

Article

# Sustainable Development of a Peripheral Mountain Region on the State Border: Case Study of Moravské Kopanice Microregion (Moravia)

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**Abstract:** The sustainability of rural areas is considered to be most threatened in peripheral, hardly accessible microregions with insufficient economical sources. The paper analyses one such rural area in the eastern part of Moravia from the viewpoint of individual economic, social, and environmental sustainability pillars. The area under study is the mountain territory on the border with Slovakia, which is under large-scale landscape protection. The area with very limited economic sources has been impacted with a change to the geopolitical situation after 1993 (from the centre of Czechoslovakia to the fringe of Czechia). It was stated that the environmental pillar is in the best of conditions; however, perhaps threatened with missing technical infrastructure in relation to the disposal of solid, liquid, and gaseous waste, the social pillar is improving in relation to the post-productive transition, whereas the economic pillar is the most fragile because of its dependence on exogenous jobs in surrounding towns. In general, the microregion seems to be sustainable at the moment. Long-term sustainability will depend on the general economic, demographic, and climatic development of the country and Europe.

**Keywords:** sustainability; rural periphery; borderland; White Carpathian Mts.; Moravia

## 1. Introduction

Problems in rural areas are often discussed in relation to rural abandonment [1], rural poverty and exclusion [2], rural aging [3], rural unemployment and working migration [4], and other similar symptoms. However, it shows that the mentioned problem concerns relatively small portions of rural microregions. They are usually the most peripheral and marginal rural areas of individual countries. There are usually difficult-to-access (mountain) territories with unsuitable conditions for intensive agriculture, with poor conditions for tourism development, eventually with some ethnically or socially conditioned problems. We choose one of such microregions in Czechia, which is situated on the very eastern border of the country in the mountain borderland area, situated far from regional centres.

The concept of sustainability is usually based on three social, economic, and environmental pillars. Alternatively, Zamboni et al. [5] speak about the economy, landscape, and energy. In some works, the governance of the area can be considered to be a fourth pillar [6], which should serve as a tool for gaining optimum portions among other pillars using local human and social sources. Copus and Crabtree [7] relate the concept of sustainability to rural Scotland. They applied the three pillars into the following aspects: demographic development, economic development, and society and culture. Domínguez, de Noronha, and Vaz [8] investigated the sustainability of the border region in the Spain–Portugal borderland. Besides their findings that more developed municipalities are less sustainable than less developed ones, they concluded that local systems of governance play an important role. Rodríguez-Rodríguez and Martínez-Vega [9] deal with the sustainability of protected

peripheral territories, turning their attention to environmental protection, which is not our precise aim. The sustainability of rural areas in relation to the globalization was mentioned by Št'astná [10] who sees the goal in a reconciliation of a keeping of a sustainable economic development combined with an improvement of living conditions of the local population. Within the globalization process, rural sustainability may serve as a barrier of local identities and cultures.

Neumayer [11] distinguishes between weak and strong sustainability. In the first case, the sources of one pillar can be substituted with sources in another one—typically environmental deficiency can be balanced by an economic and social development. However, strong sustainability means that resources of different pillars are complimentary but not interchangeable.

The liberal strategy usually consists of the support of the most prospective activities at the costs of the remaining ones. However, such a strategy seems to be temporary. As soon as the original motivation runs out, the insufficiencies of other pillars start to play a more important role step-by-step. Keeping the balance among all three pillars is often the most common problem solved from a long-term viewpoint. How to reach an equilibrium among these pillars is a crucial sustainability problem.

Our research is aimed at the:

1. Verification of possible methods of sustainability analysis and an evaluation of the sustainability of one of the most peripheral areas of the country.
2. An attempt to generalise the results. We focused on verifying the sustainability of this settlement structure in the usual three pillars.

#### *Rural Periphery and Sustainability*

In international literature, rural sustainability is used most often as the sustainability of agriculture [12]. Sometimes it also concerns rural tourism [13], renewable energetic sources [14], or ecological services [15]. This means that the investigation is directed mainly to partial factors of the development of rural areas. Milanović, Đorović, and Stevanović [16] speak about human capital for rural sustainability, but again, their approach concerns human capital within agriculture. Peripheral areas as territories with badly accessible social services are investigated in Italy [17]. Rural sustainability in extra-European countries is more complex; however, it is also mostly directed towards agricultural, land use, and the peasant sector [18,19].

European rural areas are in a transition to post-productive countryside [20], which also concerns the Czech countryside [21]. During this period, agriculture plays an important role in land use but its importance in the rural economy and social systems is decreasing, which is why rural sustainability should be conceptualised as a regional—not an agricultural—problem. Such an approach has to consider the views of different actors—public administration, the entrepreneurial sector, the population, but also visitors. Cultural aspects of the rural development come to the fore within the post-productive transition [22].

The countryside is not a homogenous category. It could be divided into more sub-categories with quite different characteristics both on a European level and on the level of national settlement systems. The following criteria could be used to differentiate rural areas from others: a distance from regional centres, natural conditions, sources, accessibility by transport, historical aspects including ethnic changes [23].

As a rule, it is possible to earmark at least three types of countryside: suburban, peripheral, and intermediate. Each of the types has more sub-types. The suburban countryside has social characteristics closer to cities than to rural areas. Its sustainability is threatened by the loss of its rurality. The intermediate countryside is easily accessible with good conditions for agriculture. It is threatened by the fact that agriculture is losing its importance for the creation of regional wealth and its accessibility opens such regions to the competition of urban centres, including distanced ones.

The negative tendencies connected with underdevelopment occur mainly in peripheral microregions, which could be divided for the border periphery and inner periphery in the Czech case [24]. The most peripheral areas in the Czech conditions are those that do not have urban centres (not even a small one). This is mainly due to very small microregions consisting of a limited number of

rural villages in the worst accessible positions with an extremely low number of endogenous sources for development. Although they have a relatively good potential for tourist attractiveness (mainly natural, historical, or folkloristic) this potential is not sufficiently used due to missing infrastructure, insufficient advertising, and poor preparation of local people to serve tourists. In Czech conditions, these factors are often connected with post-war consequences – the ethnically based population exchange in the borderland, which has created a specific social climate.

In these areas of sustainability pillars, the environment is usually in the best condition. Local nature is usually under legal protection, which often limits the development of the economic pillar and, indirectly, the social one. The main sustainability dilemma is to ensure there is economic development and to keep people, especially young and educated ones, in the microregion while maintaining the high quality of the local landscape.

## 2. Materials and Methods

As Smith [25] highlights, it is very difficult to choose indicators for measuring sustainability in rural systems. The problem is related to the fact that individual pillars of sustainability (social, economic, institutional and environmental) should not be the centre of attention, but their interlinkages. Ideally, an indicator of sustainability would be one simple, composite, numerical measure. Attempts to construct such an indicator are known, e.g. ecological footprint or the sustainable progress indicator. However, none of these indicators can cover the scope of the problem. The situation is complicated with the fact that every society can have its own goal and feelings of threats. From it follows that indicators, or at least their evaluations, must also be different in disparate societies. For now, there is nothing to do but try to evaluate the logical links between them and confront them with a specific territory on the basis of various indicators. While this may seem like an unscientific procedure, with the researchers' sufficient personal experience, it may be much closer to reality than the construction of sophisticated indicators.

In the investigation, different methods were combined: statistical data, secondary source excerpts, field research, interviews with local actors, and a questionnaire. The social pillar was characterised by means of statistical data about the population with an aim to evaluate the population's stability, possible depopulation tendencies, or social exclusion. A feeling of local and microregional identity gained by sociological methods was considered as an important factor of social stability.

The selection of a small area allows a combination of quantitative and qualitative methods that is considered optimal. Quantitative methods (statistical data and questionnaires) usually bring higher representativeness, whereas qualitative methods enable researchers to consider qualitative aspects of the problem and not speak about problems with the verity of quantitative data. Statistical data relates to the place registered population as a rule, which can be sometimes different from reality; the data obtained using a questionnaire can be blurry due to its dependence on respondents' actual feelings. This is why the field research, observations, and interviews were applied alongside the quantitative data. Even inter-relations among pillars of sustainability are more receivable through qualitative research.

The economic pillar was characterised by means of the education structure (as a presupposition to succeed in the labour market), by unemployment and engagement in individual economic branches and the entrepreneurial activities of local people, commuting for work. Individual activities in agriculture, industry, tourism, and other services were commented upon. The environmental pillar was evaluated mostly by means of the landscape structure and the coefficient of ecological stability, calculated as a share of ecological stable areas (forests, grasslands, and waters) and ecologically unstable areas (mostly arable land, built-up areas, and 'other' areas). Additionally, the basic technical infrastructure for the elimination of waste was considered.

The following statistical databases were used: Public Database of the Czech Statistical Office, results of the Population Census of 2011, and the Regional Information Service of the Ministry of

Regional Development of the Czech Republic. The field research, which consisted of observations, photo documentation, and interviews with local people, was conducted in the summer of 2018. Mayors of all municipalities (except the mayor of Starý Hrozenkov, who was not interested) were interviewed.

The questionnaire was organized in Spring of 2019. Besides of questions characterizing the respective respondent (gender, age, education, economic status), questions in the questionnaire were directed to following problems: a relation to the microregion (original settler, new settler, visitor), residential preferences in relation to the microregion, services which are felt as mostly missing, active participation in local social life, opinion concerning the tourism, opinion of the quality of municipal services, infrastructure, environment, security etc., identity of the respective municipality, imaginations about possibilities of the development. Due to the dispersed character of the settlement, a combination of an electronic and printed form was chosen. The electronic form used the Facebook network by means of which groups of interest dealing with Moravské Kopanice were addressed. The printed form used a collection point, which was situated in a supermarket JEDNOTA in Starý Hrozenkov; this was evaluated as the most visited place in the microregion. Together, 68 answers were obtained. The structure of the respondents is shown in Table 1.

**Table 1.** Structure of respondents.

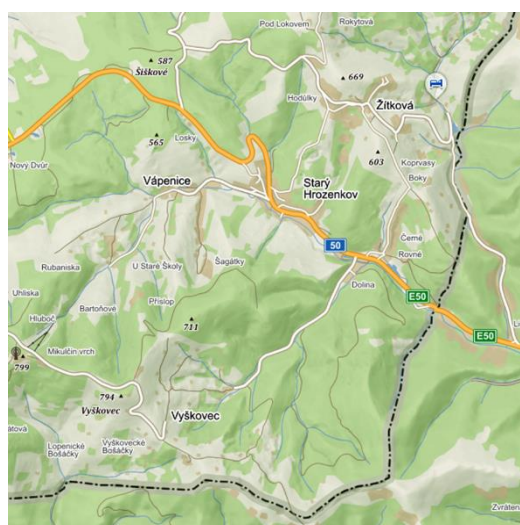
	Municipality	St. Hrozenkov	Lopeník	Vápenice	Vyškovec	Žitková	Σ
	<b>In total</b>	<b>39</b>	<b>5</b>	<b>9</b>	<b>6</b>	<b>9</b>	<b>68</b>
sex	Female	29	3	4	5	6	47
	Male	10	2	5	1	3	21
age	15–20	3	0	0	0	1	4
	21–35	13	3	3	1	5	25
	36–60	13	1	5	2	3	24
	61+	10	1	1	3	0	15
Education	Primary	3	0	1	2	0	6
	Trained	13	4	1	1	3	22
	Secondary	14	0	6	2	2	24
	Tertiary	9	1	1	1	4	16
Social status	Student	4	0	1	0	2	7
	Employee	21	1	7	3	4	36
	Self-employed	1	2	0	0	2	5
	Retired	10	1	1	3	0	15
	Others	3	1	0	0	1	5

### *The Study Region*

The microregion, called Moravské Kopanice, was chosen as a case study area to illustrate the sustainability of a Czech periphery. It forms a special part of the ethnographical region Moravian Slovakia, which is situated in the Moravian part of the Moravian–Slovak border (Figures 1 and 2). The compact village Starý Hrozenkov forms its centre, which is completed with other municipalities that have a dispersed settlement: Lopeník, Vápenice, Vyškovec, and Žitková. Bojkovice (population 4400, distance 15 km) is the closest small town, whereas Uherský Brod (population 16,000) on the Czech side and Trenčín (population 55,600) on the Slovak side of the border are the closest important centres, both of which are a distance of 22 km. The territory is situated in the White Carpathian Mts. It has been announced by the Protected Landscape Area, both from Moravian and Slovak parts from 1980, to be an example of the cultural landscape with significant harmony with nature. It became also a part of the UNESCO biosphere reserve in 1996. Moravské Kopanice is characterised by a scattered settlement with an alternation of small forests and small fields.



**Figure 1.** The geographical position of the territory under study within the Czech Republic. Source: Mapy.cz.



**Figure 2.** The study territory. Source: Mapy.cz.

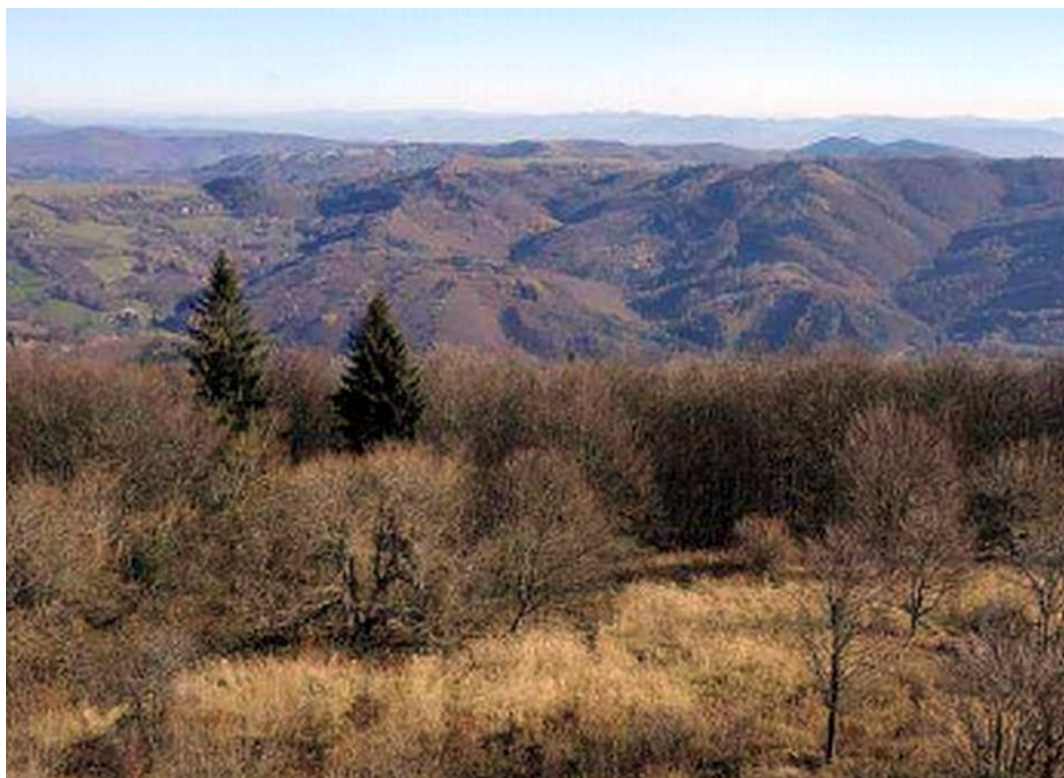
Due to poor accessibility, the distance from cities and the borderland position, the territory out of Starý Hrozenkov was settled relatively late (in the second half of the 18th century). The settlers mostly came from Upper Hungary (today's Slovakia). The economy was mainly based on extensive animal production (originally sheep and later cattle breeding). Wood mining and processing and stone quarrying were the only branches based on local sources. As a border region, the area was often a target or transit of military campaigns. The situation changed in 1918 when the area of Moravské Kopanice became an important transport connector between the western and eastern parts of the then Czechoslovakia.

Surrounding towns, both on the Moravian and Slovak side of the border, were industrialised in the 1930s when Czechoslovakia was threatened by Nazi Germany. All large Czechoslovak weapon factories built their daughter companies in the difficult-to-access terrains of the mountain ranges between Moravia and Slovakia, meaning more protection from the viewpoint of bombing or assault by enemy forces.

The industrial character was also kept during the communist regime. The agriculture was collectivised relatively late due to the unsuitable conditions for intensive agriculture. The breakthrough of the Drietomica River through the White Carpathians (road Nr. 50 Brno-Trenčín) was one of the most frequent connectors between Czechia and Slovakia. The geopolitical position substantially changed in 1993 when Czechoslovakia was divided between Czechia and Slovakia and a new standard border was put in place. Although the border was easily exceeded, economic relations (commuting of people to industrial plants in Trenčín city, Slovakia) ended. The Moravian-Slovak borderland started to marginalise [26].

Altogether, 1650 inhabitants lived in the area, almost 900 of whom lived in Starý Hrozenkov. The population density was 33 people per km<sup>2</sup>. The local population was relatively stable, with a high percentage of natives, who were associated with their region, its landscape (Figure 3), villages,

and neighbours. However, except for Starý Hrozenkov, the dispersed settlement structure did not allow basic social services such as shops, pubs, or post offices, nor schools or doctors' surgeries, etc.



**Figure 3.** Rugged relief of the White Carpathian Mts. Photo E. Kundratová.

### 3. Results

#### 3.1. Evaluation of the Sustainability

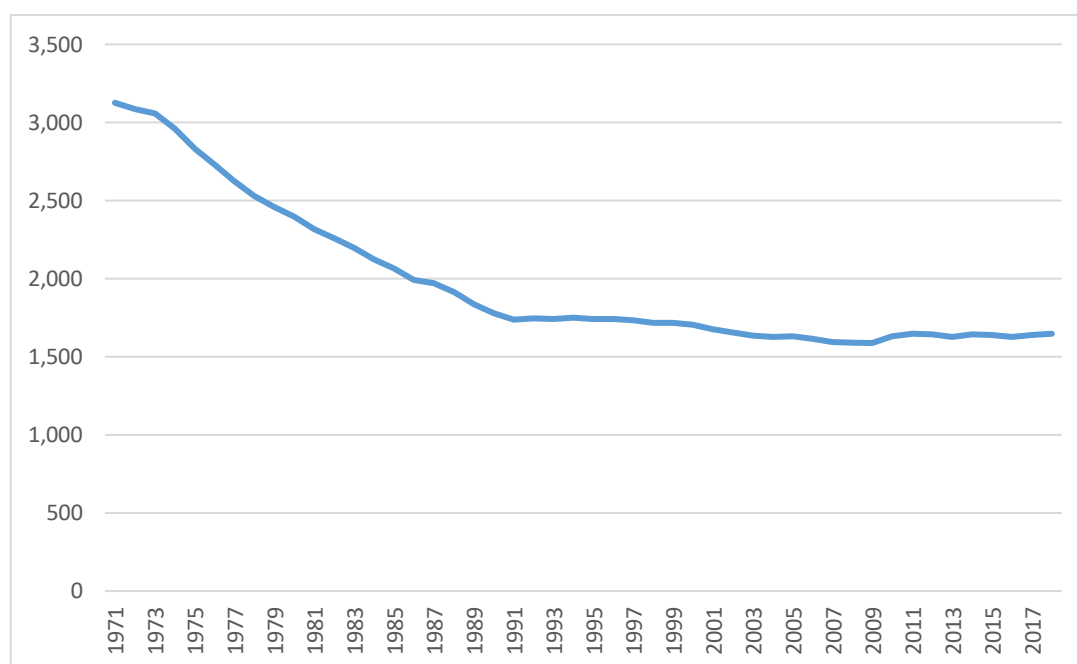
##### 3.1.1. The Social Pillar

During the second half of the last century, the microregion (especially the small villages) quickly depopulated (Figure 4). The most rapid downfall could be seen until 1990. Later, the decline slowed. The population has started to grow again since the year 2000.

During the period 2014–2018, 74 children were born in the microregion and 100 people died as a result of aging. Also, 213 people moved in and 168 people moved out (Database of Demographic Indicators for Municipalities of the Czech Republic, Czech Statistical Office Praha). This means that the population of the microregion had clearly increased through migration by almost 2.7% in the recent five-year period and was the main reason for the slight total population increase of 1.1% during the whole period. Consequently, through immigration, the population of Moravské Kopanice is increasing.

In contradiction with the past, when migration movements took place among the closest villages and towns, new immigrants came from more distanced territories and as stated by Stockman (2005), many original inhabitants did not intend moving out. The respondents of our questionnaire, who thought about emigration, mentioned the following possible reasons: lack of jobs, lack of services, poor accessibility, and family reasons.

By the end of 2018, 14% of children, 66.5% of people in the economic-active age, and 19.5% of seniors in the area were under study. The index of aging (seniors divided by children) is 140. The age structure is similar to the age structure of the district Uherské Hradiště and the region of Zlín, which means that it is no worse than the normal situation in the wider region. The generation exchange has probably already taken place.



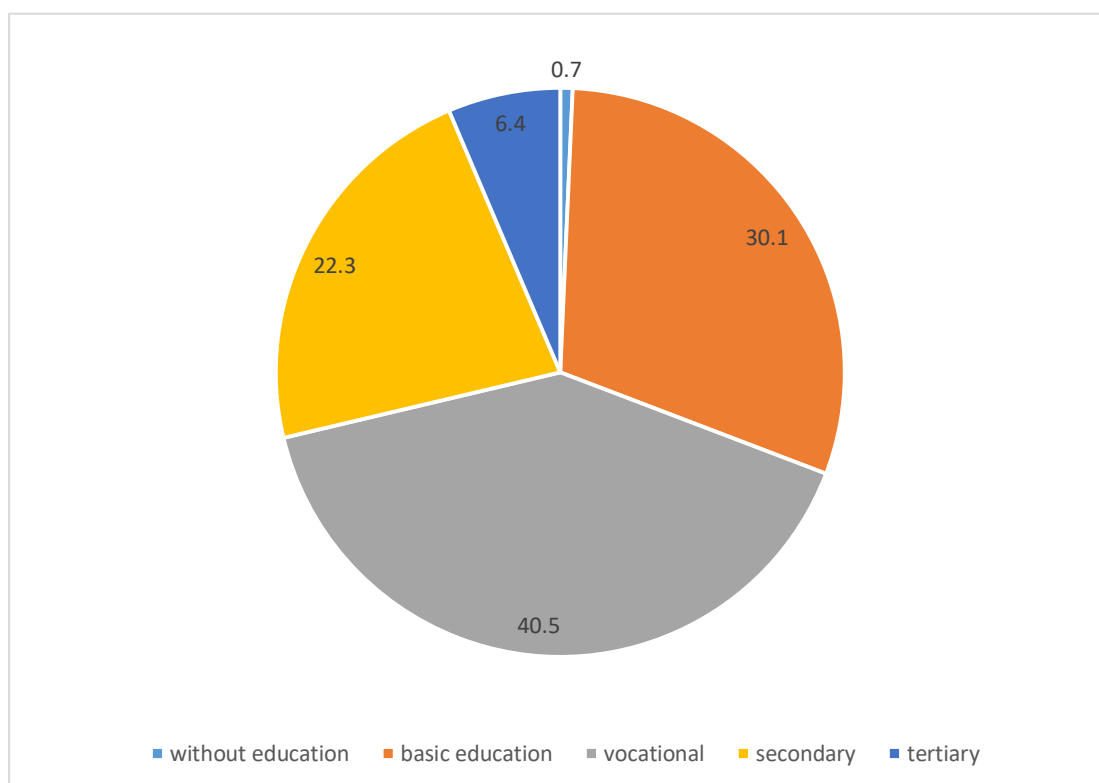
**Figure 4.** Population development in the study region. Source of data: Czech Statistical Office Prague. Own elaboration.

In the social sphere, the lack of infrastructure appears to be the most threatening social problem. According to the field research, only Starý Hrozenkov is equipped with services such as shops, gastronomic services, schools, a post office, a doctor's office, sports facilities, or commercial services.

There are three accommodation facilities in Starý Hrozenkov (Public Database, Czech Statistical Office Praha) with 56 rooms, 156 beds, 4682 guests, 9360 overnight stays, of which 1356 were taken by non-residents (foreigners) in 2018. The number of overnights decreased by 7% compared with 2016. Other settlements disposed of with facilities together but detailed data are not at our disposal because of their individual characters. Other places are almost without infrastructure except for libraries and some seasonal tourist venues. According to the interviews with mayors, attempts to support shops or pubs (renting the building free of charge, paying part of the running costs, such as electricity, operating the equipment directly at the municipal office, with the participation of the representatives) or even to operate them by municipalities were unsuccessful because of the number of customers was not able to cover remaining costs. New residents are usually mobile and satisfy their demands for services in better-equipped centres and towns (to which they often commute for work) or in hypermarkets. For this reason, immobile seniors or disabled people are threatened by social exclusion.

### 3.1.2. The Economic Pillar

The level of formal education (Population Census 2011, Czech Statistical Office Praha), which indicates a potential of realisation of local people on the labour market or the potential of entrepreneurial activities, is below average compared with the district (Uherské Hradiště) and the region (Zlín). The share of the people over 15 years with complete secondary education and higher is 28.7% in Moravské Kopanice, 39.4% in the district Uherské Hradiště, 41.7% in the region Zlín and 43.6 in the Czech Republic. The predominance of people with basic and vocational education (Figure 5) predestines employment in agriculture, industry, and simple services.



**Figure 5.** Structure of formal education of population 15 years and older (%) in the territory under study. Source: Population Census 2011, Czech Statistical Office.

The real situation can be seen in Table 2. Industry and construction employ the biggest share of economically active people (39.5%), followed by commercial services (27.9%), social and public services (24.8%), and agriculture, forestry, and fishing (7.8%). This means that this sector of services is also the main employer in the rural marginal region as Moravské Kopanice. However, employment in the primary sector is above average from a national viewpoint (2.8%). The employment in services for tourism (accommodation, gastronomy, and recreation) is also above average. People employed in industry and construction are mostly employed outside the area under study and commute for work daily or for longer periods.

Farmers prevail among active entrepreneurs. They are mostly individuals or families without employees. Industry and construction firms take second place. Almost no entrepreneurs can be found in the sector of social services because this branch is established mostly by public bodies and because private companies dealing with social services are localised mostly in towns. A relatively large number of entrepreneurs in accommodation and gastronomy is promising from the viewpoint of a possible tourist focus in the region.

The agricultural sector is focused on cattle breeding and is represented by Agricultural Cooperative Starý Hrozenkov, a joint-stock company, and Agro Březová Ltd. Fruit growing is typical in plant production. Individual farmers operate in small villages; they also breed goats, sheep, horses, and poultry. Some farms make cheese from the goats' or sheep's milk. One family farm in Žitková is already selling its sheep's milk products (a shop that serves also as a resting place for tourists). It is distributed to Lopeník goat's milk dairy. Due to the position of the region in the Protected Landscape Area White Carpathian Mts, many farms operate within ecological agriculture.

Tourism was based mostly on the facilities of the corporate recreation organised by trade unions. In fact, after 1990, all such facilities were dilapidated due to speculative privatisation or unsuccessful operations and no longer serve as tourist destinations. Recently, the demand for recreation in the area is renewing. Unfortunately, due to landscape protection, the construction of new facilities is excluded.



This is why former schools or customhouses are reconstructed for tourist facilities. Accommodation facilities of different levels are situated in every settlement. Some mass tourism facilities offer almost the only jobs in villages (except for Starý Hrozenkov). However, they are mostly owned by people living outside of the microregion. Some inhabitants rent their premises on a private basis and do not declare income. Although the microregion is very attractive and suitable, especially for eco-tourism, the financial benefits from tourism are poor. It is nearly impossible to substitute jobs in the primary sector with jobs in tourism.

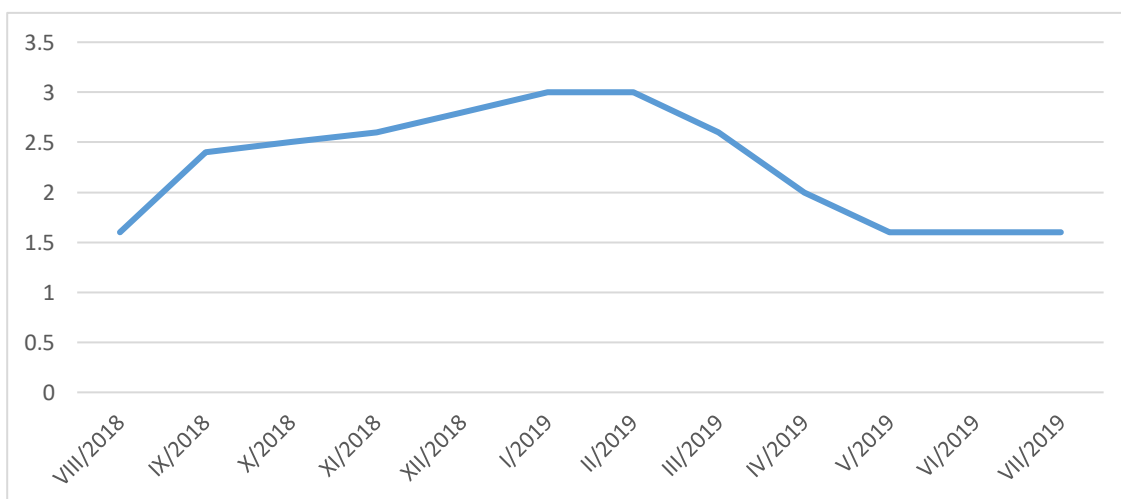
**Table 2.** Activities according to economic branches.

Economic Branch	Employee (2011)	Active Entrepreneurs (2018)
Agriculture, forestry, fishery	35	83
Industry	109	21
Construction industry	68	26
Retail, wholesale, maintenance and repairs	47	14
Transport and storage	28	5
Accommodation, gastronomy	39	17
Information and communication activities	4	
Finance and insurance	7	3
Real estate, scientific, technical and administrative activities	13	12
Public administration, defence, social security	58	5
Education	24	1
Health and social care	16	1

Sources: Population census 2011, public data-basis. Czech Statistical Office Prague.

According to the population census 2011, about one-third of economically active people commute for work (from Starý Hrozenkov 37%, from other villages 33%). A more serious fact is that 30% of commuters spent more than 30 minutes on one journey. People use their private cars for commuting as a rule, although public transport is also sufficiently frequented. Additionally, 112 pupils and students of the microregion commute to schools. The closest job centres are Bojkovice (ammunition factory ZEVETA) or Uherský Brod (Czech Weapon Factory, Slováké strojírny engineering, the brewery, services).

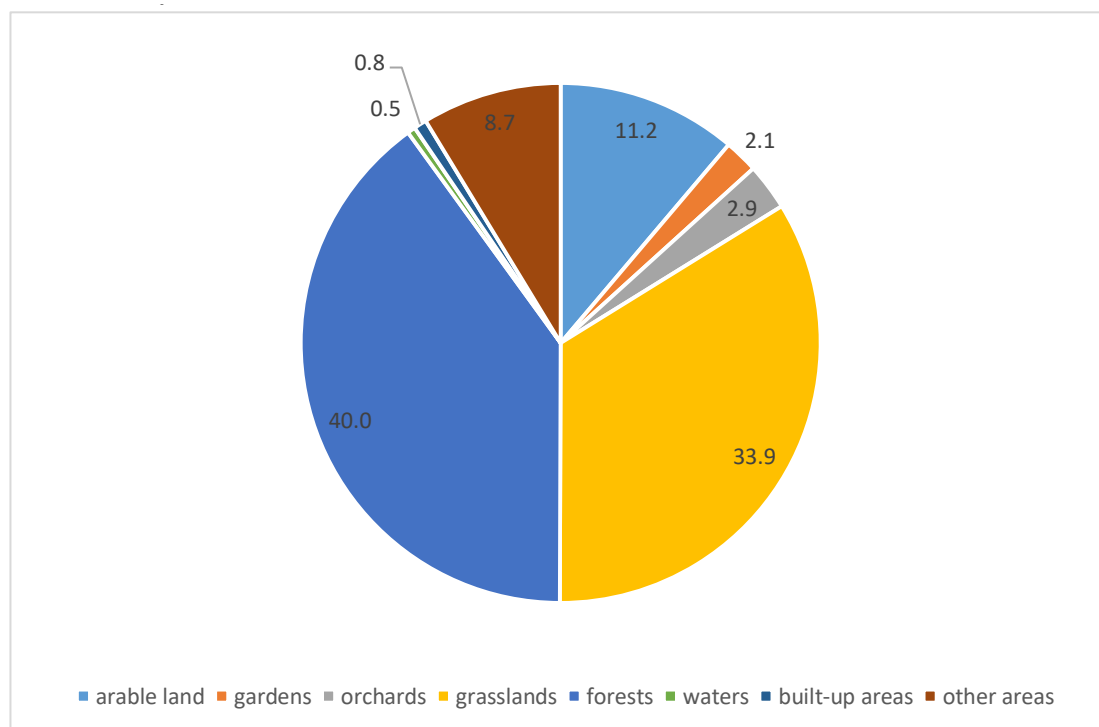
Unemployment does not represent any problems (Figure 6). It is kept between 1.6% and 3%. Its fluctuation during the year shows a seasonal course with its highest fluctuation in winter. Such a situation is due to employment in the primary sector and tourism. However, according to the interviews only individuals are unemployed. The microregion depends on surrounding territories in relation to the labour market. However, people consider their jobs in industry more permanent than local jobs in tourism.



**Figure 6.** Unemployment rates during the period of August 2018–July 2019. Source: Czech Ministry of Labour and Social Affairs Prague.

### 3.1.3. The Environmental Pillar

Originally, the landscape of the microregion was formed by a mosaic of small fields, forests, grasslands, and rural homesteads. In the second half of the last century, large areas of fields were created within the collectivisation. After 1990, production on arable land was abandoned. The territory is now covered mostly by forests and grasslands (Figure 7). At the present time, arable land accounts for only 12% of the area.



**Figure 7.** Land use by the end of 2018 (%). Source: Czech Statistical Office Prague.

The coefficient of ecological stability expresses the portion of ecological stable areas (gardens, orchards, grasslands, waters, and forests) to ecologically unstable areas (arable land, built-up areas, and other areas). Its value for Moravské Kopanice is 3.83. Generally, values of the coefficient of ecological

stability exceeding the value of three indicate natural or quasi-natural landscape, with dispersed farms (Figure 8), which is not very disturbed by human activities.



**Figure 8.** A private farm in Moravské Kopanice. Photo E. Kundratová.

Possible contamination of the environment is another aspect of environmental sustainability. It is necessary to admit that according to the Municipal Statistics of the Czech Statistical Office and the reviews with mayors, the technical infrastructure for the environment is problematic. Due to the sparse settlement and rough relief, the construction of technical networks is economical and technologically problematic (except Starý Hrozenkov, which is equipped with gas, a water supply, and sewerage leading to a wastewater treatment plant). In other settlements, all households are connected to electricity. Only Vápenice is connected to gas, which means that other villages are heated mostly using solid fuels. Public water supply is in place in cores of individual villages whereas the dispersed parts have individual wells. Sewage systems do not exist and a solution is seen in domestic wastewater treatment plants. The maintenance of roads is seen as a big communal problem, especially during the winter period. The collection of municipal waste is organised and is partially separated. Problems arise in the season due to the operation of tourists. They concern the production of waste, traffic, and parking on narrow rural paths and also the disruption with noise.

#### **4. Discussion**

##### *Is the Microregion Sustainable and Under Which Conditions?*

Although the microregion has been marginal and underdeveloped during the whole of its history, its sustainability does not seem to be threatened. Conditions for any internal economic development are extremely poor and the microregion is probably not able to compete with other microregions. In the past, a massive emigration occurred. Nevertheless, the depopulation process stopped, real unemployment

does not exist, and people are mostly satisfied. Surprisingly, some problems can be observed in the environmental pillar because of insufficient technical infrastructure.

What has happened? We can speculate that the transition to a post-productive society is the main reason for the changing trends. Conditions for the productive economy (first and second sectors) are probably no more decisive for the satisfaction of people and their migration preferences. The increasing mobility of population enables commuting for work. The availability of jobs in the village of dwelling is no more decisive for prosperity. On the contrary, people look for dwelling in other places than they work. Moreover, the share of people living from other sources than a labour (e.g., seniors) is slowly increasing. Jobs are no more the main motivation for migration. In the post-industrial society, people migrate for well-being which is perceived differently according to the individual residential preferences. The migration of young people to cities is motivated by searching for prestigious and well-paid jobs, and for a richer social life—not for jobs in general [27]. However, it is usually fully substituted with urban-to-rural migration.

Direct access to the relatively little disturbed nature, a quieter way of life, and cheaper dwellings could be motivating. People who wanted to leave the microregion left. The remaining ones, together with new settlers, accept harder living conditions in exchange for a feeling of greater freedom.

Of course, such a development is possible with the support of the state, which enables frequent public transport [28] and efficient public administration, including the care of technical infrastructure. Sustainability is also pre-conditioned in relation to keeping jobs and services in surrounding towns.

At the moment, the microregion seems to be sustainable. Is this a long-term perspective? If we accept the idea that the transition to the post-productive way of life is the main reason for positive rural development, we can consider the sustainability of the microregion to be long-term. However, there are some unclear points on the national or European scale: general economic development, demographic changes including aging, international migration, and climatic change. These changes will undoubtedly affect regional development.

This shows that the transition to the post-productive countryside does not only mean a shift from productive agriculture to the development of tourism. Such a transition means, in fact, a complex transition from the production to the consumption of the countryside, its landscape, and social systems. Understanding the sustainability of rural areas seems to be no more an evaluation of economy, demography, environment and institutional support in terms of quantitative development, but an evaluation of the quality of the countryside for purposes of consumption, which includes an attractiveness for dwelling, tourism, and maintaining traditions.

## 5. Conclusions

The best environmental conditions, due to the minimum disturbance of nature, are usually considered for the most powerful pillar of sustainability in peripheral regions, whereas, as a rule, economic and social pillars are evaluated as problematic. Our case shows another picture. Recent changes towards the post-productive way of life have most probably turned the out-migration from the periphery to immigration, under conditions that the state ensures access to some basic measures against social exclusion such as public transport, basic social services, or high-speed internet.

Surprisingly, in such a situation, the environmental pillar could be the most threatened because of the missing or insufficient technical infrastructure of the environment. It is extremely difficult to construct networks with a technical infrastructure in territory that has a dispersed settlement and low population density. Earlier, the waste did not manifest any problem because they were easily liquidated and dispersed in the landscape. However, the mass use of the household chemistry and packaging technology based on plastics placed a burden on the natural environment, even in small quantities at the present time.

The economy of the most peripheral microregions depends often on external sources and jobs. However, it seems that recent economic and social trends manifest a new hope for peripheral rural microregions. It seems that the economy is no more related to the concrete place within the globalised

era. People are more and more mobile in both a physical and digital sense. Of course, the minimum role of local agriculture for the wealth of the countryside still plays an important role.

The role of public administration lies in ensuring basic social infrastructure and services. Insufficient or missing shops, pubs, post offices, schools, and doctors' surgeries are probably the most topical challenge in this field. Maintaining public transport is obvious. Some aspects of the solution could be based on the digitalisation of some services, which are pre-conditioned by high-speed internet. At the moment, according to the Czech Telecommunication Office, 97% of the Czech territory and 99.5% of the Czech population is covered, which is higher than the European average. Corresponding values for the Uherské Hradiště district is 93.6% of the territory and 99.6% of the population. Some localities in areas such as Moravské Kopanice (especially on the area of Vyškovec) are those in which the coverage is missing or is of worse quality.

It is necessary to highlight that the sustainability of any region is more or less affected by the sustainability of the neighbouring region, which is the next aspect that should be considered.

Nevertheless, as stated in the methodological background, the inter-relations among the individual pillars are crucial, not an evaluation of them. Let us move away from the fact that the microregion under study shows a clear positive migration balance over the last few years. It follows that the microregion is perceived positively by the population—at least by the part that is aimed at the consumption of the landscape with a relatively less disturbed nature. Does this mean that the sustainability of the microregion is guaranteed for the future?

To answer this question, let us imagine what should happen when some pillars collapse. It could concern economic sustainability. If the job opportunities in the surrounding regions collapsed, the inhabitants of Moravské Kopanice would have nowhere to commute. The importance of the economic pillar is likely to increase significantly in such a case. The collapse of the institutional support of rural municipalities could be another threat. Another problem could originate when an area is discovered for mass tourism. Such a development could lead to the collapse of the environmental pillar, which would be followed by problems in other pillars. Fortunately, such a development is not probable due to relative strict landscape protection.

It is interesting that the mentioned threats and protections are mostly external. They depend on global, national and regional development and politics. The microregion under study is hardly able to affect them. From it follows that the sustainability of any region has to be researched in a relation not only to its geographical position but also in the regional, national and global context [29].

Undoubtedly, monitoring, analysis, evaluation, and forecast of the next development in this field opens a new space for rural research. It would be of great interest to monitor development, to compare microregions of a different character in countries at a different stage of the post-productive transition, to follow impacts of contemporary economic, political, demographic, and environmental changes on the development in peripheral rural areas.

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