

FOOD PRODUCTS WITH THE POTENTIAL OF GEOGRAPHICAL INDICATIONS IN BOSNIA AND HERZEGOVINA

Dragan Brenjo¹, Vlado Pijunović², Ksenija Duka³

¹Food Safety Agency of B&H, Kneza Višeslava bb, 88000 Mostar,
Bosnia and Herzegovina

²NPC, FAO, UN House, Zmaja od Bosne bb, 71000 Sarajevo,
Bosnia and Herzegovina

³Faculty of Medicine - Department of Pharmacy, Save Mrkalja 14, 78000 Banja
Luka, Bosnia and Herzegovina

Abstract: All regional food products do not have the potential of a geographical indication (GI). There are some basic conditions to be a GI. One of them is the connection between the geographical origin and the product, reputation, quality and/or processing method. More importantly, the quality, reputation or other characteristics of the product should be essentially attributable to its geographical origin. Natural and/or human factors should influence the quality of the regional product. Another condition is that the product should have a historical background. A product with GI potential should have some different characteristics from similar products from another area. The stronger the product's connection to its origin, specificity and reputation, the greater it is GI potential. From April 2021 to February 2022, the authors, with the support of REU, FAO Project TCP/BIH/3801/C1, conducted field and References research. In order to identify products with GI potential in BiH, 42 cities/municipalities were visited where interviews were conducted with representatives of institutions, scientific research institutions, chambers of commerce, cooperatives/associations, agricultural producers, non-governmental organizations and consumer associations. A questionnaire was prepared and sent to the addresses of all cities/municipalities in Bosnia and Herzegovina. All data collected from primary and secondary sources are organized according to production/processing regions and product categories. Also, the classification of products according to entities, cantons and regions is determined. The prioritization of criteria weights was achieved by applying the implementation of the Analytical Hierarchy Process (AHP). Sorting of products, was done according to their overall rating. 110 products were identified and processed, of which 68 met the criteria as products with GI potential.

Key words: Food, geographical indication, potential

Introduction

Agriculture in Bosnia and Herzegovina (BiH) is an economically and politically important sector characterized by insufficient utilization of natural resources and production potential, low productivity, low technical and technological capacity of farms, generally insufficiently value chains of agriculture and food, low level of competitiveness, significant dependence on foreign trade, etc. As a sector, agriculture, forestry and fisheries contribute about 8% to GDP (for 2017). This sector

employs about 19% of the free labor force, and there is about 1,780,000 ha of used agricultural area at its disposal. In addition, of the total area (5.113 million ha), 47% represents agricultural land. A large part of the country is a mountainous area (66% of the territory is considered a mountainous area) and only 20% (about one million ha) is suitable for intensive agriculture. The high availability of meadows and mountain pastures indicates a potential advantage for the production of livestock and dairy products. Orchards and vineyards cover about 100,000 ha. The structure of the agricultural sector is characterized by small and economically weak family farms, which are mainly produced for domestic use. It is estimated that over 50% of agricultural holdings, out of 114,576 registered in the register of agricultural holdings in 2017, occupy an area below 2 ha. State holdings, which are mostly far larger, mostly do not work or work difficult because the privatization process has not been completed [1].

Most dismembered farms are largely not in a position to compete in economies of scale and their complementarity should be based on "value-added" products, such as GI. Because its special geographical position, available natural resources and rich tradition, BiH can successfully compete with a large assortment of food products of homemade and traditional specialties. Accordingly, products with certain aspects of geographical indications are expected to be a trump card for the development of the agricultural sector in BiH.

According to the 2020 EC Report, "As far as quality policy is concerned, the country has continued to strengthen its bylaws and the necessary structures for the implementation of the quality control system. However, it is important that the country continues to improve and align its legal framework with the relevant EU acquis in order to progress in this area, in particular as regards wines and spirits, and to ensure a clearer distribution of competences. Regarding the protection of GI food products, a complete legal framework has been established at the national level in BiH and preconditions for submitting applications for the protection of products from BiH at the EU level, as prescribed and enabled by EU legislation, as well as the Rulebook on Quality Systems for Food Products [2-3].

The Food Safety Agency of Bosnia and Herzegovina (The Agency), as the competent authority in Bosnia and Herzegovina, has so far adopted five decisions on the registration of food products with protected labels, namely two decisions on the registration of food products with a designation of origin ("Livanjski original cheese" and "Drvar mutated jam of cornel") and three decisions on the registration of food products ("Nevesinjski potatoes", "Visočka pečenica" and "Livanjski cheese") with a geographical indication.

In the process of registration with a label guaranteed traditional specialty are two products; "Krajiška trahana" and "Krajiški omač". Also, on 16.12.2022., at the request of the manufacturer and through the Agency, the European Commission received the application for registration of products "Livno cheese" with a geographical indication at the EU level.

Taking into account all of the above, with fao support from the program on the link between quality and origin of products, from April 2021 to February 2022, the authors conducted field and References research. The aim of the research is divided into two main groups:

1. Preparation of inventory of regional/traditional products that have the potential to become geographical indications of Bosnia and Herzegovina.
2. Priority of regional/traditional products, according to the possibilities of their success, in the development of efficient geographical designation projects of rural territories that can be successful in implementation and can lead to other potential products, by-products and rural tourism related to geographic allocation

Material and methods

In order to identify products with potential GI of Bosnia and Herzegovina, 42 cities/ municipalities were visited (Figure 1) in which interviews were conducted with representatives of institutions, scientific research institutions, chambers of commerce, cooperatives / associations, agricultural producers, non-governmental organizations and consumer associations.



Figure 1. Map of the field tour

A questionnaire was prepared for participants related to these products, which was sent to the addresses of all cities / municipalities in BiH. During the preparation of the questionnaire, books, reports and articles prepared by FAO [4-9]. The survey gathered information such as product description, special characteristics, production method, production area, local knowledge, reputation and product history that are required to determine products with go potential, as well as some economic issues such as manufacturer number, cost of production, sales price, marketing channels,

etc. All data collected from primary and secondary sources are organized by production/processing regions and product categories. Also, the classification of products by entities, cantons and regions is determined. Each product described has uniform description details (product description, specificity, production method, history, etc.). To prioritize the weight of the criteria came by applying the implementation of the analytical and hierarchical process (AHP) [10]. Also, the protected products of GI in Bosnia and Herzegovina are described, and by applying AHP, sorted. The described products with the potential of GI are distributed by categories of food products, i.e. classes, as in the register of protected products ZOP and PGI in BiH and the EU (eAmbrosia). Products described in one class were processed using AHP and sorted based on their rating. All data with priority criteria, for the described products, were processed using AHP and sorting was carried out according to their overall assessment. Determination of the potential of GI (sorting) depended on their overall rating.

All respondents were asked to do an assessment based on seven criteria that are important for managing and determining the potential of GI, as set out in Table 1, and the weights were rated between 0 and 5 points as the most pronounced score for each criterion.

Table 1. Product evaluation according to the set criteria

<i>EVALUATION of the PRODUCT</i>	0 None	1 Very Weak	2 Weak	3 Moderate	4 High	5 Very High
Specificity of the product						
Reputation of the product						
Existence/Power of the producer/trader organization						
Marketing potential of the product (domestic)						
Export potential of the product						
Sustainability of the production (environmental, economic and social aspects)						
Income-generation potential (sale price, profit margin etc.)						

In order to obtain the most credible data, on the ballot on which the evaluation was carried out, clarifications of the meaning for each of the above criteria are given.

Specificity/Characteristics by region: ZOP and PGI products can only be produced within a given geographical area. This especially contributes to the end, a product that is unique and makes it recognizable. In cases where a product cannot be produced outside that territory or region without losing its characteristics, or where there must be at least one production step taken in the region in order to maintain its characteristics, the region shall contribute to its characteristics. If a product has the same quality when manufactured outside that territory, its characteristics are not

region-specific and are not subject to geographical indication. To achieve this, it is necessary to take into account not only biological characteristics, but also local knowledge and practice. These elements are an integral part of the specificity of the product.

PRODUCT REPUTATION: The value of the geographical indication comes from a wider reputation of the market. During commercialization, it is important that consumers living outside the city/region know the product; The product's reputation extends beyond its region. It should be perceived as a high-quality product, positioned differently from similar products, and known to a wide range of consumers. Geography must build a reputation based on past customer experience. Most well-known geographical indications (such as Parma Ham, Roquefort cheese or Champagne) naturally enjoy a reputation based on their history and international recognition.

THE POWER OF THE ORGANIZATION: Collective mobilization of neochad actors is to define and apply geographical indications. For every product, there is an organization that protects the quality and manufacturers of products and conducts marketing, studies and conducts all studies regarding the product, it is important for placing the product on the market and ensuring its sustainability. It is also important that the organization is strong and operates effectively. Here, a powerful institution/organization means: An organization with strong capital and management structure that owns or can access financial resources to carry out various activities and employs professional staff.

MARKETING POTENTIAL: Although local products are generally not produced in large quantities it is important to produce a market volume. The product should be consumed outside its region, with a marketing mix, such as promotions, prices and distributions.

SUSTAINABILITY: Sustainability includes not only the sustainability of production, but also production techniques and sustainability under different market conditions. This criterion also covers environmental, economic and social sustainability.

EXPORT POTENTIAL: Criteria such as export quantity, value and export opportunities are important in order to extract the value of a country's local products and increase the resulting added value from the product. If the applicant applies for a geographical indication at EU level, the criterion is important, but if not, then less.

REVENUE GENERATION POTENTIAL: This criterion refers to a combination of the number of producers, production volumes, cost and sales price of the product. Local products should have the potential to generate revenue for their producers and the region. If not, its impact on development in the region is weak.

When processing evaluations according to criteria, for a particular product, obtained from field respondents, analytical hierarchical process (AHP) was used. AHP was first proposed by Myers & Alpert [11], developed by Saaty [12] and turned into a model. AHP has been applied in many fields, including private sector investment decisions as well as government policy choices [13-16]. In order to achieve more

objective results, the weight of the criteria was not given by the research team, but by a team of experts, university professors, who have a minimum of 10 years of experience in the subject area. AHP was applied not only to calculate weight criteria but also as a way of selecting products.

Results and discussion

All local/regional products do not have geographical indication potential. There are some basic requirements that the product must meet. One of them is the relationship between geographical origin and product, reputation, quality and/or method of processing. More importantly, the quality, reputation or other characteristics of a product should be essentially attributed to its geographical origin. Natural and/or human factors should affect the quality of the regional product. The second condition is that the product should have a historical background. A potential product with a geographical indication should have some different characteristics from similar products in another area. The stronger the connection of a product with its origin, specificity and reputation, the greater its GI potential.

The first step that was made was the processing of collected data and the selection of products that meet the set criteria for products with go potential in BiH. A total of 110 products were identified and processed, of which 68 met the criteria as products with GI potential. The number of 68 products also includes 5 already protected. The reason for the rejection of 42 products is the failure to meet the minimum criteria prescribed by national and EU legislation. Local actors, producers of these products as well as a team of researchers have not been able to find enough References, historical and evidence of a link between geographical area and geographical origin with that product. Often the description of production methods could not be done to the end.

Using GI as a driver for local participants, and especially producers, to engage in collective processes to preserve and promote their local resources and production system, it is crucial to choose products with the potential of GI that will serve as learning processes and provide demonstrative effects. Indeed, there is usually more than one local product from a place or region or one category and it is important to assess well their capacity to provide best practice and good results for other interested parties to follow the path. Consequently, the question arises as to which products are chosen among all domestic products. Some products have to pass multiple criteria to show GI and benefit from it. Therefore, product selection, as a geographical label topic in some regions, has become a problem to be emphasized [10].

Tables 2, 3, 4 and 5 describe products with the potential of geographical indications, classified on the basis of the category of products to which they belong, according to the applicable regulations in BiH and the EU on the protection of GI, as well as the geographical area of production / processing, classified by entities and Brčko District of BiH and cantons / counties in the FBiH or regions in the RS.

Table 2. Number of products with potential GI by product category

PRODUCT CATEGORY	PRODUCT NUMBER
Class 1.1. Fresh meat (and slaughter by-products)	0
Class 1.2. Meat products (cooked, salted, smoked, etc.)	11
Class 1.3. Cheeses	16
Class 1.4. Other products of animal origin (eggs, honey, various dairy products, except butter, etc.)	7
Class 1.5. Oils and fats (butter, margarine, oil, etc.)	2
Class 1.6. Fruits, vegetables and cereals, in their natural state or processed	21
Class 1.7. Fresh fish, molluscs and crustaceans and products derived therefrom	4
Class 1.8. Other products (spices, etc.)	2
Class 2.3. Bread, pastry, cakes, confectionery, biscuits and other baker's wares	2
Class 2.4. Beverages made from plant extracts	0
Class 2.5. Pasta	2
Class 2.8. Ready meals	1
IN TOTAL	68

Table 3. Classification of products with potential GI by product category

PRODUCT CATEGORY	NAME OF THE PRODUCT
Class 1.2. Meat products (cooked, salted, smoked, etc.)	1. Pečenica from Visoko - PGI
	2. Ćevap
	3. Visoko sujuk
	4. Hercegovinian prosciutto
	5. Sheep stelja from Visoko
	6. Roasted lamb from Visoko
	7. Kaurma from Visoko
	8. Krajina beef prosciutto
	9. Visoko pirjan
	10. Hercegovinian dry goat meat
	11. Krajina sujuk
Class 1.3. Cheeses	1. Livno cheese - PGI
	2. Livno original cheese - PDO
	3. Trappist cheese– Marija Zvijezda
	4. Hercegovinian cheese in sack
	5. Torotan cheese
	6. Vlačić / Travnik cheese
	7. Majevisa smoked cheese zarac
	8. Kupres cheese
	9. Hercegovinian škripavac
	10. Janj bagel
	11. Blatnica cheese
	12. Repovci cheese
	13. Krajiški shep cheese
	14. Kalenderovac cheese

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PRODUCT CATEGORY	NAME OF THE PRODUCT
	15. Zarica
	16. Krajina semi-hard cheese
Class 1.4. Other products of animal origin (eggs, honey, various dairy products, except butter, etc.)	1. Hercegovinian honey 2. Chestnut honey from Cazinska krajina 3. Kostajnica chestnuts honey 4. Skorup – kajmak from Romanija 5. Gatački kajmak from the skin 6. Petrovačka basa – pomješa 7. Janj kajmak
Class 1.5. Oils and fats (butter, margarine, oil, etc.)	1. Hercegovinian extra virgin olive oil 2. Pumpkin seed oil
Class 1.6. Fruits, vegetables and cereals, in their natural state or processed	1. Nevesinje potato - PGI 2. Cornelian cherry jam from Drvar (not boiled)-PDO 3. Sember cabbage 4. Hercegovinian dried figs 5. Hercegovinian cherry 6. Poljak beans 7. Raštan /Raštika 8. Hercegovinian pomegranate 9. Rogatica potato 10. Glamoč potato 11. Hercegovina ćufter 12. Fig jam 13. Fojnica potato 14. Tomato from Buturović polje 15. Apple jam 16. Dried plum 17. Krnjin strawberry 18. Stodanac corn 19. Apple juice 20. Poluranka potato 21. Chestnut
Class 1.7. Fresh fish, molluscs and crustaceans and products derived therefrom	1. Neum oyster 2. Neretva soft-mouth 3. Mušule 4. Trout glavatica
Class 1.8. Other products (spices, etc.)	1. Sage 2. People's tea
Class 2.3. Bread, pastry, cakes, confectionery, biscuits and other baker's wares	1. Kiseljak scone 2. Grmeč integral bread
Class 2.5. Pasta	1. Trahana

PRODUCT CATEGORY	NAME OF THE PRODUCT
	2. Omač
Class 2.8. Ready meals	1. Cicvara

Table 4. Number of products with potential GI by entities and Brčko District of BiH

Entities	Number of processed products		
	Total (Σ)	Only in that area	Production in several areas
Republic of Srpska	36	19	17
Federation of BiH	48	30	17
Brcko District BiH	1	0	1

Table 5. Number of products with potential GI by cantons and regions

Republic of Srpska			Federation of BiH		
REGION	Total	Only in that area	CANTON	Total (Σ)	Only in that area
Prijedor	4	2	USK	8	6
Banja Luka	5	4	ZDK	6	6
Doboj	6	3	SBK	5	4
Bijeljina	3	2	SAK	1	1
Zvornik	1	1	TZK	2	1
East Sarajevo	4	3	ZHŽ	10	2
Trebinje	20	4	K10	5	4
			HNK/Ž	23	8

Figure 2 shows a map of Bosnia and Herzegovina with described products with GI potential. The map shows the administrative division of Bosnia and Herzegovina by entities and the Brčko District of BiH, cantons in the FBiH and all local government units (cities and municipalities). The Green Triangle shows products that are produced in a limited geographical area, usually only in the administrative area of one city/municipality, while the yellow circle shows products that are produced/processed in the area of several cities/municipalities. An example of a green triangle is Gatački kajmak from the blackjack, whose production can be carried out only within the administrative boundary of the municipality of Gacko and the yellow circle, Hercegovački prosciutto, whose production is carried out in the area of eastern Herzegovina in the RS and two cantons (HNK / Ž and ZHŽ) in the territory of the FBiH.

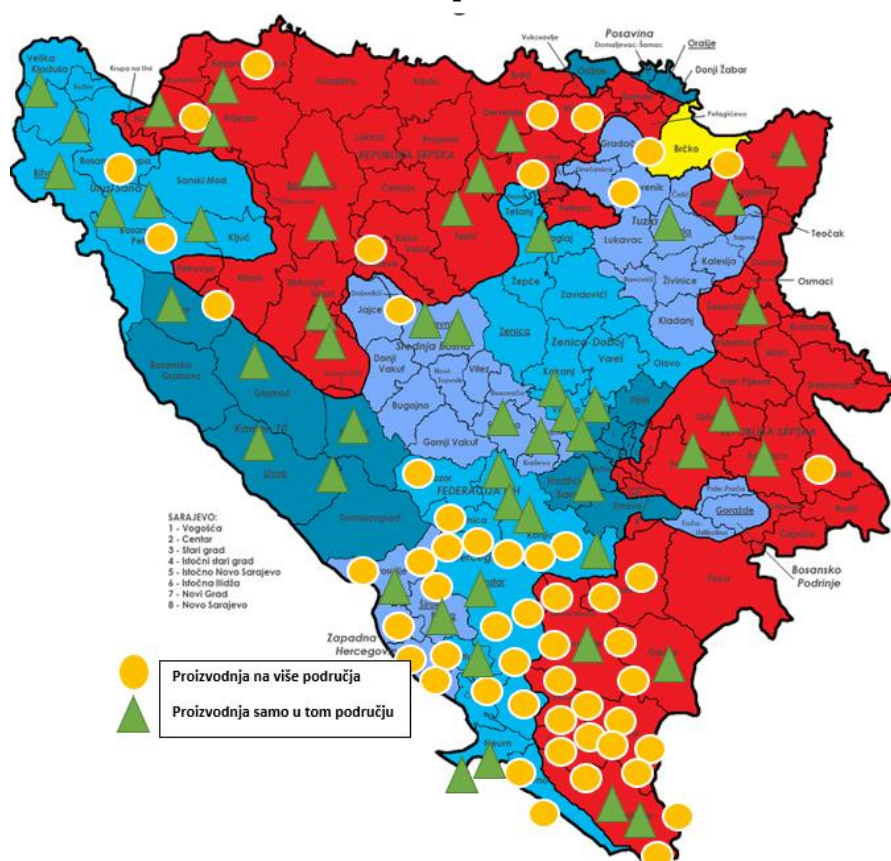


Figure 2. Map of described products

As stated in the methodology of the study, to prioritize the weight of the criteria came by applying the implementation of AHP. Figure 3a and 3b shows the determination of the severity of the molesterium. The most important criterion is determined the specificity of the product, the reputation and power of the organization, while the marketing potential and export potential of the product are at the bottom. Sustainability and potential for revenue generation are in the middle of the established weights of the criteria.

	Specificity	Reputation	Pow. Of Org	Mar. Potantial	Sustainability	Exp. Pot	Inc. Gen. Pot
Specificity	1,00	2,18	2,66	4,11	2,04	3,89	2,02
Reputation	0,46	1,00	3,58	4,56	2,14	4,83	1,94
Pow. Of Org	0,38	0,28	1,00	3,92	1,38	3,30	1,73
Mar. Potantial	0,24	0,22	0,26	1,00	1,04	3,35	0,67
Sustainability	0,49	0,47	0,73	0,96	1,00	4,37	2,00
Export Potantial	0,26	0,21	0,30	0,30	0,23	1,00	0,81
Inc. Gen. Pot	0,50	0,52	0,58	1,50	0,50	1,23	1,00
	3,32	4,87	9,11	16,35	8,33	21,97	10,17

Figure 3a. Criteria weight

	Specificity	Reputation	Pow. Of Org	Mar. Potantial	Sustainability	Exp. Pot	Inc.Gen. Pot	W Column Vector	D Column Vector	e	
Specificity	0,30	0,45	0,29	0,25	0,24	0,18	0,20	0,273	2,126	7,778	1
Reputation	0,14	0,21	0,39	0,28	0,26	0,22	0,19	0,240	1,910	7,946	2
Pow. Of Org	0,11	0,06	0,11	0,24	0,17	0,15	0,17	0,144	1,106	7,696	3
Mar. Potantial	0,07	0,05	0,03	0,06	0,12	0,15	0,07	0,079	0,583	7,411	6
Sustainability	0,15	0,10	0,08	0,06	0,12	0,20	0,20	0,128	0,936	7,295	4
Export Potantial	0,08	0,04	0,03	0,02	0,03	0,05	0,08	0,046	0,335	7,236	7
Inc. Gen. Pot	0,15	0,11	0,06	0,09	0,06	0,06	0,10	0,089	0,671	7,517	5
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Figure 3b. Criteria weight

All data with priority criteria were processed using AHP and sorting of the described products was carried out according to their overall assessment. In Table 6 there is an overview of the described products sorted by AHP.

Table 6. Product classification using AHP

Num ber	Products	Total Point			
			36.	Appče jam	3,52
			37.	Dried plum	3,52
1.	Hercegovinian honey	4,34	38.	Roasted lamb from Visoko	3,46
2.	Trappist cheese – Marija Zvijezda	4,24	39.	Petrovačka basa-pomješa	3,46
3.	Ćevap	4,24	40.	Hercegovinian škripavac	3,42
4.	Sember cabbage	4,20	41.	People's tea	3,39
5.	Hercegovinian extra virgin olive oil	4,18	42.	Pumpkin seede oil	3,37
6.	Neum oyster	4,04	43.	Kaurma from Visoko	3,37
7.	Neretva soft-mouth	3,98	44.	Stodanac corn	3,35
8.	Sage	3,94	45.	Krnjin strawberry	3,34
9.	Hercegovinian dried figs	3,94	46.	Krajina beef prosciutto	3,34
10.	Chestnut noney from Cazinska krajina	3,90	47.	Trout glavatica	3,33
11.	Hercegovinian cheese in sack	3,87	48.	Janj bagel	3,32
12.	Hercegovinian cherry	3,86	49.	Trahana	3,31
13.	Kiseljak scone	3,86	50.	Janj kajmak	3,29
14.	Poljak beans	3,86	51.	Blatnica cheese	3,22
15.	Torotan cheese	3,86	52.	Apple jam	3,19
16.	Raštan/Raštika	3,85	53.	Omač	3,17
17.	Vlašićk/Travnik cheese	3,83	54.	Repovci cheese	3,16
18.	Hercegovinian pomegranate	3,82	55.	Visoko pirjan	3,16
19.	Majevica smoked cheese zarac	3,80	56.	Poluranka potato	3,04
20.	Cicvara	3,80	57.	Krajiški shep cheese	3,02
21.	Kostajnica chestnuts hoey	3,79	58.	Hercegovinian dry goat meat	2,98
22.	Visoko sujuk	3,76	59.	Kalenderovac cheese	2,97
23.	Kupres cheese	3,73	60.	Krajina sujuk	2,94
24.	Rogatica potato	3,73	61.	Zarica	2,93
25.	Glamoč potato	3,70	62.	Krajina semi-hard cheesed	2,83
26.	Grmeč integral bread	3,70	63.	Chestnut	2,80
27.	Hercegovina ćufter	3,68			
28.	Gatački kajmak from the skin	3,68			
29.	Skorup-kajmak from Romanija	3,64			
30.	Fig jam	3,61			
31.	Hercegovinian prosciutto	3,59			
32.	Mušule	3,58			
33.	Fojnica potato	3,55			
34.	Tomato from Buturević polja	3,54			
35.	Sheep stelja from Visoko	3,53			

Conclusions

The results of the research of traditional products with the potential of geographical indications in Bosnia and Herzegovina have proven that:

- Bosnia and Herzegovina, due to the peculiarities of geographical position, natural and climatic conditions as well as rich culture and tradition, has a diverse offer of traditional products with the potential for protection by geographical indications,
- by reviewing the data, the diversity and distribution of the described products (by product category and geographical area of production/processing) show that in the coming period the opportunities and potential that exist must be made more use of,
- not all local/regional products have geographical indication potential. There are some basic requirements that the product must meet.
- Quality policies, related to geographical indications, can complement programmes around supporting rural employment increase and linking with the geography sector in Bosnia and Herzegovina. In particular, they can contribute to areas where the agricultural sector is of greater economic importance and areas with difficult economic conditions.

The results of the research can be used to support rural tourism and rural development, promote regions and territories, and can also be used to prepare registration documentation for protection in Bosnia and Herzegovina, but also in the European Union. By raising awareness of the wealth of Bosnia and Herzegovina with originating products, these data can help producers, community, traders, importers and investors to exploit the potential of "value added GI" and expand the presence of geographically labeled products on the domestic and international markets. It can also be a useful source to help policymakers build national programmes around supporting the increase of rural employment and connecting with the geography sector in Bosnia and Herzegovina.

References

- [1] European Commission (EC) (2019) Analytical report 52019DC0261, 2019.
- [2] Rulebook on Quality Systems for Food Products ("Official Gazette of BiH", No. 90/18), 2018. https://www.fsa.gov.ba/old/images/pravni-propisi/bs-Pravilnik_o_sistemima_kvaliteta_za_prehrambene_proizvode_90-18.pdf
- [3] Brenjo D & Hajrić Dž. 8th INTERNATIONAL SYMPOSIUM ON AGRICULTURAL SCIENCES, EU policy on food quality and legislative framework in Bosnia and Herzegovina, Trebinje, 2019, <http://agro.unibl.org/wp-content/uploads/2019/06/Book-of-Abstracts-AgroReS-2019.pdf>
- [4] FAO-SINER-GI. Linking People, Places and Products - A Guide for Promoting QualityLinked to Geographical Origin and Sustainable Geographical Indications. Personal authors: E. Vandecandelaere, F. Arfini, G. Belletti, A. Marescotti. 2010. <http://www.fao.org/3/i1760e/i1760e.pdf>

- [5] FAO. Identification of origin-linked products and their potential for development: A methodology for participatory inventories, Rome, Italy, 2012. Retrieved from Food and Agriculture Organisation of United Nations: <https://www.fao.org/3/au686e/au686e.pdf>
- [6] FAO and Slow Food. National Inventory of origin-linked Products in Albania, Bulgaria and the Republic of Macedonia, 2015. <https://slowfood.mk/national-inventory-of-origin-linked-products-in-albania-bulgaria-and-the-republic-of-macedonia/>
- [7] FAO. Geographical indication schemes in Croatia, Hungary and Poland. 2018. <http://www.fao.org/3/CA0938EN/>
- [8] FAO. Atlas of Origin Linked Food Products in Georgia. Rome, Italy, 2019. 133 pp.
- [9] FAO. Atlas of typical food from Montenegro, Rome, Italy, 2021. <https://www.fao.org/3/ca8339b/ca8339b.pdf>
- [10] DOKUZLU S, PONS J.C, VANDECANDELAERE E, ROGGIA E, RICCI M, ERDAL B and GUEYE M. Food and Agricultural Product Pilot Selection for Geographical Indication Projects, New Medit - A Mediterranean Journal of Economics, Agriculture and Environment, 2020, 20(3), 103 – 117.
- [11] Myers J.H, Alpert M.I. Determinant Buying Attitudes: Meaning and Measurement. Journal of Marketing, 1968, 32(4): 13-20.
- [12] Saaty T.L. A scaling method for priorities in a hierarchical structure. Journal of Mathematical Psychology, 1977, 15(3): 234-281.
- [13] Haas R, Meixner O (2009) An Illustrated Guide to the Analytic Hierarchy Process. Institute of Marketing & Innovation University of Natural Resources and Applied Life Sciences, Vienna. 2009.
- [14] Ömürbek N, Tunca M.A. Analitik hiyerarşi süreci ve analitik ağısüreci yöntemlerinde grup kararı verilmesi aşamasına ilişkin bir örnek uygulama. Süleyman Demirel Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 2013, 18(3): 47-70.
- [15] Özden Ü.H. Analitik hiyerarşi yöntemi ile ilkökul seçimi. Marmara Üniversitesi İktisadi İdari Bilimler Fakültesi Dergisi, 2008, 14(1). 299-320.
- [16] Saaty T.L. Decision making with the analytic hierarchy process. International Journal of Services Sciences, 2008, 1(1): 83-98

PREHRAMBENI PROIZVODI SA POTENCIJALOM GEOGRAFSKIH OZNAKA U BOSNI I HERCEGOVINI

Dragan Brenjo¹, Vlado Pijunović², Ksenija Duka³

¹Agencija za bezbjednost hrane BiH, Kneza Višeslava bb, 88000 Mostar, Bosna i Hercegovina

²NPC, FAO, UN House, Zmaja od Bosne bb, 71000 Sarajevo, Bosna i Hercegovina

³Medicinski fakultet-smjer farmacija, Save Mrkalja 14, 78000 Banja Luka, Bosna i Hercegovina

Sažetak: Svi regionalni prehrambeni proizvodi nemaju potencijal geografske oznake (GO). Postoje neki osnovni uslovi da bi bili GO. Jedna od njih je veza između geografskog porijekla i proizvoda, reputacije, kvaliteta i/ili načina obrade. Što je još važnije, kvalitet, reputacija ili druge karakteristike proizvoda treba da se u suštini pripisuju njegovom geografskom porijeklu. Prirodni i/ili ljudski faktori treba da utiču na kvalitet regionalnog proizvoda. Drugi uslov je da proizvod treba da ima istorijsku pozadinu. Proizvod sa potencijalom GO treba da ima neke različite karakteristike od sličnih proizvoda sa drugog područja. Što je jača veza proizvoda sa njegovim

porijeklom, specifičnošću i reputacijom, veći je njegov GO potencijal. Od aprila 2021. do februara 2022. godine autori su, uz podršku REU, FAO Projekta TCP/BIH/3801/C1, sprovedi terenska i literaturna istraživanja. Kako bi se identifikovali proizvodi sa potencijalom GO u BiH, obišli su 42 grada/opštine u kojima su obavljani intervjui sa predstavnicima institucija, naučnoistraživačkih ustanova, privrednih komora, zadruga/udruženja, poljoprivrednih proizvođača, nevladinih organizacija i udruženja potrošača. Pripremljen je upitnik koji je upućen na odrese svih gradova/opština u BiH. Svi podaci prikupljeni iz primarnih i sekundarnih izvora organizovani su prema regijama proizvodnje/prerade i kategorijama proizvoda. Takođe, određeno je klasifikovanje proizvoda prema entitetima, kantonima i regijama. Za određivanje prioriteta težina kriterijuma došlo se primjenom implementacije analitičko hijerarhijskog procesa (AHP). Sortiranje proizvoda izvršeno je prema njihovoj ukupnoj ocjeni. Identifikovano i obrađeno je 110 proizvoda, od kojih je 68 ispunilo kriterijume kao proizvodi sa potencijalom GO.

Ključne riječi: Hrana, geografska oznaka, potencijal