings and Marsden 2014; Marsden 2016; Heller 2000; Tudor 2015).

Originally founded in 2009 in the Cluj Napoca region by 5 farmers, the organization now counts well over 10.000 members by its own count. Active both within Romania and as representation of Romanian farmers' interests on the EU level, Eco Ruralis notably has become part of La Via Campesina international peasant organization.

(b) Current situation

Although formally an NGO, Eco Ruralis operates more similarly to "a sort of farmer's union" (A. Szocs, personal communication, 4 October 2018), holding a general assembly, executive committee, and coordination committee, each elected in accordance with the bylaws of the organization, which oversee the operation of the NGO. Among other programs, they work with promoting alternative food networks, the Peasant Box, advocacy and transparency related to land acquisition laws, and a seed exchange program. The campaign against illegitimate land grabbing takes the form of legal advocacy and published transparency reports.

The "seed ex change" consists of production and distribution of traditional peasant's seed via a free catalogue distributed to Eco Ruralis members. The catalogue solicits several thousand order per year (A. Szocs, personal communication, 4 October 2018), and is an activity of particular import to Eco Ruralis' efforts in the Carpathian region, where many of the seeds offered in the catalogue are originally cultivated (A. Szocs, personal communication, 4 October 2018). Following the chain of production, the organization has launched an initiative in the Cluj region it calls the Peasant Box, a subscription model for produce that operates similarly to a CSA combined with domestic delivery.

Such programs take on transversal dimensions within the context of Eco Ruralis' political lobbying in Romania and within the EU, providing a source of legitimacy for its claims to successfully represent Romanian peasant's interests.

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⁹ The CAP is a system of subsidies and support schemes for agriculture operated by the European Union. Through direct support and market measures as well as rural development programs, the CAP strives to ensure European food security and the livelihood of the rural population. (Council of the European Union 2018) The policy was reformed multiple times still it is object of criticism, for instance for "favoring larger farms and industry giants; holding back development in poorer countries outside the EU by imposing import tariffs on their agricultural products; pushing up food prices for consumers; and creating food waste" (Food Sustainability Index 2018)

(c) Project aim & progress

According to Atilla Szocs, Eco Ruralis Coordination Committee Member, the main achievement of Eco Ruralis is that of its role as the first organization in Romania that stands for representation of peasants' political interests. While corroborating evidence has been difficult to find, Mr. Szocs' and the organization's website cite the political impact of their land grab transparency reports. The NGO's aim is to continue to develop both this lobbying work and the work of seed exchange and alternative economic network development.

Mr. Szocs highlighted two primary challenges. Firstly, that of capacity, where limited availability of individuals to take on organization tasks is seen as an issue. Mr. Szocs highlighted the tension between working in an organization's office and having to be in the field working as a farmer. The second issue, which underlies the first, is that of funding. Due to their strict policy on donations and refusal to charge membership fees, as Romanian farmers tend to have very limited financial resources, funds for the organization remain limited (A. Szocs, personal communication, 4 October 2018)

(d) Outlook

Going forward, Eco Ruralis intends to expand into the issue of out-migration of youth from rural areas, hoping to develop incentives to prevent demographic decline going forward. Lobbying on the issue of crop monocultures such as soy was also mentioned as a potential direction forward. The most central issue for Mr. Szocs, however, was maintaining political voice and autonomy as an organization, stating in response to the outreach efforts of "extension services from other EU member state NGOs:

I think what is most important is to highlight how important is the need, especially in Eastern Europe, for small farmers to have their own voice, to have their own social movement. Otherwise these extensions can be intrusive, abusive and patronizing. This has to be emphasized; it has to go hand and hand with these kind of extension services, also with this kind of political mobilizing and self-representation. (A. Szocs, personal communication, 4 October 2018)

This is especially important, against the background of the current revision of the Common Agricultural Policy. Our interviewee also briefly mentioned the possibility of a new, updated online presence.

4 Analysis of the Case Studies

4.1 Identification & discussion of the SI principles

Table 1 shows in what way the presented projects reflect the five elements of social innovation that we have defined in Section 2.1. The table is followed by a discussion of each principle.

Project	BioSzentandrás	Pogány-havas	Eco Ruralis
SI principles	Local	Regional	National
Response to local needs/challenges	Unemployment, poverty, social exclusion	Environmental degradation, loss of traditional practices	Lacking representation of peasants, demographic decline, land grabbing, limited access to seeds and markets
Aiming at a social goal	Economic and social stimulation through employment in the food production	People living in harmony with nature, preservation of traditions, rural development	Improve representation of Romanian farmers at a national level, develop economically and ecologically sustainable networks
Better use of existing resources & assets	Community land with good soils & water supply, inhabitants without employment	Natural/cultural landscapes, historic architecture, traditional knowledge	Mobilization of political capital of farmers, agricultural traditional knowledge
Change in relationships and creation of networks	CSA, connecting producer and consumer; partnerships with regional restaurants; connecting people through work	Network of municipal governments; partnerships with scientists, NGOs and the EU	Network of farmers; creation of an international communication and representation platform,
Civil society involvement	Everyone can participate in gardening activities; information campaigns	Volunteers, university programs (ERASMUS)	Connected with various NGOs, and international peasant movement (such as La Via Campesina)

Table 1. Analysis of 5 SI principles for BioSzentandrás, Pogány-havas & Eco Ruralis, own compilation

(a) Response to local problem or challenge

Social innovation in the sphere of territorial development is about finding solutions for areaspecific problems. Rural areas are often left aside in the centralized model of command and control, which highlights the importance to seek alternative ways to react to pressing social, economic, political and environmental issues (Caulier-Grice et al. 2012: 22). In Hernádszentandrás the main problem was unemployment after 1989. In the literature the communities' initial situation is characterized by poverty. Moreover, they struggled with social integration. Multiple sources emphasize, that they gave up "waiting for external help" (e.g. Kantoáné Kovács et al. 2016: 25).

Pogány-havas was founded in the need of protecting and developing the valuable natural environment, against the background of changing patterns of human interactions with nature and climate change. Examples include conflicts between increasing agricultural activities and big predators, such as wolves and bears, as well as degradation of traditional building culture.

Romanian farmers started Eco Ruralis as a response to the Common Agricultural Policy of the European Union, as they realized that they must organize themselves to participate in political processes. Besides this, Romanian peasants, especially small landowners, are faced with economic pressure, e.g. through land grabbing.

(b) Aiming at a social goal

One of the main features of social innovation is its purpose of "meeting social goals" (Mulgan et al. 2007: 8). In other words, social innovations serve the society and "enhance outcomes on societal well-being" instead of maximizing the benefit of an individual or company. All three case studies show good examples of social goals:

The community garden BioSzentandrás started to tackle unemployment, as employment is one of the most important strategies to fight against poverty and give the population a purpose. Secondary objectives were to encourage regional cooperation and social interaction within the village, as well as to produce healthy food for the community.

The Pogány-havas Association fights for a better relationship between nature and mankind. To this end, they raise awareness of environmental concerns, and propose solutions to minimize conflicts. Often this is connected with the preservation of knowledge about traditional agriculture, as practices like the hay meadow practice is creating valuable ecosystems. Moreover, they protect cultural and building heritage and promote sustainable tourist activities.

Eco Ruralis objective is to offer Romanian farmers a platform to organize themselves and defend their rights, against external interest. They promote environmentally friendly agricultural practice, such as organic farming; and the usage of (non-modified) traditional seeds, which contributes to the protection of the environment and to the preservation of the livelihoods of small-scale farmers. Other goals include the production of healthy foods and ensuring the food sovereignty in Romania.

(c) Better use of existing resources & assets

As discussed by Hubert, SI offers new approaches that enable a more effective use of territorially specific assets, such as local knowledge or culture (2010: 53). To take up these existing resources is also an important element of endogenous development, as "territorial specificities can be built on to provide a development platform" (Kluvánková et al. 2018: 14).

The case of BioSzentandrás shows very clearly how local elements were taken up to establish the community garden, and regional networks in the following. The general conditions in Hernádszentandrás were always favorable for agriculture: good soils, groundwater and the major markets of Miskolc and Košice in proximity. Despite this, the small-scale vegetable production, even for self-consumption, had almost completely disappeared from the village (Kantoáné Kovács et al. 2016: 25). Another important asset that was taken up by BZS was the "available human labor" (Szpociński & Szparkowska 2018)

The Pogány-havas Association builds upon the region's natural and cultural values. Of high importance is the traditional knowledge on land use-management, such as how to use hay meadows, and building culture.

Eco Ruralis mobilizes and channels the knowledge and energy to engage in political and societal change from Romanian farmers; the organization relies on their involvement.

(d) Establishment of new relationships and networks

Social innovation projects enable "new social relationships between previously separate individuals and groups" (Mulgan et al. 2007: 35) and change "the dynamics, roles, and relationships between many players" (Preskill & Beer 2012: 2). SI often includes involvement of many different actors in organizational structures that can be referred to as governance (Jenson & Harrison 2013: 19).

In Hernádszentandrás the community garden project strengthened community cohesion and social interaction, by giving people with different social backgrounds a common working place. Apart from this, they built a relationship between the local producers and the consumers of vegetables and fruit. On a larger scale regional networks, for instance with restaurants, were established.

Pogány-havas' organizational framework is a network of seven municipalities. Moreover, the association works in cooperation with several NGOs, entrepreneurs and scientists, who form common goals for the region's well-being. The horizontal connection with other NGOs also plays an important role for Eco Ruralis.

As pointed out by Moulaert et al. 2005 the change of relationship is not limited to the relationships within a system, but implies also external relations, including power relations (2005: 1978).

For instance, by organizing themselves and creating a strong inner-network of Romanian farmers, EcoRuralis established a communication channel between peasants on the one side, and

governments, respectively transnational organizations or companies, on the other side. The association enables a much better bargaining position.

(e) Civil society involvement

Even though SI can occur in all sectors the civil society always plays an important role. As it was put in a publication by the European Commission the "purpose is to innovate in a different way through the active engagement of society itself (2011: 30). In all three projects the civil society is largely involved.

The Bio-Team, the first farmers of BioSzentandrás, was represented by community members without any agricultural background. They, as civil society, were integrated through the employment possibility. Nowadays, the community garden is open to the public. Everybody has the possibility to participate in the gardening practice and to learn about organic agriculture. Through the Open Garden Imitative the knowledge transfer is systemized.

Pogány-havas' activities are often operated by the local population, which is, for instance, actively involved in various training activities. The connection with civil society is therefore very strong. Apart from that, the association also engages (external) volunteers in assisting ongoing projects and welcomes international support provided by universities through the ERASMUS study program.

Eco Ruralis seeks involvement with civil society both within Romania and throughout Europe in order to foster networks of peasant solidarity and idea sharing related to political representation and action. Their membership in transnational groups such as La Via Campesina is seen as crucial to facilitating their ability to represent and advocate for their members before the government and on the international scene.

4.2. Discussion of the role of SI in the Carpathian Region

All three projects, as demonstrated in the Section 4.1, show strong signs of social innovation as they fulfill all five principles of SI that we have deduced from literature. It means that SI solutions can be implemented at different scales, from local to regional and (inter-)national.

The examples show the variety of challenges that can be addressed by social innovation projects, ranging from land use conflicts, lacking political representation to adverse demographic and environmental trends. As such, the Carpathian Region can definitely benefit from the approach.

Even though it was never the purpose of this paper to evaluate the projects in terms of their effectiveness, all projects were reported as successful. They lead to the formation of local and regional (food) networks, ameliorated the bargaining position through negotiations with bigger organizations, and gave former unemployed people new job opportunities.

The situations of the study sites are not unique but are shared by many other places and communities. Still, not every other place finds an equally good solution. In our case studies one could identify multiple factors that lead to the formation of the projects. Firstly, there were opportunities, such as the grant that was given to Hernádszentandrás or the administrative restructuring in Romania. Secondly, there were pressing events, such as the CAP negotiations, and, thirdly, there were strong groups or individuals putting effort and personal capacities in finding a solution, e.g. Üveges Gábor for BioSzentandrás, or motivated farmers for Eco Ruralis. Analyzing the point of departure of social innovation projects based on these or similar factors should be the subject of future research.

The topic of the starting point is closely connected with the question of how to promote the formation of SI initiatives. The important role of the European Union as funder, on the one hand, and as a collaborating institution on the other, is highlighted by all three projects.

Most SI solutions are highly context dependent. This is, on the one hand, a real strength as they offer tailor-made solutions. On the other hand, this lack for transferability impedes the spread of an idea, since it is not easily possible to implement it somewhere else. The conception and implementation phases usually constitute the most important financial hurdle for new projects. Moreover, as highlighted by the Bureau of European Policy Advisers (2011: 104) many SI projects, like the ones reviewed, rely on charities, foundations and public support. This establishes not only a dependency, but these funding sources tend not to offer growth capital. In this context it is particularly interesting to keep on examining BioSzentandrás' process of franchising.

It takes both human capital in terms of knowledge of funding schemes and strong international and national schemes themselves to support SI initiatives. Regional, national, and supranational governments should be aware of these constraints when designing and developing new funding policy, putting out calls for tenders and developing grants that target smaller, grassroots projects that are a rich source for innovation that, if it is successful funded and supported, can ultimately lead to the development of transferable skills, knowledge, and forms of economic sustainability with wider implications for other regional and national communities and initiatives.

As discussed by Mulgan et al, SI is about improving "societies' capacities to solve their problems" (2007: 7). Still, what must be emphasized, the examples show, that the projects tackle many problems that could also be taken up by the government. For instance, the BioSzentandrás project only started as the Hungarian state failed to offer a perspective for the inhabitants. Especially remote, rural areas are often left aside by political intervention. By underlining the possibility of these regions to solve their problems themselves through social innovation shouldn't mean that the state can withdraw from its responsibility to provide good living conditions for the population.

5 Policy recommendations

Based on the analysis and discussion of the case studies we put forward the following policy recommendations. The recommendations concern detected areas of improvement, and address the UN, on the one hand, and national governments and the European Union on the other hand.

First states and international organisations play an important role in enabling SI initiatives through funding. While ample funding exists at the European level, other application procedures to receive such funding are often complex and difficult to complete. This difficulty weighs heavily on small, local SI initiatives. Therefore, governmental support must focus on streamlining and simplifying funding procedures where possible, and ensuring easy and affordable access to professional help in the submission of tenders. Additionally, as financial support is often only available in the beginning of a project, we highlight that it is also important to offer capital when the project is already established in order to enable growth and scaling-up of projects. Overall, sustained financial support is necessary for the goal of project transfers and expansion and should be provided on the (inter)national level.

In order to support this innovation, it is important that maintaining and increasing governmental financial support comes together with respect to the autonomy of such initiatives to operate as they see fit. Policy should take into account the importance of local knowledge, investment, and creative development as the backbone of Social Innovation, and stress non-restrictive, hands-off approaches to support it, allowing local projects the independence to pursue their own ideas.

As the impact of SI initiatives is often limited to a certain area, work should be done to give projects a better visibility on a larger scale. Seeing good practice examples can be inspirational for other people, who might therefore start an initiative themselves. The UN can support such processes by awarding best practice and building a knowledge exchange platform to allow such projects to benefit from idea sharing.

In brief, it is recommended to:

- 1. facilitate the accessibility of (European) tenders, especially in terms of human capital;
- 2. strengthen national and international funding schemes for SI projects;
- 3. offer funding in later project phases to stimulate growth of initiatives;
- 4. recognize the autonomy of SI projects with respect to local knowledge, investment and creative development;
- 5. increase visibility of SI in general;
- 6. build platforms for best practice and knowledge exchange.

6 Concluding remarks

In a time of complex problems there is a need for innovative and adapted solutions. Often these solutions include social innovation. It was the leading question of this paper to examine how social innovation projects can contribute to the sustainable and inclusive development of the Carpathian region. For this purpose, we reviewed three case studies. The surveyed projects were all implemented on different scales, from local to regional and (inter-)national. All respond to the existing problems or challenges that can be found in area:

BioSzentandrás is a community garden project in a village in Northern Hungary that tackles unemployment and social exclusion among the local population. Nowadays, the initiative is a part of regional food networks and is actively involved in knowledge transfer about organic farming.

Pogány-havas is a micro-regional association in Romania, which focuses on promoting a sustainable and more peaceful relationship between mankind and nature, while protecting cultural heritage and establishing tourism opportunities in the region.

Eco Ruralis is a Romanian NGO, giving peasants a platform to participate in political, social and economic reforms. Apart from fighting for farmers' rights, it promotes organic farming through seed exchange and knowledge campaigns.

As previously demonstrated, SI offers valuable solutions to some challenges of the Carpathian Region. Thus, this study can only be seen as a starting point for further research about the contribution of SI initiatives to the development of rural areas. The further analysis of more projects and a multilayer evaluation design, with a particular focus on social outcomes, could bring better evidence about the efficiency of the initiatives.

As a critical thought, SI as a vehicle to improve societies' capacities to solve their problems themselves is no excuse for national governments to withdraw from the responsibility to provide good living conditions. That applies especially to remote, rural areas that are often left aside by political intervention.

Still, all projects show positive effects and contribute to making the Carpathian Region somehow more inclusive, sustainable and environmental aware. In particular, the work of the three organizations represents the spirit of the SDGs mentioned in the introduction, particularly of Goals 10 (Reduced Inequalities), 12 (Responsible Consumption and Production), and 15 (Life on Land), wherein efforts made to increase the economic viability of local networks through local change simultaneously reduces inequalities in said communities while preserving and protecting ecosystems under threat. The fact that the concepts of SI are employed by autonomous projects in their efforts to develop and enrichen their social and economic networks speaks to the transformative potential of such innovative developments.

7 Bibliography

- Alberton, M., Andresen, M., Citadino, F., Egerer, H., Fritsch, U., Götsch, H., Hoffmann, C., Klemm, J., Mitrofanenko, A., Musco, E., Noellenburg, N., Pettita, M., Renner, K., Zebisch, M. (2017). Outlook on climate change adaptation in the Carpathian Mountains. United Nations Environment Programme, GRID-Arendal and Eurac Research, Nairobi, Vienna, Arendal and Bolzano
- Bauer, R. (2017) The Framework Convention of the Protection and Sustainable Development of the Carpathians. CESCI Budapest.
- Benedict, M. A., McMahon, E. T. (2001). Green Infrastructure: Smart Conservation for the 21st Century. Sprawl Watch Clearinghouse Monograph Series.
- Bock, B. (2012). Social innovation and sustainability; how to disentangle the buzzword and its application in the field of agriculture and rural development. Studies in Agricultural Economics, 114(2), 57–63.
- Borsa, M., Chifelea, C., Egerer, H., Gal, Z., Glowacki, W., Halas, M., Hopfgartner, V., Illes, I., Niewiadomski, Z., Ptacek, P., Wiederwald, D. (2009). VASICA Visions and Strategies in the Carpathian Area. Protection and Sustainable Spatial Development of the Carpathians in a Transnational Framework. UNEP United Nations Environment Programme. The Carpathian Project.
- Bösze, S., Meyer, H. (2014): Regional Development Opportunities of Protected Areas and Natural Assets in the Carpathians. Work Package 4. Integrated Management of Biological and Landscape Diversity for Sustainable Regional Development and Ecological Connectivity in the Carpathians. WWF Danube-Carpathian Programme, Vienna, Austria.
- Caulier-Grice, J. Davies, A. Patrick, R. Norman, W. (2012) Defining Social Innovation. A deliverable of the project: "The theoretical, empirical and policy foundations for building social innovation in Europe" (TEPSIE), European Commission 7th Framework Programme, Brussels: European Commission, DG Research
- Centrum Environmentalnych Aktivit, Green Agora, Ecological Institute for Sustainable Development, & Conzorzium EUREK. (n.d.). Best practices from the Grundtvig "Local Heritages in the mirror of Europe" project partner's countries (Romania, Slovakia, Hungary, Italy).
- Choi, N., Majumdar, S. (2015). Social Innovation: Towards a Conceptualisation. In S. Majumdar et al (Ed.), Technology and Innovation for Social Change. Springer India.
- Council of the European Union (2018) Common Agricultural Policy. URL: https://www.consilium.europa.eu/en/policies/cap-introduction/# (December 2018)
- European Commission. (2011). Empowering people, driving change. Social innovation in the European Union. Bureau of European Policy Advisers.
- European Commission. (2014). A map of social enterprises and their eco-systems in Europe. Country report: Hungary. ICF Consulting Services.

- European Investment Bank Institute, & Fondazione Cariplo. (2015). Social Innovation Tournament. Final Event 24, (September 2018)
- Fontana, A., Frey, J. (2005). The Interview: From Natural Stance to Political Involvement. In: Norman Denzin & Yvonna Lincoln (Hrsg.), The Sage Handbook of Qualitative Research [3. Edition]. Thousand Oaks/London/New Delhi: SAGE Publications: 695-728
- Food Sustainability Index (2018) A future for the EU's common agricultural policy. Center for Food and Nutrition. The Economist Newspaper Limited. URL: http://foodsustainability.eiu.com/a-future-for-the-eus-common-agricultural-policy/ (December 2018)
- Garbor, Ü; Vargas, P. (2015) 2015 SIT Finalist BioSzentandrás. Speech for the Final Presentation of the Social Innovation Tournament. European Investment Bank. Milano. URL: http://godialy.com/clipsg/Q8ZegT1B3dA (November 2018)
- HAS Centre for Regional Studies. (2007). Socio-economic analysis of the Carpathian area. UNEP, Interreg III B CADSES. Hungarian Academy of Sciences. Pécs.
- Harghita County Council (2018) Harghita County Council. URL: https://judetulharghita.ro/harghita-county-council.html#(December 2018)
- Heller, W. (2000). "Socioeconomic Transformation in Rural Romania through the Eyes of Experts: Demographic and Social Issues." GeoJournal 50 (2): 151–55. https://doi.org/10.1023/A:1007120608735. (December 2018)
- Horlings, L. G., Marsden T. K. (2014). Exploring the 'New Rural Paradigm' in Europe: Eco-Economic Strategies as a Counterforce to the Global Competitiveness Agenda. European Urban and Regional Studies 21 (1): 4–20. https://doi.org/10.1177/0969776412441934. (December 2018)
- Jenson, J., Harrisson, D. (2013). Social innovation research in the European Union Approaches, findings and future directions. Policy Review. European Commission. Directorate-General for Research and Innovation, Socio-Economic Sciences and Humanities.
- Juppenlatz, L. (2012). A Neo-endogenous approach to Rural Development Policy in the North East of England Adopting. AESOP, 1–10.
- Kantoáné Kovác, J., Varga, E., & Nemes, G. (2016). Understanding the process of social innovation in rural regions: some Hungarian case studies. Studies in Agricultural Economics, 118, 22–29.
- Kelen, A. (2012) Social enterprises in today's rural Hungary. In: The Civil Review. Civil Szemle. IX. ÉVFOLYAM 4. SZÁM. Budapest. ISSN 1786-3341
- Kluvánková, T., Gežik, V., Špaček, M., Brnkaláková, S., Slee, B., Polman, N., ... Weiss, G. (2018). Social Innovation in Marginalised Rural Areas. Innovative, Sustainable and Inclusive Bioeconomy Work Programme: Topic ISIB-03-2015. Unlocking the growth potential of rural Transdisciplinary understanding of SI in MRAs.

- Kondracki, Jerzy A. (2014): Carpathian Mountains. Encyclopædia Britannica, inc. URL: https://www.britannica.com/place/Carpathian-Mountains (August 2018)
- KSH Hungarian Central Statistical Office (2011) Population number, population density.
 4.1.1.1 Population, area, population density. URL: http://www.ksh.hu/nepszamlalas/tables_regional_05 (November 2018)
- Marsden, T. (2016). Exploring the Rural Eco-Economy: Beyond Neoliberalism. Sociologia Ruralis 56 (4): 597–615. https://doi.org/10.1111/soru.12139. (December 2018)
- Moulaert, F. (2009). Social Innovation: Institutionally Embedded, Territorially (Re)Produced. Social Innovation and Territorial Development, 11–23.
- Moulaert, F., Martinelli F., Swyngedouw E., Gonzales S. (2005) Towards alternative model(s) of local innovation. UrbanStudies 42 (11) pp. 1969–1990
- Mulgan, G., Tucker, S., Ali, R., Sanders, B. (2007). Social innovation. What it is, why it matters and how it can be accelerated. Saïd Business School, Oxford. The Young Foundation.
- Mulgan, G., Tucker, S., Ali, R., Sanders, B. (2008). Social Innovation. Stanford Social Innovation Review.
- Nagy, J. (2018) Orbánnak fogalma sincs a vidék agóniájáról? 14.hu. URL: https://24.hu/belfold/2018/07/13/orbannak-fogalma-sincs-a-videk-agoniajarol/ (September 2018)
- OECD Organization for Economic Co-Operation and Development. (2011) Fostering Innovation to Address Social Challenges. URL: https://www.oecd.org/sti/inno/47861327.pdf (December 2018)
- OECD Organization for Economic Co-Operation and Development. (2015). Recommendation of the Council on Budgetary Governance. Public Governance and Territorial Development Directorate.
- Pogány-Havas Kistérség (2018a). About Us. Members. URL: http://poganyhavas.hu/menu.php?menu=szervezet&almenu=4 (November 2018)
- Pogány-Havas Kistérség (2018b). Projects. Village view preservation project. URL: http://poganyhavas.hu/menu.php?menu=projektek&almenu=8 (November 2018)
- Pogány-havas Microregion Association (2013). Short presentation of the protected areas. URL: https://www.mountainhaymeadows.eu/region.html (November 2018)
- Pozitív Nap (2012) BioSzentandrás: borsodi mintafalu óriási példaértékkel. URL: http://pozitivnap.hu/belfold/bioszentandras-borsodi-mintafalucska-oriasi-peldaertekkel
- Preskill, H., Beer, T. (2012) Evaluating Social Innovation. FSG. Center for Evaluation Innovation. URL: https://guelph.ca/wp-content/uploads/Contract_12-191_Description.pdf (December 2018)
- Rodics, G., Knowles, B. (2011) Supporting Agriculture, Tradition and Ecosystems in the Pogány-Havas Microregion of Transylvania (Romania). In: Mountain hay meadows:

- hotspots of biodiversity and traditional culture, Ed. Barbara Knowles, Society of Biology, London. ©Pogány-havas Association
- Streifeneder, T., Hoffmann, C., Vanin, A. (2015). Background analysis and documentation as basis for the development of the Carpathian Convention Sustainable Agriculture and Rural Development Protocol. European Academy Bolzano (EURAC Research), Institute.
- Szirmai, P. (2015) Gazdag Szegények. Figyelő. 2015/51–52. Budapest. URL: http://honlapom.hu/pages/hernadszentandras/contents/startpage/doc/hatranyosfalu.pdf (November 2018)
- Szpociński, W., Szparkowska S. (2018) Local Tastes of Associations on Agreements. The local food & wine in Georgia, Moldova and Ukraine: A savoury guidebook. Development Policy Foundations, Visegard Fund. URL: http://fpr.org.pl/wp-content/uploads/2018/06/Local-Tastes-of-Association-Agreements.pdf (November 2018)
- Tudor, M. (2015). "Small Scale Agriculture as a Resilient System in Rural Romania." Studies in Agricultural Economics 117 (1). https://econpapers.repec.org/article/agsstagec/206112.htm (December 2018)
- UN United Nations (2018) 17 Goals to transform our World. URL: https://www.un.org/sustainabledevelopment/ (December 2018)
- Utveckling, H. (2013). Assessing Vulnerability of Agriculture in the Carpathian Region to Climate Change. Uppsala University, Department of Earth Sciences.
- Werners, S., Szalai, S., Kőpataki, É., Csaba Kondor, A., Musco, E., Koch, H., Zsuffa, I., Trombik, J., Kuras, K., Koeck, M., Lakatos, M., Peters, R., Lambert, S., Hlásny, T., Adriaenssens, V. (2014). Future imperfect? Climate Change and Adaptation in the Carpathians. UNEP United Nations Environment Programme. CARPATCLIM, CARPIVIA and CarpathCC

8 Depictions and tables

Image 1. Carpathian Mountains, own depiction	8
Image 2 location of BioSzentradrás, own depiction	10
Image 3, SDGs addressed by BioSzentradrás, (UN 2018)	11
Image 4, location of Pogány-havas, own depiction	13
Image 5, SDGs addressed by Pogány-havas, (UN 2018)	13
Image 5, location of Eco Ruralis, own depiction	15
Image 6, SDGs addressed by Eco Ruralos, (UN 2018)	34
Table 1. Analysis of 6 principles of social innovation	23

9 Appendix

Interview guide

Interviev	wer:	
Interviev	wee:	
• 1 • 1	Introduction of Interviewer(s) Introduction of our research Notification of audio-recording Notification of Interviewee's anonymity Data usage policy	
Question	ns for the interview:	
1.	Could you introduce yourself?	
2.	How long have you been with the project? Why did you start working here?	
3.	How was [project] founded?	
4.	Describe your average day at [project].	
5.	How is [project] organized and financed?	
6.	What do you think are the biggest challenges facing the Carpathian mountains/your region, and how should they be addressed? How does [project] react to these challenges?	
7.	(if not yet answered: What is the underlying mission of [project]?)	

 8. Do you think that [project] achieves this/these goal(s), and if so how? 9. (if not yet answered: What are the main achievements of [project]?) 10. In what way do you involve the civil society in your projects? 11. What are some of the challenges facing your work? 	
achievements of [project]?) 10. In what way do you involve the civil society in your projects? 11. What are some of the challenges facing	
society in your projects? 11. What are some of the challenges facing	
12. Are there any other projects that you work in collaboration with? Do you know any similar projects in the region?	
13. Where do you see [project] in the future? What about yourself?	
14. Is there anything you would like to add?	