### ECOLOGICA, Vol. 30, No 109 (2023), 89-98

https://doi.org/10.18485/ecologica.2023.30.109.13

Originalni naučni rad

UDC: 003.65 330.35(1-22)

## Products with protected indication of geographical origin: potential of rural and regional development of the Republic of Serbia

## Proizvodi sa zaštićenom oznakom geografskog porekla: potencijal ruralnog i regionalnog razvoja Republike Srbije

Živorad Gligorijević<sup>1</sup>, Aleksandar Manasijević<sup>2</sup>, Marina Stanojević<sup>3</sup>\*, Dragana Vasić<sup>4</sup>

<sup>1,2,3</sup>University of Niš, Faculty of Economics, Trg kralja Aleksandra Ujedinitelja 11, 18000 Niš, Serbia / Univerzitet u Nišu, Ekonomski fakultet, Trg kralja Aleksandra Ujedinitelja 11, 18000 Niš, Srbija

<sup>4</sup>Bubić Ltd., 37000 Kruševac, Serbia / Bubić d.o.o., 37000 Kruševac, Srbija

Received / Rad primljen: 20.01.2023, Accepted / Rad prihvaćen: 18.02.2023.

Abstract: Products with a protected designation of geographical origin, thanks to their characteristics (price, quality and reputation), can significantly contribute to the more efficient development and increase in the well-being of the national economy. Namely, these products, on the one hand, by achieving premium prices on the market, enable an increase in the employment and income of local producers, encourage the development of the activity to which they belong and contribute to sustainable development (including all its dimensions - economic, social and environmental dimensions), above all, rural areas. These products at the same time, represent a significant potential for achieving more even regional development since these products achieve added economic value, as and a whole range of other advantages (cultural, ecological and others). On the other hand, consumers receive a quality product that is produced in full compliance with the appropriate quality standards, with minimal occurrence of information asymmetry. In accordance with the above, the aim of this paper is to, along with the previous presentation of the concept of protection of the designation of geographical origin of the product, look at the importance that these products can have as a potential of rural and regional development of the Republic of Serbia.

**Keywords:** Products with a protected designation of geographical origin, the concept of protecting the geographical origin of products, rural development, regional development.

Sažetak: Proizvodi sa zaštićenom oznakom geografskog porekla, zahvaljujući svojim karakteristikama (cena, kvalitet i reputacija), mogu značajno doprineti efikasnijem razvoju i povećanju blagostanja nacionalne privrede. Naime, ovi proizvodi, s jedne strane, postizanjem premijskih cena na tržištu omogućavaju povećanje zaposlenosti i prihoda domaćih proizvođača, podstiču razvoj delatnosti kojoj pripadaju i doprinose održivom razvoju (uključujući sve njegove dimenzije - ekonomsku, socijalnu i ekološku dimenzije), pre svega, ruralna područja. Ovi proizvodi, istovremeno, predstavljaju značajan potencijal za ostvarivanje ravnomernijeg regionalnog razvoja jer ovi proizvodi ostvaruju dodatnu ekonomsku vrednost, kao i čitav niz drugih prednosti (kulturnih, ekoloških i drugih). S druge strane, potrošači dobijaju kvalitetan proizvod koji je proizveden u potpunosti u skladu sa odgovarajućim standardima kvaliteta, uz minimalnu pojavu informacione asimetrije. U skladu sa navedenim, cilj ovog rada je da se, uz prethodni prikaz koncepta zaštite oznake geografskog porekla proizvoda, sagleda značaj koji ovi proizvodi mogu imati kao potencijal ruralnog i regionalnog razvoja Republike Srbije.

**Ključne reči:** Proizvodi sa zaštićenom oznakom geografskog porekla, koncept zaštite geografskog porekla proizvoda, ruralni razvoj, regionalni razvoj.

<sup>\*</sup> Corresponding author / Autor za prepisku

orcid.org/0000-0003-0055-5228, e-mail: zivorad.gligorijevic@eknfak.ni.ac.rs

<sup>&</sup>lt;sup>2</sup>orcid.org/0000-0002-2268-8403, e-mail: aleksandar.manasijevic.eknfak@gmail.comrs

<sup>&</sup>lt;sup>3</sup>orcid.org/0000-0002-5784-1607, e-mail: marina.stanojević@eknfak.ni.ac.rs

<sup>&</sup>lt;sup>4</sup>e-mail: gagavasic@gmail.com

### INTRODUCTION

The intense process of globalization, which took place during the second half of the twentieth century, allowed the economy of scale to play an extremely important role. The development of traffic and traffic infrastructure enabled an easier and much faster flow of goods, people and capital. State borders are no longer an obstacle to conquering new markets and finding new production resources, and the free spread of information and technology has made it possible for the whole world, as it is often pointed out, to become one "global village". However, the excessive forcing of the economy of scale, as well as the need to reduce production costs as much as possible, caused transnational companies (carriers of the globalization process) to increasingly engage in exploiting the resources of developing countries. At the same time, many regions, within the mentioned countries, have specialized in performing only certain production activities that enable transnational companies to have high economic effects. The above-mentioned facts led to the emergence of increasing social differences, to the migration of labor (primarily, qualified), but also to the loss of local cultural identity and unique products from the cultural heritage of developing countries (van Ittersum, 2001). However, the development of global brands and the appearance of a large number of uniform products, present in modern conditions, led to the need and demand of consumers for a more diverse offer, and accordingly, the production of unique and original products that consumers appreciate and that are their own competitive in quality.

The mentioned process did not bypass the Republic of Serbia, whose development strategy is primarily based on the inflow of foreign direct investments, and which faces numerous problems in the development of rural areas, as well as large differences in the degree of development between individual regions, which according to the Regional Strategy development from 2007 to 2012 between the most developed and the least developed administrative district in the Republic of Serbia amounted to 7:1 (Strategy of the regional development of the Republic of Serbia for the period from 2007 to 2012), with the fact that, according to numerous studies, these differences over time, and deepened (Manić et al., 2017; Manić & Mitrović, 2021).

On the basis of the above, two completely logical questions arise, namely: first, whether the Republic of Serbia can have its own original products that will be competitive in terms of their features and quality, and whose production will require the involvement of domestic capital and labor that would

significantly improve the quality of life and secondly, by producing such products, could underdeveloped regions raise the level of their economic development, which would, at the same time, enable the reduction of regional differences, which, unfortunately, are among the largest in Europe?

Products with a protected designation of geographical origin represent a development potential that, to a significant extent, can solve the previously exposed problems and that has the potential to contribute to sustainable rural and regional development, that is, the development of the entire national economy. We are talking about products that are authentic, produced in a certain territory from raw materials that come from that territory, using traditional procedures that the local population passes on from generation to generation over time, and that have a certain quality and reputation. Thanks to such, authentic products, greater visibility of the area or region can be ensured, which enables certain external effects, in terms of the development of some other activities, most often tourism, as well as an increase in demand for other products thanks to the reputation of that region or area.

Products with a protected designation of geographical origin can enable numerous external effects. In addition to being able, first of all, to stimulate rural development, to value the socio-cultural and agro-ecological characteristics of a certain place, they can also influence the development of tourism, provide additional income and improve the reputation of the place (Geuze, 2011) and, what is special significance, they can enable the achievement of regional development goals since each region has certain specificities that differentiate it from other regions (Gligorijević, 2014). Therefore, it is necessary to apply a multifunctional approach which, in addition to the primary goals of development, which mainly include economic goals (higher prices, increased sales, increased employment and income), can enable the achievement of secondary development goals related to the preservation of biodiversity and traditional knowledge. One of the effects that could be realized is an increase in income and the remaining of the rural population in less developed areas (Réquillar, 2007).

Natural and human resources that include not only local products, but also local knowledge and cultural experiences can serve as a very important instrument of rural development. Namely, the unique historical and ecological characteristics of each region, in particular, can be valued through tourism, through the process of spreading knowledge and through the commercialization of products and services (Giovannucci & Ranaboldo, 2008), and prod-

ucts with protected geographical origin can bring inclusive territorial benefits to all parties within region (Bramley, 2011).

### 1. THEORETICAL-METHODOLOGICAL APPROACH TO RESEARCH

Products with a protected designation of geographical origin, judging by numerous available researches, have multiple importance for the sustainable development of a country, but also for the development of certain parts of it. Accordingly, in modern conditions, in more than 150 countries of the world, significant attention is paid to this question, both in development policy and in theoretical research, so in the literature, a large number of works are found that analyze numerous problems related to protection of the designation of geographical origin of the product.

The largest number of these papers deal with theoretical and methodological problems, while a much smaller number of papers deal with concrete empirical research. At the same time, some researchers made a literature review synthesizing works based on different criteria, such as: contribution to well-being, consumer behavior or simply grouped works according to the territory of production of a certain product with geographical origin. Thus, for example, based on a large number of consulted papers, Török et al. (2020) provide, according to the problem that is the subject of research, the following literature review: the economics of products with protected geographical origin and strategies for their application - Török & Moir (2018), welfare effects of geographical origin labels - Réquillart (2007), perceptions of quality labels of agricultural and food products - Marchesini et al. (2007), methods for assessing the territorial impact of geographical indications and analysis of 14 case studies from the SINERGI project - Barjolle et al. (2009), welfare contribution, willingness to pay - Teuber et al. (2011), a meta-analysis for premium prices of GI products -Deselnicu et al. (2012), willingness to pay for designations of origin, economic sense of GI products -Herrmann & Teuber (2012), meta-analysis for premium prices for GI products - Deselnicu et al. (2013), meta-analysis of willingness to pay, especially for organic food - Bienenfeld & Roe (2014), local food perceptions and preferences - Feldmann & Hamm (2015), aggregate research of documents related to GIs from the database of the Brazilian agency CAPES - Mirna de Lima et al. (2016), consumer response to the use of quality labels in the EU -Grunert & Aachmann (2016) and bibliometric analysis of various research topics related to geographical indications - Dias & Mendes (2018).

In addition to the aforementioned review, there are also views of researchers in the literature who indicate in their research that products with a protected designation of geographical origin make, above all, a significant contribution to the development of rural areas, such as: Arfini et al., 2019; Barjolle, 2010; Gracia et al., 2007; Raimondi et al., 2018; EU Commission, 2012; European IPR helpdesk, 2016; FAO, 2018; WIPO, 2018 (Srbinovska et al., 2020).

In the Serbian literature, although in a much smaller number, there are works that also deal with research related to products with a protected designation of geographical origin, of which we mention the following: geographical designations as a generator of the competitiveness of the national economy - Simin-Jovićević et al., (2016), national and international protection of agricultural and food products through designations of geographical origin - the case of Serbia - Radovanović (2014), concept of designation of geographical origin of food in the function of promoting cultural tourism - Kilibarda et al. (2018), the importance of product branding through protected geographical origin - Đorđević & Sredojević (2014), geographical origin labels as a means of valorizing business operations - a chance for rural recovery - Lukinović et al. (2021), agri-food quality schemes at the EU level - potential benefits of protecting Serbian products in the context of negotiations with the EU - Simović (2015), legal protection of geographical indications of goods and services - Miladinović & Varga (2011), products with geographical indications and regional development of the Republic of Serbia - Gligorijević et al. (2021).

Based on the reviews presented, it can be concluded that three questions are key, i.e. those three questions are the most common subject of research, namely: the size of the market for products with designations of geographical origin, the price of products with designations of geographical origin and the rural development of territories where products with protected designations of origin are produced designation of geographical origin.

The research present in this paper, in addition to the presentation of the evolution and concept of protection of products with geographical origin, aims to perform an objective analysis of the protection of geographical origin of products in the Republic of Serbia and to assess their importance in the function of sustainable rural and regional development, using theoretical knowledge and relevant data and positions of official institutions (Ministry of Agriculture, Republic Institute of Statistics, Institute for Intellectual Property of the Republic of Serbia and National Register of Geographical Indications). Due to

the lack of appropriate statistical material, the method of description, the method of analysis (structural and functional) and the method of induction are applied in the work.

### 2. THE CONCEPT OF PROTECTING THE GEOGRAPHICAL ORIGIN OF PRODUCTS

The protection of the geographical origin of products can be done in four ways: the sui generis system, i.e. a special form of intellectual property, using collective or certification trademarks, methods that focus on business practice, including administrative product approval schemes that include competition protection laws, on consumer protection or product declaration. Most countries, in their systems, combine two or more of the mentioned approaches depending on the legal tradition, as well as historical and economic conditions.

The sui generis protection system is used in the European Union to protect wine and spirits, agricultural and food products. This system can also be found in the legal systems of other countries such as, for example, India, Switzerland, the Andean Group of Countries and the African Organization for the Protection of Intellectual Property. On the other hand, Australia, Canada, China and the United States of America use collective or certification marks (WIPO, 2017). In the United States of America, there is no government will to introduce a system of geographical indications for several reasons: the American culture is based more on what is new and not on traditional products, the procedure for trademark registration is faster and cheaper and does not require additional funds from the state, and the dairy industry consortium is interested in producing and marketing its products under generic names (gorgonzola, feta, parmesan, etc.) and exporting, especially to China (Perišić, 2017).

Appellation of origin or Protected designation of origin (PDO) is the geographical name of a country, region or locality that designates a product that originates from there, whose quality and special properties are exclusively or significantly determined by the geographical environment, including natural and human factors, and whose production, processing and preparation as a whole takes place in a certain limited area.

Protected geographical indication (PGI) is a mark that identifies a certain product as a product originating from the territory of a certain country, region or locality from that territory, where a certain quality, reputation or other characteristics of the product can essentially be attributed to its geographical origin and whose production and/or, processing and/or preparation takes place in a certain limited

area" (Official Gazette of the RS, no.18/2010 and 44/2018).

"Appellation of origin is a higher category than geographical indication. [...] All names of origin are geographical indications, but not all geographical indications are names of origin" (Raičević, 2010, 263). A product can be protected by the designation of origin if the production, processing and preparation of the product, cumulatively and completely, take place in a certain area, and in the case of products protected by a geographical indication, at least one of these activities, i.e. production, processing and preparation, is carried out in a certain area. In addition, the name of origin in certain cases may also consist of names that are not administratively geographical names of the country, region or locality, while geographical indications must exclusively be the names of geographical areas (Official Gazette of the RS, no 18/2010 i 44/2018).

Products with geographical origin have a specific quality that arises from the connection between the local population and the local environment, which means that they have elements related to terroir, which UNESCO defines as "a responsible union of man and his territory that includes knowledge: production, culture, landscape and heritage. Therefore, they are a source of great human biological and cultural diversity. Terroirs are expressed by products, typicality, originality and recognition associated with them. They create value and wealth. Terroir is a living and innovative space, where groups of people use their heritage to build sustainable development. Terroirs contribute to responding to consumer expectations regarding diversity, authenticity, food culture and balance and health" (UNESCO, 2005), while FAO states that terroirs are living and innovative spaces that include more than tradition (FAO, 2021).

# 3. PROTECTION OF THE GEOGRAPHICAL ORIGIN OF PRODUCTS IN THE REPUBLIC OF SERBIA

The protection of geographical indications of product on the territory of the Republic of Serbia is regulated by the Law on Geographical Indications of Origin, which was adopted in 1995, and whose last amendments were adopted in 2018, which is now called the Law on Geographical Indications of Origin. In accordance with this law, a total of 56 products with a protected designation of origin, not including wines and strong alcoholic beverages, originating from the territory of the Republic of Serbia will be registered in the Republic of Serbia until 2021. Of the mentioned number of products, the majority are food and agricultural products (50), only 5 non-food

products were registered, while Čigota is the first designation of geographical origin that was registered for the provision of services. The Republic of Serbia is one of the few countries that, in its Law on Indications of Geographical Origin, provides the possibility to protect services as well (Institute for Intellectual Property of the Republic of Serbia, 2018).

However, only ten registered products, from the ones mentioned above, have authorized users, which practically means that only they have the right to use the name of origin or geographical indication to mark their products and to put their products on the market in that way.

The protection of the geographical origin of wine and strong alcoholic beverages is regulated by special laws, namely: the Law on Wine and the Law on Strong Alcoholic Beverages. According to the Wine Law, the designations of geographical origin of wine are the geographical indication (PGI), which bears the name of the region, and the designation of controlled geographical origin (PDO), which may bear the name of the region or vineyard (Official Gazette of the RS no. 41/2009, 93/2012). Knjaževac, Negotinska krajina, Šumadija, Subotica, Toplički region, Sremski region, Morava region, Bermet and Belgrade have registered designations of controlled geographical origin of wine, to date, with over 100 wine producers, while the geographical designation of a strong alcoholic drink is carried by Šumadijska šljivovica (plum brandy) with 18 authorized users (Ministry of Agriculture, Forestry and Water Management, 2022).

The status of the authorized user of the name of origin or geographical indication lasts for three years and can be renewed countless times (Official Gazette of the RS no. 18/2010, 44/2018). Every authorized user who is in the process of control and certification has the right to mark his product with a control stamp issued by the Topčider Banknote and Coin Production Institute (Official Gazette of the RS, 92/2012, 19/2013).

Before recognizing the status of an authorized user, the certification body authorized by the Ministry checks the conformity of the quality and special properties of the product, the method of production and the origin of the raw material with the data specified in the report (Ministry of Agriculture, Forestry and Water Management, 2022). According to the data of the Ministry of Agriculture, Forestry and Water Management, there are two certification bodies authorized by the ministry to carry out quality control and special properties of agricultural and food products with designations of geographical origin, which are supervised by the Accreditation

Body of the Republic of Serbia (Ministry of Agriculture, Forestry and Water Management, 2022). In addition, during the use of protected marks of origin, in addition to self-control and control within the producer association, compliance control can be performed by certification bodies and inspection services. Additional controllers can be consumer protection associations or law offices that can be engaged in the fight against producers of products with geographical origin who are not authorized users, i.e. who are "free riders" (GI - Certification Academy, 2022).

Regardless of significant positive changes regarding the application of the concept of protected geographical origin of products, the national legislative framework of the Republic of Serbia is still not harmonized with the regulations of the European Union, which prevents domestic producers from exporting their products to its market. Various organizations (such as FAO, SDC and EU TWINNING) with their projects support the development of designations of geographical origin in the Republic of Serbia. Harmonization with the legal regulations of the European Union also implies changes in our legal framework that refer to: actors who can perform registration (in the European Union only producers or their associations can do so, and in the Republic of Serbia both producers and local and national institutions, i.e. actors who are not producers); the very form and content of the specification (elaboration); objection to the registration procedure (there is no possibility of objection in the Republic of Serbia) and the adoption of the Law on Quality Schemes for Agricultural and Food Products.

One of the biggest problems faced by producers of products with protected geographical indications in the Republic of Serbia is precisely the delay in passing the Law on quality schemes for agricultural and food products, the draft of which was adopted as part of the TWINNING project. Quality schemes for agricultural and food products include: designations of geographical origin, "mountain product", "from my farm" and a guaranteed traditional specialty (Kovačević, 2021). Without this law, manufacturers are unable to market their products on the European Union market. Nevertheless, thanks to the TWINNING project, two catalogs were created: "Authentic Serbia", about agricultural and food products with protected designations of geographical origin, and "Wine treasures of Serbia" about wines with protected designations of geographical origin. In addition, three products are targeted for registration of designations of geographical origin in the European Union, namely Pirot cheese, Aril raspberry and Fruška Gora linden honey.

The "Original Serbia" association, formed in 2015, which gathers producers of products with protected designations of geographical origin in the territory of the Republic of Serbia, recognized the importance of these products and the benefits that small producers would have from their production. The goal of the association is the cooperation of producers, joint promotion of products, improvement of the position and working conditions of producers, as well as the revival of the Serbian countryside. Since the members of this association started selling products with protected marks of origin, the market price of their products has increased from 10% to 47% (Institute for Intellectual Property, 2021). However, when applying this concept, one should not only focus on the primary development goals such as higher selling prices, increased sales and employment, as well as higher incomes. Protected designations of origin can be used as a valuable tool to support local development and increase agricultural economic sustainability (Cei et al., 2018).

### 4. PRODUCTS WITH DESIGNATIONS OF GEOGRAPHICAL ORIGIN POTENTIAL OF RURAL AND REGIONAL DEVELOPMENT OF THE REPUBLIC OF SERBIA

One of the comparative advantages that the Republic of Serbia possesses, and which can be turned into a significant competitive advantage, is certainly products with a geographical origin label a concept that has been very successfully implemented in Europe and the world for several decades. We all eat parmesan cheese and know that it comes from Parma, we drink champagne and we know that it comes from the French region of Champagne, and Prague ham from Prague and these products are the associations we have when we hear about these regions or cities, regardless of whether we have travelled to them or not. The essence of the mentioned concept is contained in the protection of products that are produced from raw materials from a specific territory, using, at the same time, autochthonous and traditional production methods and processes that originally come from that territory, so it is precisely that territory, that is, the geographical origin of such products, at the same time, and a guarantee of their quality. The designation of geographical origin of a product actually protects its two designations. First, it protects its name of origin, i.e. the name of the country or region from which it originates, and then it protects the geographical indication, i.e., a specific territory on the basis of which a special reputation or quality is attributed to the goods. The protection of geographical origin brings producers, mainly agricultural producers, a much wider market and a much higher added value, given that these products have higher prices. To this end, the construction of communal and road infrastructure is needed, as well as the application of modern concepts of rural development: geographical origin, quality control, sorting, calibration, storage, packaging, branding, promotion, placement and the like (Vukmirović, 2013).

Thanks to external effects, there may be a reduction of large regional differences (Gligorijević et al., 2021), and precisely the problem of large economic differences is present in the economic reality of the Republic of Serbia and represents one of the most significant limitations of its economic and overall development (Aranđelović & Gligorijević, 2014). For example, in 2019, the share of the gross domestic value of the most underdeveloped, Toplica district, was only 0.6% in the total gross domestic value of the Republic of Serbia, while that percentage for the most developed, Belgrade region, was 41.7% (Statistical Office of the Republic of Serbia, 2020). It is interesting that only one food product with a protected designation of origin (Oblačina cherry) is produced in the Toplica district, as well as wines of the most famous grape variety, Prokupac. However, the Toplica district has very significant resources that can be protected and probably economically valorized, such as the medicinal Prolom water and the mineral water "Milan Toplica", known in all the former Yugoslav republics.

Even more surprising are the Danube and Rasina districts as the most famous wine-growing regions with their Smederevo and Župa vineyards, which protected certain wines. However, these regions do not have a single agricultural-food or nonagricultural product with a protected designation of origin, although Smederevo is known for its autochthonous Lipka sheep and products derived from this breed, and the Rasin district for its Rasin quince, dairy and other products from the slopes of Jastrebac and Kopaonik, as well as Belovodsk sandstone, a stone that has adorned our most famous churches and monasteries since the Middle Ages. The situation is similar with the Pomeranian district, which, in addition to protected wines, also has the potential to protect the turkey from Jagodina and "Moravian" pigs (Table 1).

Other traditional products and services in the Republic of Serbia also have the possibility of protection with a designation of geographical origin, such as, for example, climatic and spa resorts, where, above all, the special hospital for the treatment of lung diseases on Mount Ozren, which is distinguished by its exceptional and specific climatic conditions for the treatment of these diseases (Gligorijević et al., 2021).

Table 1. Protected designations of origin of agricultural, food and non-food products and services by district (excluding wine and spirits)

District	Protected geographical indications of origin
Bor district	Kladovo caviar, Đerdap honey
Braničevo district	Požarevac sausage, Homolja sheep cheese, Homolja goat cheese, Homolja cow cheese, Duboka mineral water, Homolja honey, Đerdap honey (with Bor district)
City of Belgrade	Kacer honey (along with other districts)
Zaječar district	Rtanj tea, Krivovir cheese, Stara Planina cheese (with Pirot district)
West Bačka district	Apatin Jelen beer, Bezdanski damask, Sombor cheese, Lemeški kulen
Zlatibor district	Beef Užice prosciutto, Pork Užice prosciutto, Užice bacon, Sirogojno, Arilje raspberry (with Moravica district), Sjenica sheep cheese (with Raška district), Sjenica lamb (with Raška district), Zlatarski cheese, Sjenica cow cheese (with Raška district), Sjenica litter (with Raška district), Ivanjica potato (with Moravica district), Health and tourist services "Čigota", Zlakusa
Jablanica district	Leskovac barbecue meat, Leskovac homemade ajvar, Leskovac fry, Vlasina honey (with Pčinja district)
South Banat district	Vršac Champion beer, Vršac ham, Deliblato honey
South Bačka district	Petrovska sausage, Futoški fresh and sauerkraut, Fruška Gora linden honey (with Srem district), Begečka šargarepa
Kolubara district	Valjevo tobacco greaves, Kacer honey (with other districts)
Kosovo district	-
Kosovska Mitrovica district	-
Kosovo-Pomoravlje district	-
Mačva district	Towels from the Šabac region
Moravica district	Arilje raspberry (with Zlatibor district), Ivanjica potato (with Zlatibor district), Kacer honey (with three other districts)
Nišava district	Svrljig cheese, Svrljig belmuž, Svrljig cow cheese, Oblačina cherry (with Toplica district)
Peć district	-
Pirot district	Pirot carpet, Stara Planina cheese (with Zaječar district), Pirot cow's milk cheese
Danube district	-
Pomoravski district	-
Prizren district	-
Pčinja district	Bujanovac water "Aqua Heba", Vlasina honey (with Jablanica district)
Rasina district	-
Raška district	"Vrnjci" water, Sjenica sheep cheese (with Zlatibor district), Sjenica lamb (with Zlatibor district), Sjenica cow cheese (with Zlatibor district), Sjenica litter (with Zlatibor district)
North Banat district	Vrbički garlic
North Bačka district	-
Central Banat district	Ečani carp
Srem district	Srem kulen, Srem homemade sausage, Srem salami
Toplica district	Oblačinska višnja (with Nišava district)
Šumadija district	Mineral water "Knjaz Miloš", Bukovička Banja, Kacerski med (with three other districts)

Source: Republic of Serbia, National Register of Geographical Indications

Many agricultural and food products from the Republic of Serbia, although they are recognized in the world, do not carry a protected designation of origin, such as, for example, cream, bacon and kavurma. These are generic names of products that are

produced in many parts of the Republic of Serbia, but they can only be protected according to the narrower geographical areas from which they originate, because each region has its own different terroirs that give a specific quality, taste and name to these products. Products with a protected designation of geographical origin can also become an important factor in the tourism offer of the Republic of Serbia, above all when it comes to rural, health-recreational and cultural tourism, but also gastronomic and wine tourism, since an integral tourist product can only be called a joint result the offer of an area, that is, the totality of material and immaterial elements that belong to the original and derivative tourist offer of an area (Gligorijević, 2017).

In this sense, there should be a much greater interest of the state, i.e. competent public institutions, in encouraging the registration and circulation of products with protected geographical indications, as well as the inclusion of this concept in various national and local development strategies: sustainable development strategy, regional development strategy, agriculture and rural development strategy, tourism development strategy and others.

As public institutions that provide support for the implementation of this concept, certain institutions from the agricultural and food sector can be mentioned, then institutions that deal with environmental protection, cultural and educational institutions, but also international institutions (for example, certain bodies and organs of the United Nations Organization) and national institutions (state administration and competent ministries, regional and local governments).

At the same time, the coordination of all participants in the process of implementation and maintenance of the system of designations of geographical origin is very important. Public institutions at the national level have an important role, first of all, in the process of establishing a legal framework that will regulate the application of the concept of products with designations of geographical origin, but also in providing support to processes at different levels, maximizing positive and minimizing negative effects.

Local public actors should work on the implementation of legal solutions in accordance with the specifics of products, production solutions and goals of individual participants at the local level. In addition, they should ensure the participation of all participants in the system of designations of geographical origin of products, to resolve potential conflicts between different entities, to engage in the achievement of common goals, then to enable the use of local raw materials in accordance with the principles of sustainability, to implement capacity building measures and support market development for GI products (Vandecandelaere et al., 2018).

### CONCLUSION

Products with a protected designation of geographical origin represent a significant potential for sustainable development of both national and local economies. With their premium prices, these products are able to contribute to the increase and diversification of agricultural production, the development of other activities at the local level, the reduction of dependence on imports and the increase of exports, the increase of employment of the local population and the reduction of the poverty rate. Their protection can enable better institutional, cultural and ecological development.

Products that carry a protected designation of geographical origin are highly valued, which is why consumers are willing to pay a higher price compared to the price of generic products. In addition, products with a protected designation of geographical origin can make a significant contribution to increasing the well-being of: producers, consumers and society as a whole, which practically means that they can influence the realization of greater value and consumer and producer surplus.

In the Republic of Serbia, agricultural and non-agricultural products, as well as wines and strong alcoholic beverages, as well as services, are protected by the designation of geographical origin. However, there is a very small number of authorized users of the designation of geographical origin, so accordingly it can be said that a small number of designations really "live". Bearing this in mind, it is very important and far greater involvement of the state in ensuring adequate legal regulations that would enable adequate protection of producers of products with protected geographical indications from so-called free riders (unregistered producers) and ensuring low incentive administrative costs for producers of high-quality products.

It is also necessary to harmonize with the legal acquis of the European Union because it is of particular importance for producers to pass the Law on Quality Schemes for Agricultural and Food Products in order to be able to market their products on the European Union market.

#### **REFERENCES**

- [1] Aranđelović, Z., & Gligorijević, Ž. (2014). *Regionalna ekonomija*. Niš: authors' edition.
- [2] Bramley, C. (2011). Lima, Peru: A review of the socio-economic impact of geographical indications: considerations for the developing world. In: WIPO Worldwide Symposium on Geographical Indications, 54-73. https://www.wipo.int/edocs/ mdocs/geoind/en/wipo\_geo\_lim\_11/wipo\_geo\_li m\_11\_compilation.pdf

- [3] Cei, L., Defrancesco, E. & Stefani, G. (2018). From Geographical Indications to Rural Development: A Review of the Economic Effects of European Union Policy. In: Sustainability, Basel: MDPI. doi.org/10.3390/su10103745
- [4] Đorđević, T. & Sredojević, Z. (2014). The Importance of Product Branding through Protected Geographical Origin. *Food marketing*, 127-151.
- [5] FAO (2021). The nutrition and health potential of geographical indication foods, Rome: FAO. doi.org/10.4060/cb3913en
- [6] Geuze, M. (2011). Geographical Indications and Appellations of Origin: An Overview. WIPO National Seminar on the Use of Industrial Property for the Protection of Iranian Handmade Carpets, Tehran, April 26-27. https://www.wipo.int/meetings/en/doc\_details.jsp ?doc\_id=167861
- [7] GI Certification academy (2022). https://giakademija.rs/wp-content/uploads/ Modul-I-sesija-2-with-notes.pdf.
- [8] Giovannucci, D. & Ranaboldo, C. (2008). Markets and Geographical Indications of Origin: Synthesis of Terra Madre Gathering and E-Forum. Latin-American Center for Rural Development (RIMISP). https://www.rimisp.org/wpcontent/files\_mf/13678 56069D\_GiovannucciandC\_RanaboldoMarketsa ndlGeng15\_11\_081.pdf
- [9] Gligorijević, Ž. (2017). TURIZAM razvojni društveno-ekonomski fenomen. Niš: authors' edition.
- [10] Gligorijević, Ž. (2014). *Ekonomska trilogija*. Niš: SVEN.
- [11] Gligorijević, Ž., Manasijević, A. & Vasić, D. (2021). Proizvodi sa oznakama geografskog porekla i regionalni razvoj Republike Srbije. U: Regionalni razvoj i demografski tokovi zemalja Jugoistočne Evrope, Niš: Faculty of Economics.
- [12] Institute for intellectual property (2022). National register. https://reg.zis.gov.rs/ogpreg/.
- [13] Kilibarda, N., Mizdraković, V., & Brdar, I. (2018). Koncept oznake geografskog porekla hrane u funkciji promocije kulturnog turizma. In: Proceedings: Kultura, nasleđe i razvoj turizma, International Scientific Conference of Singidunum University, Singidunum University, Belgrade (pp. 229-235). DOI: 10.15308/Sitcon-2018-229-235
- [14] Kovačević, V. (2020). Politika kvaliteta hrane u Srbiji, Šeme geografskih oznaka i tradicionalnih specijaliteta u Jugoistočnoj Evropi. Skoplje: Stalna radna grupa za regionalni ruralni razvoj u JIE, 199-219.

- [15] Law on indications of geographical origin, *Official Gazette of the RS*, no. 18/2010 and 44/2018. https://www.paragraf.rs/propisi/zakon\_o\_oznaka ma\_geografskog\_porekla.html
- [16] Law on wine, Official Gazette of the RS, no 41/2009-140, 93/2012-28, https://www.pravnoinformacioni-sistem.rs/SIGlasnikPortal/eli/rep/ sgrs/skupstina/zakon/2009/41/9/reg
- [17] Lukinovic, M. V., Opacic, A. I. & Milojević, I. M. (2021). Oznake geografskog porekla kao sredstvo valorizacije privrednog poslovanja šansa za oporavak sela. Sociološki pregled, 55(4), 1423-1438. doi.org/10.5937/socpreg55-32937
- [18] Manić, E., Mitrović, D., & Popović, S. (2017). Regional disparity analysis of business conditions: The case of Serbia. *Ekonomika preduzeća*, 65(3-4), 275-293. DOI:10.5937/EKOPRE1704275M
- [19] Manić, E. & Mitrović, Đ., (2021). Unbalanced development regional disparity analysis in Serbia. *Economic themes*, 59(1), 45-60. DOI: 10.2478/ethemes-2021-0003
- [20] Miladinovic, Z. & Varga, S. (2011). The legal protection on the indications of geographical origin of certain goods and services. *Economics* of *Agriculture*, 58(297-2016-3810), 333-346. https://www.ea.bg.ac.rs/index.php/EA/article/vie w/707/629
- [21] Ministry of agriculture, forestry and water management (2022). http://www.minpolj.gov.rs/category/saopstenja/s aopste-nja-poljoprivredne-politike/kvalitetideklarisanje/?script=lat%20),%20pristupljeno:% 2030.11.2022.%20godine.
- [22] Ministry of agriculture, forestry and water management (2022). http://www.minpolj.gov.rs/downloadcategory/jaka-alkoholna-pica/?script=lat.
- [23] Ministry of agriculture, forestry and water management (2022). http://www.minpolj.gov.rs/dozvoleiobrasci/geografsko-poreklo-vina/pdopgioznake-geografskog-porekla//.
- [24] Ministry of agriculture, forestry and water management (2022). http://www.minpolj.gov.rs/ministarstvo/sektori/se ktor-za-poljoprivrednu-politiku/grupa-za-kvalitetdeklarisanje-i-oznacavanje-hrane/grupa-zaoznacavanje-hrane-i-seme-kvalitetapoljoprivrednih-i-prehrambenihproizvoda/poljoprivredni-i-prehrambeniproizvodi-sa-zasticenim-geografskim-poreklom/.

- [25] Perišić, D. (2017). Regionalna konferencija o zaštiti geografskih oznaka porekla: lisabonski sistem i ostali načini zaštite – izveštaj, U: Marić, V. (ur.), Glasnik intelektualne svojine 2017/5, Belgrade: Institute for Intellectual Property of the RS.
- [26] Radovanović, N. (2014). Nacionalna i međunarodna zaštita poljoprivrednih i prehrambenih proizvoda putem oznaka geografskog porekla – slučaj Srbije. U: Mitić, G. & Ognjanov, S. (urednici), Marketing prehrambenih proizvoda, 115-126.
- [27] Raičević, V. (2010). Pravo industrijske svojine, Novi Sad: Pravni fakultet za privredu i pravosuđe. https://www.slideshare.net/-RadeGlomazic/pravo-industrijske-svojine
- [28] Republic institute for development (2007). Regional development strategy of the Republic of Serbia for the period 2007 to 2012, Belgrade. https://www.gs.gov.rs/lat/strategije-vs.html
- [29] Republic of Serbia, (2021). Nacionalni registar geografskih oznaka, available at: https://reg.zis.gov.rs/ogpreg/.
- [30] Réquillart, V. (2007, June). On the Economics of Geographical Indications in the EU. In: Geographical Indications, Country of Origin and Collective Brands: Firm Strategies and Public Policies workshop, Toulouse School of Economics, pp. 14-15.
- [31] Simin, M. J., Jovićević, P. & Novaković, S. (2016). Appellations of geographical origin as a generator of national competitiveness. *Ekono-mika poljoprivrede*, 63(2), 567-583. doi.org/10.5937/ekoPolj1602567J
- [32] Simović, K. (2015). Agro-prehrambene šeme kvaliteta na nivou EU i potencijalne koristi zaštite srpskih proizvoda u kontekstu pregovora sa EU. Belgrade: Center for European Policies. https://cep.org.rs/wp-content/uploads/2022/ 10/final\_agroprehrambene\_seme.pdf
- [33] Srbinovska, S., Korsinovi, P., Ilić, B., Pavloska Đorđieska, D., Mor, B. & Džimrevska, I. (2020).

- Politika kvaliteta hrane: šeme geografskih oznaka i tradicionalnih specijaliteta u Jugoistočnoj Evropi. Stalna radna grupa za regionalni ruralni razvoj u JIE (SWG). https://seerural.org/wpcontent/uploads/2020/07/Food-Quality-Policy-Assessment\_SRB.pdf
- [34] Statistical office of the Republic of Serbia (2020). Regionalni bruto domaći proizvod. Regioni i oblasti Republike Srbije, 2019. Belgrade. https://publikacije.stat.gov.rs/G2020/Pdf/G20201 328.pdf
- [35] Török, Á., Jantyik, L., Maró, Z. M. & Moir, H. V. (2020). Understanding the real-world impact of geographical indications: A critical review of the empirical economic literature. Sustainability, 12(22), 9434. https://www.mdpi.com/2071-1050/ 12/22/9434
- [36] UNESCO (2005). https://www.sciencedirect.com/topics/agricultural-and-biological-sciences/terroir
- [37] Vandecandelaere, E., Teyssier, C., Barjolle, D., Jeanneaux, P., Fournier, S., & Beucherie, O. (2018). Strengthening sustainable food systems through geographical indications: An analysis of economic impacts. European Bank for Reconstruction and Development (EBRD). https://www.fao.org/3/i8737en/i8737en.pdf
- [38] Van Ittersum, K. (2001). The Role of Region of Origin in Consumer Decision-Making and Choice, Mansholt Studies Series, No 23, Mansholt Institute. https://edepot.wur.nl/82514
- [39] Vukmirović, J. (2013). Regionalni razvoj kao preduslov za izlazak iz krize. *Makroekonomske* analize i trendovi, 219, 39-43. https://www.ecinst.org.rs/sites/default/files/matkratki/temabroja219.pdf
- [40] WIPO (2017). Geographical Indications, An Introduction, Geneva: World Intellectual Property Organization. https://www.wipo.int/edocs/pubdocs/en/wipo\_pu b\_952\_2021.pdf