ORGANIC FOOD: CHARACTERISTICS, REGULATIONS AND TOURISM DEVELOPMENT IMPACT

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Abstract

The European Union is committed to setting the highest standards in the field of food safety, so it brings new and complements existing food quality and safety regulations. One of the forms of production of safe products is primary organic production. The law on organic production defines the methods of organic production, control, certification, processing, etc. Organic food is a product that in its basic biochemical characteristics matches the type and varieties. The organic production of lettuce and other vegetables increases the content of vitamin C. In the human diet, products derived from primary crop farming are largely consumed. A significant increase in protein content was found in the grains of these plant species and their product (flour) from organic production. Undeveloped countries, such as the Republic of Serbia, do not have the capacities to process primary agricultural products into highly processed products, for which there is a strong demand on the international market, apart from the possibility of placing products through tourist facilities.

Key Words: *organic production, nutritional components, regulations, tourism development*

Introduction

Nutrition and food safety as interdependent components are key elements of public health (World Health Organization, 2013).

Food quality and safety is a very important issue that is being debated today. Food safety can be defined either in a broad or narrow sense. In a

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narrow sense, food safety can be defined as the absence of food risks. In a broad sense, food safety may include the nutritional characteristics of foods as well as the presence of toxicant residues of chemicals and genetic modification (Savović et al., 2012). According to the Commission of the European communities (1999), food quality and safety can be defined as "the degree to which a product meets the needs of users". The food safe for health is most often defined as food that does not contain physical, chemical, or microbiological contaminants, and after consumption, it can not harm human health.

The presence of toxicants in food can be a consequence of air, water and soil pollution. The soil, as the main environment for food production and the circulation of matter, is undergoing major changes in hygiene and health. Many toxicants and harmful substances that can be found in food products are the result of agricultural production. Over the past few decades, the risk of food and water contamination has increased with chemical residues from agricultural production (mineral fertilizers, pesticides, biostimulants, and antibiotics in livestock production). According to Cvijanović & Savić, (2016) thus, various dioxins can be found in food products, representing a group of stable, polychlorinated complex organic chemical compounds (p. 46). Dioxins are widespread contaminants that do not have a specific use and are not produced. They are produced as by-products of various industrial processes (combustion in waste incineration, as well as in the production of chemicals and in the use of orphanochlorine compounds). Organochlorine pesticides belong to the group of so-called persistent organic pollutant (POPs), which are generally resistant to photolytic, biological, and chemical degradation. Since they do not dissolve in water, they can accumulate in animal adipose tissue and thus enter the food chain. Organophosphate insecticides, triazine herbicides can be leached from agricultural land to get into drinking water, where they pose a danger to human health (Cvijanović et al., 2013). Large amounts of mineral fertilizers are used in intensive agricultural production. This method is dangerous for the environment because plants can not absorb some of nitrogen. As a result, nitrogen is released into the environment. Nitrogen and phosphorus fertilizer residues also pose a great risk to food safety. The highest concentrations of nitrates and nitrites contain leafy vegetables, especially spinach, lettuce, arugula, carrots, and other species that can cause health problems in young children. Environmental contamination with heavy metals is a global problem, since they are non-degradable, and most of them have a toxic effect on living organisms in certain concentrations (Bhuiian et al., 2010). The presence of heavy metals

(nickel, lead, iron, and cadmium) in food may be a consequence of changes in various agrotechnical measures in agricultural production (Kanianska, 2016).

Organic production - a prerequisite for healthy food

Over the last few decades, the increasing human population has greatly influenced a progressive increase in demand for value-added food products (Elmalimadi et al., 2017) leading to an increase in primary food production per unit area. (Cvijanović et al., 2011) "in addition, the exploitation of energy and other resources in a usable form is a serious environmental problem in all parts of the world' (p. 330). The exponential growth in food production is a threat to resources and has disrupted the link between ecology and food production. To address these issues, measures are being taken for further development of primary raw materials that should be prioritized: human health, environmental protection, food security, conservation of natural energy sources, land and water, etc. These priorities can be achieved through organic agricultural production aimed at the quality and safety of food products for human health, compliance with environmental and economic principles. Targeted production, both conventional and evironmetally friendly, strives to achieve stable yields and select the most favorable varieties for a particular area, the most suitable for a specific production technology. Cvijanović et al., (2008) 'the level of the yield of cultivated plants, expressed through profit, and which is the final goal of production, depends primarily on investment in production' (p. 25).

Agriculture is an industry sector that is identified in the EU as part of European critical infrastructure (ECI). Growing demands for healthy food and environmental protection, on a global scale, have led to the development of strategies and programmes for sustainable agricultural production. The organic production sector was developed within the framework of sustainable agricultural production, in order to prevent further environmental degradation. Over the past decade, the organic food sector has been one of the fastest growing segments in the global food market (Sahota, 2015). Organically produced food has become a trend and a way to provide safe and quality food products. Organic production in the world by the number of producers, the surface of cultivated land involved in organic production, and the development of the market is constantly growing. The largest increase was observed in 2016. Growth continued in 2017 for the year, 20% more areas were under organic plants (2016, 57.9

million ha, 2017, 69.8 million ha). In 2017, organic production accounted for 1.4 % of the total amount of agricultural land. The largest areas are in Oceania 35.9 million ha (8.5%), Europe (14.6 million ha, which is 2.9 %) and the EU 7.2 % of the total area. The number of organic producers was 2.9 million, which is 0.2 million more than in 2016. According to Sahota (2015), the global organic food market has grown by 330% over the last 15 years, and the offer has grown by 200%, so the question is whether the supply will be able to keep up with the demand.

Table 1: *Share (%) of area under organic production by region*

Regions	**Total of organic production areas** ***(%)***	**Total of agricultural land** ***(%)***	**Growth of organic areas in the period 2009-2017** ***(%)***
Africa	73	0.2	130.2
Asia	9	0.4	82.1
Europa	21	0.9	75.5
Latin America	11	2.1	10.5
North America	5	0.8	25.0
Oceania	51	8.5	196.4
The world	100	1.4	102.4

Source: *FiBL & IFOAM Organics International The World organic Agricukture Statiscis and Emereging trends 2019 https://shop.fibl.org/chen/mwdownloads/download/link/id/1202/*

In Europe, the share of areas under organic production is 14.6 million ha, which is one million hectares more than in 2016. In fifteen EU countries, organic production was 7.2% (12.1 million ha) of the total agricultural area. The largest areas are in Spain (2.1 million ha), followed by Italy (1.9 million ha), and France (1.7 million ha), which is five times more than in 1999 (11 million ha). The number of organic food producers in Europe is about 370,000, which is 7% more than in 2016 and in the EU 300.000, which is 10% more.

The organic food market in Europe is growing steadily reaching 37.3 trillion euros even in 2017, and in the EU 34.3 trillion euros, which is 10.5% more than in 2016. In the European market, milk and dairy products, eggs, vegetables, bread and pastry are most on demand. After eggs, the largest share goes to organic vegetables (Table 2).

Table 2: *Products with the highest % share in organic production in 2017*

	Austria	**Germany**	**Finland**	**France**	**Switzerland**
Eggs	20.1	19.4	15.4	27.0	25.5
Milk and dairy products	10.4	-	-	4.0	12.6
Bread and pastry	-	7.7	1.0	2.9	20.7
Fruit	10.6	7.8	-	6.7	13.5
Vegetables	14.4	9.7	3.91	5.4	21.2
Meat and meat products	3.52	2.5	1.10	1.6	5.32

Source: *FiBL & IFOAM Organics International The World organic Agricukture Statiscis and Emereging trends 2019 https://shop.fibl.org/chen/mwdownloads/download/link/id/1202/*

Organic production in Serbia

Organic production in Serbia is defined in accordance with the European Commission document Codex Alimentarius and the Law on organic production in the Republic of Serbia (Official Gazette of the Republic of Serbia, No. 30/10), the Rulebook on control and certification in organic production and methods of organic production (Official Gazette of the Republic of Serbia no 48/11 and 40/12). For organic production in Serbia, we can not say that it is at a high level. In particular, although Serbia shares only 2 % of the area of Europe, according to the standards of IFOAM and the World Health Organization (WHO), Serbia has a favorable potential for organic production (agro-ecological conditions, knowledge, land fragmentation, relief conditions). In addition, there is a significant genetic divergence in agriculture in Serbia, as there are more than 150 cultivated plant species, which is a great potential. With meadows and pastures, the total area under organic production in Serbia in 2017 was 15,298 ha. Out of these, the largest part of the area is under cereals (39.79%) and fruits (22.3%), followed by vegetables with 1.79%, fodder 10.46% and industrial plants 8.59%. The most common types of industrial plants are sunflower (58.5%), soybean (19.8%) and rapeseed (18.4%), as well as lucerne fodder plants (42.0%), fodder peas (33.2%) and lupine (8.4%). Organic vegetable production is dominated by the cultivation of beans, which accounts for 13.8% of the total area under organic vegetables. Then pumpkin and potatoes with a share of 11.7%, tomatoes 5.6% and onions 5%. A third of the area under organic fruit is covered by raspberries. The production of organic apple (24%), plums (18%), sour cherries (9.7%) and blackberries (6.1%) is also significantly represented http://www.dnrl.minpolj.gov.rs/

o_nama/organska/organska_proizvodnja_u_srbiji.html)/. The spatial distribution of organic production in Serbia is found in the Vojvodina region (53.7%), then in Southern and Eastern Serbia (32.4%), Šumadija and Western Serbia (13.7%), and least in the Belgrade region (0.03%) (Table 3).

Table 3: *Spatial distribution of area under organic production in regions in Serbia (2017)*

Republic/Region	**Agricultural land used (ALU) (ha)**	**Areas under organic production (ha)**	**Organic areas share in ALU (%)**
Republic Serbia	3,437,423	15,298	0.45
Belgrade area	136,389	38.13	0.03
Vojvodina	1,608,896	7,706.44	0.48
Šumadija and Western Serbia	1,014,210	1,963.11	0.19
South East Serbia	677,928	4,650.28	0.69

Source: *Directorate for National Reference Laboratories of the Ministry of Agriculture, Forestry and Water Management RS) http://www.dnrl.minpolj.gov.rs/o_nama/organska/organska_proizvodnja_u_srbiji.html)*

The largest share of the organic area in total agricultural land is located in the region of Southern and Eastern Serbia. These areas are dominated by organic fruit production (37%) and cereals (25.4%) (Table 4). This region accounts for 0.69% of the total land used (Table 3). In the region of Vojvodina, the area under organic production is 0.48% of the ALU (Table 3). This region is dominated by the production of cereal (43.3%), inudstrial plants (29.3%), and fodder (16.5%) (Table 4). In addition, the region of Vojvodina is also a key climate for the production of organic vegetables, as this region contains 75.2% of the organic area under vegetables. The regions of Šumadija and Western Serbia accounts for 0.19% of the region's ALU (Table 3). In these regions, organic fruit production is 82% of organic area in the region (Table 4).

The legal framework for producers in the organic sector consists of national and international standards. Organic food development is supported by the International Federation of Organic Agriculture Movements (IFOAM), which has brought the basic standards for organic and sustainable production. The standards are adapted to all forms of food production and harmonized with regional diversity, the organic production system best

conforms to the IFOAM standards. Within these standards, the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) have developed a set of rules and principles for the production, processing and distribution of food, nutritional and microbiological values, residues, labeling, sampling methods and food analysis through a joint commission, Codex Alimentarius Commission. Standards ensure the safety of food consumption, as they define the traceability of production controls and the problems that can lead to changes in taste, color, freshness, etc.

Tabela 4: *Areas under organic production by region and share in total utilized areas*

Region	**Belgrade**		**Vojvodina**		**Šumadija and Western Serbia**		**Southeast Serbia**	
	ha	%	ha	%	ha	%	ha	%
Cereal	2.57	0.06	3,335.5	72.4	86.44	1.88	1,182.8	25.7
Industrial plants	0.00	0.00	2,260.5	77.5	1.66	0.06	656.2	22.5
Vegetable	6.10	3.31	138.52	75.2	27.32	14.83	12.5	6.7
Fodder plants	0.89	0.07	1,269.2	94.1	26.70	1.98	51.9	3.8
Fruit	8.20	0.23	115.64	3.2	1,688.0	47.81	1,719.0	48.7
Herbs	0.00	0.00	9.59	8.5	65.40	58.14	37.5	33.3
Others	19.9	8.80	36.36	16.2	10.45	4.60	160.1	70.6
Total arable land	37.7	0.29	7,165.3	55.4	1,906.2	14.74	3,819.8	29.5
Meadows/ pastures	0.42	0.03	541.18	37.8	56.93	3.98	830.3	58.1
Total area	38.1	0.27	7,706.4	53.6	1,963.0	13.67	4,650.2	32.3

Source: *Directorate for National Reference Laboratories of the Ministry of Agriculture, Forestry and Water Management RS) http://www.dnrl.minpolj.gov.rs/o_nama/organska/organska_proizvodnja_u_srbiji.html)*

A prerequisite for establishing a food safety system is the application of rules, requirements, and principles: good manufacturing practices (GMP), good agricultural practices (GAP), good hygiene practices (GHP), good veterinary practice (GVP), good animal feeding practices (GAFP), good production practices (GPP), good distribution practice (GDP), good trading practices (GTP), good farming practice (GFP) and herd health surveillance programme (HHSP).

In the European Union, organic food is regulated by Regulations EC834/07; EC 889/08. Related to the principles and standard of organic production according to Sredojević et al. (2017) European Union Regulation CE 967/2008 establishes the mandatory use of the European logo on the packaging of EU products. The EU Council has adopted a regulation expected from January 1, 2021 that addresses new regulations to ensure high quality of organic products, increase organic production in the EU and avoid contamination with illegal synthetic agents.

Quality of organically produced food

A higher level of public awareness of the importance of food safety and the need to conserve natural resources are leading to increasing demand for organic products, especially in more developed countries. Organic food is a product that, by its basic biochemical characteristics, matches to a given species and variety. Organic fruits and vegetables, as a part of the daily nutrition, have a natural taste, aroma and color characteristic of the species and variety. In addition, the content of dry matter (by about 25%) and individual nutritional components is higher. Thus, it is possible in the system of organic production of lettuce and other vegetables to increase the content of vitamin C (about 28%), which is very important for maintaining the body's immune system and a good antioxidant. In addition, flavors increase as well as yields, e.g. salads by 17.7% (Tošić et al., 2016). There is about 90% less nitrates very harmful to humans and especially to children, in organic production due to altered plant nutrition and controlled intake of nitrogenous substances in vegetables. Nitrate accumulation in plants depends on a plant genotype, environmental conditions and agricultural practices. Plants contain more natural biotoxins, such as solanine in potatoes and tomatin in tomatoes, which increases their resistance to disease and pests. Bean is one of the basic vegetable cultures used in the human diet, which, in addition to nutritional values, is a rich source of vegetable proteins, carbohydrates, fibers and minerals (Fe, Ca, Sn, Mo). Due to its nutritional value, bean is one of the richest sources of plant proteins, which are often only source of proteins to poor people in a diet. The protein content, depending on the genotype, is about 24%, and the differences between individual genotypes vary from 17 to 32% (Todorović et al., 2008). If the grain yield of the beans increases, the yield of the total protein also increases. According to research (Cvijanović et al., 2016) in the organic bean production using *Trichoderma atroviride* microbiological preparation, grain yield of different bean genotypes was increased from 11.11% to 20.37%, which was statistically significant.

The protein content of organic beans in organic production where organic fertilizers and effective microorganisms have been applied can be increased up to 8% depending on the genotype and weather conditions, as well as the grain yield itself. The presence of medicinal herbs in healing and cooking is high, and measures for increasing the green mass of plants and various oils are very important. In organic basil production, according to Filipović et al. (2016), the content and yield of essential oils increased from 16.84% to 21.8% depending on climatic conditions. In the human diet, products derived from primary agricultural production (wheat, corn, soybeans) are used in a large degree. Organic production of these plant species showed a significant increase in nutritional elements. Soy is the absolutely dominant protein plant species in our country and in the world, and protein content is one of the priority goals when creating new varieties. Soy proteins are rich in essential amino acids, similar in composition to proteins of animal origin, which gives them high biological value.

Likewise, bioactive peptides derived from food proteins are safer and healthier than synthetic ones. These bioactive peptides besides their nutritional values might have pharmacological activities (antioxidant, antitumoral, antithrombic, antihypertensitive or antimicrobial activities) (Jovanović et al., 2016; Knežević-Jugović et al., 2012).

In organic soybean production using treatments with different groups of microorganisms, the increase in grain protein content can be 1.63% - 1.71% and under conditions of significant climate change (Cvijanović & Dozet, 2018). According to Đukić et al. (2018), by introducing organic production methods, such as plowing of harvest residues, found an increase in soybean grain yield that varied from 7.03% to 15.94% depending on the precipitation schedule. An increase in grain yield is positively correlated with an increase in grain protein yield. In the production of maize as a plant species that is significantly represented in the food chain, the protein content of organic production can be increased up to 9.22%, which is very important, since the protein content of corn grain ranges from 6 to 12% (Cvijanović et al., 2008) (p. 32). In terms of human nutrition, wheat production as bread grain is very important. In addition to bread, people also use a large number of flour products, such as wheat grits, pasta, various biscuits, etc., and the chemical composition of wheat grains is very important. The chemical composition of wheat flour depends on the chemical composition of the grain and the type of flour, while the chemical composition of the grain depends on the type and variety of wheat, climate, and method of production. The protein content of wheat grains varies

considerably, ranging from 8 to 15%. According to Cvijanović et al. (2008), protein content of the Pobeda variety produced in sustainable production systems was increased by 6.43%. Nutritionists are increasingly introducing certain types of cereals into human nutrition as an integral product, mixing it with wheat flour 50:50 (such as triticale). The group of alternative cereals includes cereals of the genus *Triticum* such as *Triticum turgidum spp durum, Triticum aestivum spp. spelta, Triticup aesativum spp compaktum*. These types of cereals have a good chemical composition, consisting of essential amino acids, starch, sugars, cellulose, fats, vitamins and minerals. Flour of alternative cereals in the healthy diet system has a significant place on its own or as a flour improver for soft wheat. Under organic farming conditions, wheat varieties intended exclusively for the production of hard tea pastries (*Tr. aestivum ssp. compactum*) can be successfully grown, as well as the *Triticum spelta* variety, which has good characteristics for making special breads that are much faster to digest than ordinary wheat bread. According to research (Roljević Nikolić et al., 2018), by applying different types of organic fertilizers under different climatic conditions, the grain yield of the *Triticum spelta* can increase by 4.58% over the original cereals of *Triticum vulgare* (p. 13307).

International standards and certifications of importance for food safety

Organic (BIO) Certificate - Farms and food producers that have a BIO certificate have strictly controlled production of more biologically valuable food. The biological value of food is determined by the cultivation method itself, the choice of species and varieties or breeds, as well as the growth and development in conditions close to the natural environment. In order to obtain an organic certificate, control by the selected certification company is required, as well as a number of measures that are applied during production. In the organic food manipulation chain, company certification is required. The focus is on the ingredients that affect the end product and the handling conditions of those products. A transport company wishing to introduce an organic certificate should have detailed documentation on vehicles, warehouses, containers, etc., and restaurants should also be licensed by inspection and organic certificate suppliers (Razvojna agencija Srbije, 2020). The country that has made the most progress in promoting and development of organic production is Denmark, where 25% of the total agricultural production is BIO certified. The following Serbian companies have organic certification: Midi Organic, Zadrugar, Beli Stonovi, Sirogojno, Suncokret, Albox, Foodland, Fungo

Jug, DMV and others (Razvojna agencija Srbije, 2020). In addition to the nutritional value of food from organic production, it is necessary to introduce a set of standards that define food safety in addition to food quality into the system of production, processing and manipulation of food in catering establishments. The most important international standards and integrated quality systems that are applied in the agriculture of the Republic of Serbia, important for the export of agricultural products are: ISO 9000: standards of quality management systems. This standard defines inputs and outputs in production. However, the standard does not guarantee the quality of the product. Still its implementation indicates the possibility of a quality production process from which the quality of the product should originate (https://www.iso.org/obp/ui/#iso:std:iso:9000:ed-4:v1:en). Within the ISO standard, ISO/IEC 17067: 2012 concerning the certification of products in the organic sector has a special place. This International Standard applies to those organizations that undertake the certification of product, production, process and service. GLOBAL GAP: standard of good agricultural practice HALAL: food production and processing system; Kosher: food production and preparation system; GOST-R: standard for food products; HACCP: risk analysis system and process control at critical control points; Organic (BIO) certificate: organic production and product certification; PGI/PDO: certificate of protection of geographical origin, name and sign (Jovanović et al., 2014).

HACCP standard- According to the definition given by Codex Alimentarius, HACCP is a system for identifying, evaluating, and controlling food safety hazards. HACCP is a management system in which food safety is considered through the analysis and control of biological, chemical and physical hazards from input raw materials, handling, production, distribution and consumption of the end product. This system is applicable in practice if program gaps (GAP, GHP) are met. The HACCP system consists of two basic components: HA and CCP. HA is a risk analysis, that is, the identification of hazards at each stage of food production and the assessment of their harmfulness to human health. CCP (critical control points) are production procedures that can prevent or eliminate food safety risks or reduce their impact to an acceptable level. They are easy to control. Hazard - hazard to health at a certain point in the food production process, analysis - hazard analysis of possible contamination of the product at each point of the food production process, critical - determination of a critical point in the process of product health safety, control - control of the critical point of the process, point - points of the process of food production (Wareing, 2010). In the EU and World

Trade Organization markets, the HACCP system has become mandatory (Council Directive 93/43 / EEC 1 January 2006). Integration of food quality and safety standards into the overall quality control system in companies has become a requirement for doing business with partners in the international market. The legislation of almost all developed countries obliges food producers in those countries to implement HACCP. Because of this, this concept of safe food has become mandatory in the Serbian market. In addition to the production, processing, packaging, storage and sale of food, the program of mandatory implementation of the HACCP system includes hotels and ready to eat food restaurants. It should also be emphasized that HACCP does not refer (directly) to the quality of a product but only to its health safety (Dumitrascu & Lepadatescu, 2016).

HACCP in Horeca - In addition to the food industry and organizations that prepare, serve and consume food, they are in the program of mandatory implementation of the HACCP system. The hospitality industry is specific in terms of providing healthy food. In the dynamics of the product finalization process, a high frequency of health risks is expressed. Specifically, there are a large number of products and processes that are performed in the preparation of food and in which the food comes into contact with various equipment and surfaces, emphasizing the constant presence of employees who manipulate the food (Savović & Ćurčić, 2008). Successful and permanent implementation of the HACCP system depends on the education, skills and ongoing motivation of the food handling staff (Springer, 2003).

Prerequisites for successful operation of the HACCP hospitality system

HACCP only implements successfully with the implementation of prerequisite programs. It is a common name used to describe all activities that are implemented in addition to those defined through the HACCP plan that affect food health. Prerequisite programs or abbreviated PRP (pre-requisite practices) represent general activities that affect the health of food: Good hygiene practices - GHP, Good manufacturing practices-GMP, pest control, cleaning, as well as training of people (Wareing, 2010).

Good Hygiene Practice - GHP provides general information that includes rules of conduct for employees, wearing protective equipment, wearing special clothing, hair protection, prohibiting the use of cosmetics, the

suitability of smoking and eating areas, washing and disinfection procedures (Peran i Sala, 2015).

Good Manufacturing Practice - GMP Minimum requirements for process control and sanitation in food production. Includes convenient equipment and equipment material, location and design of building, pest control, production location, process logistics (Rubenstein, 2018).

Standard Operating Procedures - SOP Defines who should do something, why it is done, what exactly should be done and how it is done. Frequency of performing the above operations, limit of acceptability and corrective action are also determined if the results are not satisfactory.

Standard Sanitation Operating Procedures (SSOP) Procedures that determine the manner and steps of sanitation given the possibility of direct contamination of the products during production. It also includes pre-operational sanitation (cleaning of equipment, accessories and surfaces before production begins) and operational sanitation (cleaning of equipment during production, employee hygiene, manipulation of raw materials, semi-finished products and finished products (Araujo et al., 2019).

These programs reduce basic potential production risks and ensure that they do not affect product safety. The implementation of these programs formes the basis for the implementation of the HACCP system in the hospitality industry. In the hospitality industry, where it is necessary to make a large number of different meals in a short period of time, it is clear that a great deal of engagement and awareness of employees is required to handle food so as not to serve foods that can have a detrimental effect on human health (Wareing, 2010).

Tourism development impact

Organic production provides an opportunity to develop a value-added tourism food offering (agrotourism). In addition, there is a demand for organically produced and traditionally processed, which can significantly affect the development of organic production. Regional food tourism can play a role in revitalizing rural communities. Regional food brand and identity can be developed at distinct geographic regions. Through cultural and historical tours and events a regional brand identity can be build by emphasizing distinct food identity and marketing uniqueness (Lee & Arcodia, 2011). There are different ways to do this, such as food trails and festivals destination branding agritourism and other agricultural events like farm tours and the branding of farmers' markets (Silkes, 2012). Many

consumers are interested in consuming local products when they are travelling, and yet, business owners engage and understand the sustainability concept to varying degrees (Hjalager & Johansen, 2013). Trying something new, escape and fun, leisure activity, to engage environmental issues, to interact with local producers and to have a pleasant social experience in a positive environment are reasons why consumers attend food festivals. Consumers in these festival contexts participate in more than just a consumption practice. They also partake in a diverse emotional and sensory experience that is tied to a geographic place. Food festivals can help develop and improve regional branding opportunities. Farmers' markets could be said to fit within the research on culinary tourism since from a marketing perspective this food event encourages local food consumption, sparks consumer engagement with regional food identities and commoditizes a sense of place (Garner & Ayala, 2019).

Acknowledgement

This paper is the part of the project research No. III46006, financed by the Ministry of Science and Environmental Protection of the Republic of Serbia.

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