# UNLOCKING POTENTIAL: GEOGRAPHICAL BRANDING AS A POSSIBLE FACTOR OF REVITALIZATION OF SERBIAN VILLAGES - A CASE STUDY OF THE VISOK MICROREGION

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# ABSTRACT

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UDC 659.11:711.3 (497.11 Visok) The objective of this paper is to emphasize, branding as one of the possible ways to take concrete steps towards reaffirming the local values and traditional knowledge of rural populations in Serbia. Based on information gathered in the field, as well as from existing literature sources, the main goal of this study is to promote products from the Visok microregion.

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Due to very alarming demographic data, this may be the last chance for revitalizing this region. In this study, we highlighted the following products: Pirot kilim (Pirot rug), Pirot/Stara Planina lamb, Pirot Kachkaval cheese, Stara Planina honey, and Stara Planina potato. Besides agriculture, micr oregion Visok also has exceptional tourist potential. The conclusion of this paper emphasizes that the only viable path to revitalization is through planned investment. Such investment would facilitate the development of local infrastructure and help restore the population, thus enabling the creation of sustainable development.

#### Introduction

The results from the 2022 Census of the Republic of Serbia reveal that Serbia is faced with an alarming demographic inventory (Cenus, 2022). It has brought to light a plethora of crucial social indicators, encompassing data on population growth, birth rate, age structure, and more. However, the most significant changes are notably observed in rural areas. Rural settlements in the Republic of Serbia are profoundly impacted by depopulation, deagrarization, and devitalization. Over the years, these trends have resulted in substantial population aging across rural areas on a broad social scale, especially in Eastern Serbia. (Krstić, 2007). The very fact that at the end of the first decade of the 21st century, Serbia had a record of 1,961 villages with zero population, i.e. of every fourth village (out of the total of 4,800) in a die-off phase, speaks for itself about the seriousness and stunningness of the current trends (Census, 2011; 2022). The reasons for such a situation are multidimensional and cannot possibly be fully reviewed in a paper of this scope. However, the most significant factors include the typical dispersion of Serbian rural areas, characterized by a high number of miniature villages and hamlets, as well as the general economic situation in the country, which leads to a high outflow of population, predominantly young and highly educated and highly skilled individuals, to urban centers and foreign countries. The main reason for this migration is the search for chances for further education, better job offers, working and life conditions, economic underdevelopment of rural areas, lack of quality traffic and communal infrastructure, low level of mechanization, lack of prospects regarding the intensification of agriculture, etc. (Rašević, 2017; Milić, 2017; Lukić, 2021).

Serbia's pollution is driven by fossil fuels and inefficient agricultural practices, including heavy fertilizer use. To leverage its agricultural strengths and promote rural development, a targeted green transformation is necessary. (Vukelić et al., 2023). However, agriculture remains the predominant economic activity in rural areas (Pejanović et al., 2017). In the pursuit of effective solutions, it is imperative to adopt a paradigm of creative reinterpretation of the essence and role of rural communities, grounded in a holistic, synergistic approach aligned with the dynamics of the contemporary global society in the 21st century. Concurrently, it is essential to uphold the foundational

principles traditionally underpinning the social fabric of agrarian societies and serve as the cornerstone of cultural identity for rural residents. These principles encompass family-based agriculture, land cultivation, animal husbandry, and the preservation of distinctive traditional practices. Rather than undermining these elements, they should be leveraged as inherent strengths in redefining the socioeconomic status of rural communities and reducing their historical reliance on urban centers of influence.

The importance of branding in agricultural domestic products cannot be overstated, particularly in today's competitive market environment. Effective branding serves as a powerful tool for enhancing the visibility, credibility, and marketability of agricultural products originating from domestic sources. Firstly, branding provides a means of differentiation in a crowded marketplace. With an abundance of similar products available, a well-crafted brand identity sets domestic agricultural products apart, enabling consumers to recognize and distinguish them from competitors. This differentiation fosters brand loyalty and encourages repeat purchases. Secondly, branding facilitates trust and confidence among consumers. A strong brand conveys reliability, quality, and consistency, reassuring consumers about the origin and standards of the agricultural products they purchase. By associating positive attributes with domestic agricultural products, branding builds trust and fosters a positive reputation in the market. Furthermore, effective branding enables agricultural producers to command premium prices for their products. A well-established brand communicates value and justifies higher price points, allowing producers to capture greater margins and enhance profitability. Consumers are often willing to pay a premium for products with a recognized brand that aligns with their preferences and values (Pay et al., 1996; Butova et al., 2019).

It's worth mentioning that the territorial brand, alongside its geographic positioning defining natural and climatic conditions, significantly influences the success of product brands (Butova et al., 2019). Moreover, branding plays a crucial role in opening new market opportunities and expanding market reach. A recognizable brand facilitates market entry by creating awareness and generating interest among consumers. It also enables agricultural producers to access niche markets and cater to specific consumer segments with unique preferences or dietary requirements. In addition, geographical branding contributes to the overall development and sustainability of rural economies. By establishing strong brands for domestic agricultural products, rural communities can capitalize on their natural resources and cultural heritage, creating economic opportunities and preserving local traditions. Branding initiatives can also attract investment, tourism, and support for rural development initiatives. Overall, branding is essential for enhancing the competitiveness, profitability, and sustainability of agricultural domestic products. By investing in branding efforts, agricultural producers can unlock the full potential of their products, differentiate themselves in the market, and build lasting relationships with consumers (Murphy, 1988; McDowell, 2006).

In this study, we present the main agricultural brands in Serbia. The main focus will be on the development of agriculture in the Visok microregion and the heritage of livestock breeding on Stara Planina Mountain.

#### Materials and methods

Demographic data was obtained from Censuses from 1953 to 2022 and existing literature (Krstić, 2007; Velojić & Radovanović, 2017). The authors spent a significant amount of time in the field collecting information from local inhabitants between 2017 and 2024. Most of the data for the Visok microregion is part of the research process for the PhD thesis titled "Geoecological and Functional Changes in the Visok microregion." As part of this thesis, a survey was conducted to identify motives and sustainable solutions for intensive depopulation and to determine the most effective methods of revitalizing villages. While specific details about this survey will be included in forthcoming papers, the knowledge obtained in the field was utilized to provide crucial information about brands in this region.

For cartographic visualization in this study ArcGIS Pro 2.5.0. was used. We used Digital Elevation Model (DEM) data in Figure 1. with horizontal resolutions from 1 arc-second (30 m) (SRTM) to 12.5 m (ALOS PALSAR RT1) (Das et al., 2014; Marković et al., 2024).

# Study area

The Visok microregion is delineated by the Visočica River basin and Toplodolska River watershed. Situated in the southeastern region of Serbia. It lies between the Stara Planina and Vidlič mountains (Vidanović, 1955). The section of the basin located in Serbia falls within the administrative jurisdictions of the municipalities of Pirot and Dimitrovgrad. Within the Visok microregion, there are a total of 26 villages, 22 of which are situated in Serbia. All of them are experiencing a significant decline in population. The population decreased from 13,914 (Census, 1953) to 504 (Census, 2022). None of these villages have a population exceeding 100 inhabitants (Census of 2022) (Marković et al., 2024). The population is in the final stage of demographic transition, and in almost all rural areas, the process of biological reproduction is at the minimum level of sustainability.

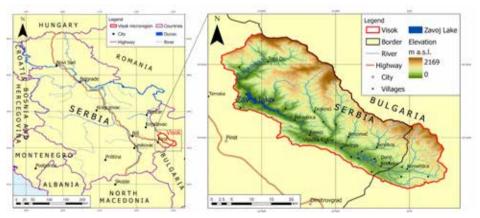


Figure 1. Geographical position of the microregion Visok

Source: The map utilized in this study was created by Rastko Marković and modified according to Marković et al, 2024

The morphology of the investigated area is predominantly represented by the Stara Planina Mountain, which has great potential and a long tradition as a livestock breeding region. The average height of the Visočica basin is ~1146.47 m a.s.l. (Marković et al, 2024). The highest point of the Visok microregion is represented with peak Midžor (2169 m a.s.l.). Interestingly, it is located approximately in the middle of the Adriatic, Aegean and Black Sea. All the big aquatic surfaces are farther than 300 km from the investigated region, which means it doesn't get as much moisture as other mountains with this elevation in the Balkans (Milovanović, 2010).

Visok, as well as the whole Stara Planina Mountain, is well known for its milk and wool products. In the past, Visok microregion had around 1.000.000 sheep (Vidanović, 1955). Unfortunately, nowadays we witness that this number is negligible. Due to the old age structure of inhabitants, depopulation, and deagrarization, all sectors of agriculture are decreasing rapidly. There is only one active farm "Bele Vode" close to Slavinja and Rosomač villages with a capacity of around 5000 sheep and goats.

In addition to its great agricultural potential, Stara Planina is also distinguished by its exceptional geoheritage (Marjanović et al., 2022a, 2022b). Every season on Stara Planina is suitable for tourists. In the spring, the biggest attraction is represented by over 60 waterfalls, fueled by melted snow and rain, offering an exceptional experience (Stojadinović. 2013; Marković, 2024). In summer, this region represents one of the few places of untouched nature in Serbian, with exceptional locations for swimming and bathing tourism, such as Zavoj lake, Ogorelica, Topilnica and others. In winter, visitors most often spend time in the "Stara Planina" ski center. While it may not be the largest ski center in Serbia, it is considered the most affordable option.

# Geographical Branding – EU Experience

The World Intellectual Property Organization (WIPO) defines a geographical indication (GI) as "a sign used on goods that have a specific geographical origin and possess qualities, reputation or characteristics that are essentially attributable to that place of origin." (WIPO – World Intellectual Property Organization: <a href="http://www.wipo.int/geo\_indications/en/about.html">http://www.wipo.int/geo\_indications/en/about.html</a>) Much in the same spirit, the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) qualifies GIs as "indications which identify a good as originating in the territory of a Member, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin." (Article 22(1) of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS)).

Hence, "geographic labeling is motivated by the notion that there are unique characteristics implicit in a product (such as food) attributable to certain production methods and location-based attributes based on where the product is made" (Moran, 1993; Barham, 2003; Bowen & Zapata, 2009; Bowen & De Master, 2011). Thus, geographic labeling typically tries "to establish a link between the production characteristics and the characteristics of the location and/or method or production" (Verhaegen & Van

Huylenbroeck, 2001). The whole concept is based on the idea of creating products different from standardized industrial outputs by emphasizing the producer's personal touch and the "little secrets" involved in traditional ways of preparing, producing, processing or breeding in a specific geographic microenvironment, i.e. on a unique combination of natural and human factors of a particular locality.

GI products play an increasingly significant role in the world market as an effective value-creating tool, i.e. means of upturning and affirming the micro localities which have their own traditional high-quality products as a specific combination of unique geographical traits and local population expertise. In 2009 there were more than 10,000 protected GIs in the world with billions worth of trade value, although about 90% of them come from only 30 most industrialized countries (Giovannucci, et al., 2009).

#### Results

# Geographical Branding in Serbia

Up to March 2015, 52 Serbian products obtained recognition and registration by the Intellectual Property Office of the Republic of Serbia on account of their geographical origin (11 as geographical indications – GI, and 41 as appellations of origin – AO), out of which only three (Homolje honey, "Bermet" wine and Leskovac homemade ajvar) have so far obtained international labels of quality under the Lisbon Agreement, which made opportunity to the mentioned products to be present on the markets of 28 countries – signatories of the mentioned Agreement. For the remaining 46 products from the list of the Intellectual Property Office protected geographical origin is limited to the Serbian market (Table 1).

**Table 1.** List of all the products that have so far been registered with the Intellectual Property Office of the Republic of Serbia as geographical indications (GI) or appellations of origin (AO).

Cheeses	Sjenica sheep milk cheese (AO), Sjenica cow milk cheese (AO), sheep milk cheese from Homolje (AO), Homolje goat cheese (AO), Homolje cow milk cheese (AO), Sombor cheese (AO), Zlatar cheese (AO), Svrljig hard cheese (kashkaval) (AO), hard cheese (kashkaval) from Stara Planina (AO), cow milk hard cheese (kashkaval) from Pirot (AO), hard cheese (kashkaval) from Krivi Vir (AO), Svrljig belmuž <sup>9</sup> (AO)
Meat and meat products	Sjenica lamb meat (AO), Užice beef prosciutto (AO), Užice pork prosciutto (AO), Užice bacon (AO), Srem kulen <sup>10</sup> (AO), Srem home sausage (AO), Srem salami (AO), Požarevac sausage (AO), Petrovska sausage <sup>11</sup> (AO), Leskovac barbeque meat (AO), "tobacco" pork cracklings from Valjevo (AO), pepper sausage from Lemes (AO), Vršac ham (AO)

<sup>9</sup> A cheesy dish of the Balkan cattle breeders made from young sheep's milk cheese and corn flour

<sup>10</sup> Paprika flavored sausage made of minced pork

<sup>11</sup> Traditional dry-fermented flavored sausage from Bački Petrovac

Other agricultural products	Leskovac homemade ajvar <sup>12</sup> (AO), Homolje honey (AO), lime-tree honey of	
	Fruška Gora (AO), Kačer honey (GI), Kladovo caviar (AO), Rtanj tea, Ečka	
	carp (GI)	
Wines and beers	Bermet – Sremski Karlovci (AO), Banat Riesling <sup>13</sup> (AO), Jagodina pink wine <sup>14</sup> (GI),	
	Karlovac Riesling <sup>15</sup> (AO), Island of Pearl (Muskat krokan wine) (AO), Kosovo	
	Polje (Amselfeld, Field of the black bird, Champ de merle) (AO), Kosovo wine	
	(Amselfelder) (AO), Prizren wine (AO), Metohija (Metohy) wine (AO), Apatin	
	Jelen beer (GI), Vršac Champion Beer (GI)	
Water	Vrnjci water (GI), AQUA HEBA mineral water from Bujanovac (GI), Duboka	
	mineral water (GI), Knjaz Miloš mineral water - Bukovička banja (GI)	
Fruits and	Fresh and pickled cabbage from Futog (AO), Arilje raspberry (AO)	
vegetables		
Non-food products	Pirot kilim rugs (AO), Sirogojno handmade knitwear (GI), bezdan hand-woven	
	silk damask (nepkins, table toppers, tablecloths, pillow cases, bedclothes) (GI)	

Source: Republic Statistical Office. (2017,2020,2023). Annual Report on Population Statistics. Republic Statistical Office.

Out of 29 districts, 19 have at least one product registered on account of quality attributable to geographical origin. The districts that have not shown any initiative for geographical branding are Mačva, Podunavlje, North Banat, North Bačka, Toplica, Rasina, Kosovo, Kosovska Mitrovica, Kosovo-Pomoravlje and Peć districts. Some districts have shown comparatively high activity in searching for solutions for economic stimuli in the domain of products branding on account of their geographical origin (Zlatibor, Braničevo and South Bačka Districts), mainly in synergy with other incentive measures (primarily tourism in various forms) (Table 2).

Table 2. Agricultural brands classified by geographical region.

District	Geographical indications/Appellations of origin		
Bor District (1)	Kladovo caviar		
Braničevo District (6)	Homolje honey, Homolje sheep milk cheese, Homolje goat cheese, Homolje cow milk cheese, Požarevac sausage, Duboka mineral water,		
City of Belgrade (1)	Kačer honey/(shared with Kolubara, Moravica, Šumadija districts)		
Zaječar District (2)	Rtanj tea, hard cheese (kashkaval) from Krivi Vir		
West Bačka District (4)	Apatin Jelen beer, bezdan hand-woven silk damask, Sombor cheese, pepper sausage from Lemeš		
Zlatibor District (9)	Užice beef prosciutto, Užice pork prosciutto, Užice bakon, Sjenica sheep milk cheese, Sjenica cow milk cheese/(shared with Raška District), Sirogojno handmade knitwear, Arilje raspberry, Sjenica lamb meat/(shared with Raška District), Zlatar cheese		
Jablanica District (2)	Leskovac homemade ajvar, Leskovac barbrque meat		
South Banat District (3)	Banat Riesling. Vršac Champion Beer, Vršac ham		

<sup>12</sup> A paprika delicacy made from indigenous and domesticated varieties of red peppers

<sup>13</sup> Dry white table wine

<sup>14</sup> Dry pink table wine

<sup>15</sup> Quality dry white wine

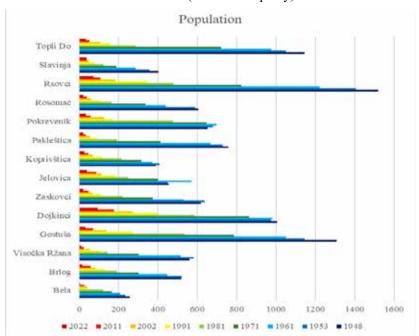
District	Geographical indications/Appellations of origin			
South Bačka District (5)	Bermet, petrovska klobasa, Karlovac Riesling, fresh and pickled cabbage from Futog, lime-tree honey of Fruška Gora			
Kolubara District (2)	"tobacco" pork cracklings from Valjevo, Kačer honey /(shared with Belgrade, Moravica, Šumadija districts)			
Moravica District (1)	Kačer honey/(shared with Beograd, Kolubara, Šumadija districts)			
Nišava District (2)	Svrljig belmuž, Svrljig hard cheese (kashkaval)			
Pirot District (3)	Pirot kilim rugs, hard cheese (kashkaval) from Stara Planina, cow milk hard cheese (kashkaval) from Pirot			
Pomoravlje District (1)	Jagodina pink wine			
Prizren District (4)	Kosovo Polje (Amselfeld, Field of the black bird, Champ de merle), Kosovo wine (Amselfelder), Prizren, Metohija			
Pčinja District (1)	AQUA HEBA mineral water from Bujanovac			
Raška District (4)	Vrnjci water, Sjenica sheep milk cheese, Sjenica cow milk cheese /(shared with Zlatibor district), Sjenica lamb meat /(shared with Zlatibor district)			
Central Banat District (2)	Island of Pearl (Muskat krokan wine), Ečka carp			
Srem District (3)	Srem kulen, Srem home sausage, Srem salami			
Šumadija District (2)	Knjaz Miloš mineral water - Bukovička banja, Kačer honey/(shared with Belgrade, Kolubara, Moravica districts)			

Source: Republic Statistical Office, Municipalities in Republic of Serbia

Although it is still rather early to analyze the real and full effects of these measures on the revival of economic activities of the local population (living mainly in the rural areas which have been most severely struck by depopulation), being that this process has been initiated only recently (the first products registered for quality attributable to geographical origin were registered in 1990 in the Zlatibor District, and the first international certification occurred in 2010), it is already possible to talk about the first signals of good practice and significant potentials for change that can be expected in the future. The first Serbian products with international registration based on their geographical origin – Leskovac handmade ajvar, Homolje honey and "Bermet" wine from Sremski Karlovci (Chever et al., 2012).

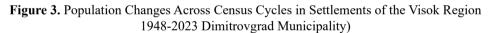
# The potential of the Visok microregion products for branding

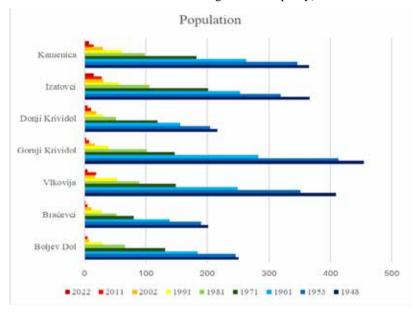
The demographic trend for the Visok microregion is alarming. There has been a consistent trend of depopulation across all villages of Visok microregion since 1961, persisting until 2022 (see Figures 2 and 3). In the mid-20th century, five villages had populations exceeding 1000: Topli Do, Rsovci, Dojkinci, Gostuša, and Zavoj. However, Zavoj village no longer exists. It had been submerged in a catastrophic event in February 1963. Afterward, the villages of Velika Lukanja and Mala Lukanja were also submerged following the construction of an artificial dam at the location where a natural dam had appeared (Marković et al., 2024). For this reason, these villages are not included in this study. Today, migrations to Pirot and other big cities left behind a population of 504, mostly elderly residents. This demographic shift is starkly evident in the Population Aging Index, highlighting almost the complete absence of young people in the region since the 1990s (Table 5). The aging population, initiated by war, migrated to city centers and sealed any natural revitalization chances within these villages.



**Figure 2.** Population Changes Across Census Cycles in Settlements of the Visok Region 1948-2023 (Pirot Municipality)

Source: Republic Statistical Office, Census Data (1948-2022)





Source: Republic Statistical Office, Census Data (1948-2022)

By using the Population Aging Index, it is evident that Serbia is experiencing an aging population, primarily due to the departure of young people from the country between 1991 and 2022 (RZS, 2022). Table 3 illustrates that the Pirot district has a significantly older population than the Serbian average, although the numbers are not alarming. However, the Visok microregion exhibits a Population Aging Index more than twenty times higher than the Serbian average, indicating a severe lack of young individuals residing there. The decline in the Population Aging Index over the last decade is attributed to the passing out of the oldest residents rather than an influx of young people migrating to the Visok microregion.

	Population Aging Index				
Year of Census	1991	2002	2011	2022	
Serbia	0,44	1,05	1,22	1,54	
Pirot district	0,92	1,59	1,87	2,39	

Table 3. Population Aging Index in Serbia, Pirot district and Visok microregion

Source: Republic Statistical Office, Census Data (1948-2022)

36,57

39.93

32

10

Visok

The cultural heritage of the local community in the Pirot municipality once hung in the balance. Pirot kilim (Pirot rug), Pirot/Stara Planina lamb, and Pirot/Stara Planina Kachkaval cheese are all precious products made using rural traditional recipes, linked to Visok microregion sheep breeding (Figure 4). Their continued existence hinges upon the preservation of the unique breed originating in this geographical region (Stevanović et al., 2016b).

A meticulous examination of 51 ewes and two rams reveals the Pirot sheep's distinctive features are compact, slightly rectangular body frame, with a body length averaging 115.40 percent of height at withers. The studied population displays remarkable homogeneity, with morphological variations confined to the parameters of this research. However, significant differences among age groups hint at the breed's late maturation and slow growth. These sheep represent the last vestiges of their breed, and their evaluation serves as a crucial step in preservation efforts (Stevanović et al., 2016a).

Pirot School for Milk Products is well-known using only traditional ways of making products with the famous brand Pirot Kashkaval from Stara Planina mountain (Đorđević, 1955). Nowadays the biggest problem is the lack of young people, as well as rapidly decreasing number of livestock in the rural areas. Young people are migrating constantly mostly to Pirot, Niš, Belgrade and other bigger cities since 1953. The decrease of the inhabitants of the Visok microregion in Pirot and Dimitrovgrad municipalities is visible in Figure 2 and Figure 3.



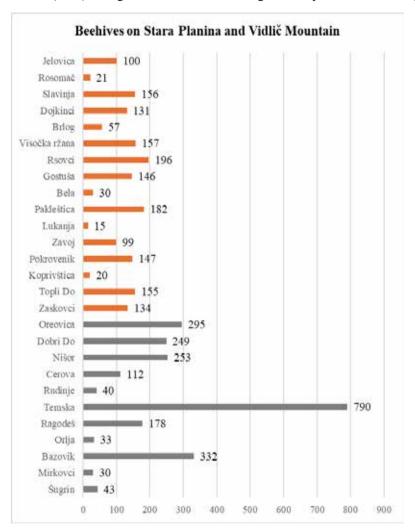
Figure 4. Farmer with sheep and goats

Source: Photo by Rastko Marković (2017)

According to data gathered in the field, domestic potatoes are also highly regarded in this region. The primary reason for this is the high altitude, which prevents damage from potato beetles. Additionally, the soil structure is favorable for cultivating potatoes. There was also a plan for a potato product industry in Dojkinci village, but this never materialized due to political reasons, as stated by locals.

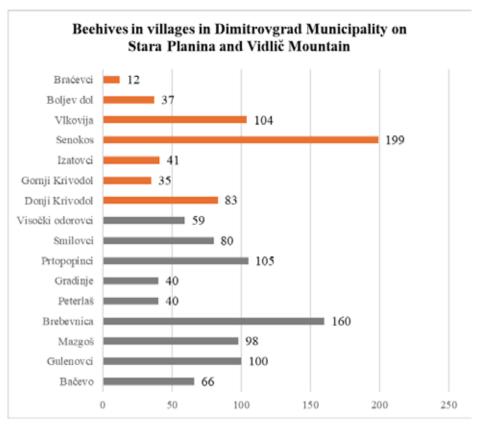
Beekeeping is widely represented and is one of the last branches of agriculture that still survives in this area. There are more than 10,000 beehives in the municipalities of Pirot and Dimitrovgrad. Specifically, there are 4,101 (1,746 in Visok) beehives in Pirot and 1,259 (511 in Visok) in Dimitrovgrad, all within the area of the Stara Planina Mountain and Vidlič Mountain (Figure 5 and Figure 6).

**Figure 5.** Number of beehives for villages in Pirot Municipality within the area of the Stara Planina Mountain (2024). Villages from the Visok microregion are represented with orange color.



Source: Veterinary Station Pirot. (2023).

**Figure 6.** Number of beehives for villages in Dimitrovgrad Municipality within the area of the Stara Planina Mountain (2024). Villages from Visok microregion are represented with orange color.



Source: Veterinary Station Pirot. (2023).

The average beehive in Serbia produces around 12 kg of honey per year (Ignjatijević et al., 2015), and in the Vojvodina region from 11 kg to 23 kg of honey per year (Marinković & Nedić, 2010). Based on the presented numbers in Figure 5 and Figure 6 we can assume that on average Visok is producing more than 27 t, while the region of Stara Planina and Vidlič mountains are producing more than 64 t of honey. Temska village represents the highest number of beehives and it is the only village with some potential for revitalization. Temska lies outside the Visok microregion, yet it serves as the primary connection point between Visok and other parts of Serbia. For instance, it stands as the sole crossroad for Zaskovci and Topli Do. Additionally, Temska boasts a functional school and is home to several children within the village. Most of these children (aged 0-18) are of Romani ethnicity, and any potential revitalization efforts should consider their distinct way of life. According to the veterinary services of Pirot and Dimitrovgrad, all the beekeepers gather in the different beekeeper societies. Through such societies, they get help from the state or local governments.

## Discussion and conclusion

Branded objects and branding processes are deeply intertwined with spatial and historical contexts, contributing significantly to economic and social disparities of whole regions (Pyke, 2009). The brand is created with prescribed technology that cannot be changed. It reflects the style of living and tradition of the specific area.

The most famous brands from Serbia over the world are "Plazma", "Krem bananica", "Jafa", Knjaz Miloš", "Smoki", "vacuumed sauerkraut from Futog", "Karneks" pate, "Štark", "Začin C", "Medeno srce", "Negro" bonbons and "Eurokrem" (Đuričanin et al., 2012). Unfortunately, none of those brands include traditional ways of preparation, so there is an open niche in the market for some new brands that represent Serbian culture and tradition, as essential parts of the brand. In this study, we suggest the following products originating from the Visok microregion: Pirot kilim (Pirot rug), Pirot/Stara Planina lamb, Pirot Kachkaval cheese, Stara Planina honey, and Stara Planina potatoes.

Recognition of products based on their geographical origin for quality is a relatively new trend in Serbia. The first "geographical brands" were registered in 1990, and by early 2015, their number had reached 52, with only three products holding international certification. Products with registered geographical origins can provide reaffirmation and stimulus for rural area development. This is due to their favorable geographical positions in specific micro-locations and the utilization of traditional methods in preparation, processing, or production, ensuring certain value-added products with guaranteed quality that can gain national and, more importantly, international recognition (Stevanović et al, 2016a, 2016b). Examples such as Homolje honey, Leskovac homemade ajvar, and "Bermet" wine, which have obtained international quality labels, have already validated this assumption (Gorjanović et al, 2020).

Geographical branding can become one of the main solutions in the struggle against the depopulation of rural areas. However, it definitely is a good and efficient way of revitalization which, in synergy with some additional stimuli and incentive strategies (development of tourism in various formats, strengthening of the public sector, organic farming, etc.) can lead to much better results in the battle against the severe demographic crisis that Serbia is currently facing.

Young people migrated from the Visok microregion due to various factors, such as the industrialization of Pirot, rather poor job offers, bad infrastructure and communal service, low salaries, unemployment, etc. This resulted in a catastrophic age pyramid and led to the closing of almost all schools in this region. At this point, revitalization can't come naturally. If current demographic trends continue, it is most likely that in 30 years there will be more waterfalls than people in the Visok microregion.

In conclusion, the study highlights the potential of seasonal residences for the tourism season, with the micro-region predominantly inhibited during the summer season. Given the natural conditions, the entire micro-region holds potential for the development of agriculture and complementary activities. This primarily involves the

integrated development of agriculture and tourism. Excursion tourism, active leisure, mountain tourism, and ski tourism are just some of the motivating forms of movement that can complement and enhance the tourism product of this region. On the other hand, an increase in tourist traffic would lead to increased sales and placement of agricultural products authentic to this region. Consequently, greater economic effects would be realized from agriculture, leading to increased employment levels, and ultimately initiating demographic revitalization.

At this juncture, it is unrealistic to expect the villages in the micro-region to regain the function they held in the mid-twentieth century. However, the potential of villages for seasonal residency should be considered. The villages should be specialized and influenced by the modern style of living. Without state intervention and a detailed development plan, rural revitalization cannot be expected. However, it is worth mentioning that this region represents one of the most preserved natural ecosystems in Serbia, which is crucial in organic production and the modern trends in tourism.

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## **Conflict of interests**

The authors declare no conflict of interest.

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