

## FOOD SAFETY AND QUALITY POLICY IN THE REPUBLIC OF SERBIA<sup>1</sup>

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### Summary

*Food safety and quality have a decisive impact on the placement of agro-food products on the domestic and world market. In the sector of agriculture and food industry in Serbia a range of public and private standards, mandatory and voluntary is applied, covering the different stages of the supply chain and different levels of communication (with business partners or consumers). However, still a small number of primary agricultural producers are certified to Global G.A.P., organic production and products with a geographical indication. A better situation is in food processing industry and export. Many of food processors, especially suppliers of global retail chains are, in addition to HACCP, certified to ISO (9001, 22000) and exporters to BRC and IFS standards. The loss of the market due to failure to respect the safety standards and product quality is a real danger, which must be averted by an active state support policy.*

**Key words:** standardization, certification, competitiveness, food safety and quality

**JEL:** Q02, Q13, Q17, Q18

### Introduction

Consumer demands for safe and quality products produced by sustainable production methods in an environmentally-friendly and ethically acceptable way are increasingly rigorous. Food safety and quality have a decisive impact on the competitiveness of the agricultural and food sector in the domestic and global markets and are the foundation of a good business reputation for manufacturers, processors and retail chains, especially those that manage food supply chains and develop their own brands.

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International supply chains place great obstacles in the path of information transfer, local autonomy, local systems standards and incompatible operating procedures (Houlihan, 1985). Standards play an important role in directing and coordinating the production, trade and consumption of food in the context of globalization (Bain et al., 2013; Beghin, 2014).

In addition to producing standardized products for the mass market, global retailers and processors also enter the production of value-added products for niche markets (Roth et al., 2008). This reduces the transparency of production practices, but also increases the possibility of placing these products through retail chains. Engagement in certification, promotion and quality control requires the linking of business entities in the chain and contributes to the improvement of production and income of small agricultural producers (Popović et al., 2009; Qaim, 2017).

Serbia has favorable natural conditions and tradition in the production of a wide assortment of agricultural and food products in conventional and organic production systems, as well as food production with geographical origin (Popović et al., 2011; Katić et al., 2010). By entering global retail chains into the domestic market and concluding a free trade agreement with the most important trading partners, significant market potentials for these products have been created (Popović, Grujić, 2014).

Standards are used as a basis for building consumer confidence, entering the market and developing new products and markets (Bain et al., 2013). Case studies confirm that the contribution of standards to the company's gross profit varies between 0.15% and 5% of annual sales revenue (ISO, 2014).

Public standards are embedded in legislation and may be mandatory, such as basic food safety and quality standards or voluntary, such as organic and geographical indication (GI) standards. Private standards, developed by commercial or non-commercial private entities, including firms, industry organisations, nongovernmental organisations, etc., are referred to as private voluntary standards. There may also be overlap between public and private standards where public regulations incorporate private standards and conversely, where private standards incorporate public standards (e.g. public food safety standards are often incorporated into private food safety certification systems) (Bain et al., 2013; Henson, Humphrey, 2010).

In Serbian agribusiness, a series of public and private standards, mandatory and voluntary are applied covering different stages of the supply chain and different levels of communication (with business partners or consumers) (SEDEV, 2012).

### **Basic food safety and quality standards**

The largest number of basic food safety and quality standards is formulated by international organizations, such as the CODEX Alimentarius Commission (CAC) and UNECE. CAC standards of food safety and quality, although voluntary for Member States, are most often used as a basis for the adoption of national regulations, as recommended by the WTO. The reference made to Codex food safety standards in the World Trade Organization's

Agreement on Sanitary and Phytosanitary measures (SPS Agreement) means that Codex has far reaching implications in trade disputes (Codex Alimentarius, 2017; Beghin, 2014). The UNECE quality standards provide common terminology and harmonized quality requirements to facilitate fair trade and increase transparency in the markets. UNECE standards also have the status of recommendations for national legislation and comply with WTO Agreement on Technical Barriers to Trade (UNECE, 2015).

According to the Law on Food Safety (Official Gazette of the RS, No. 41/2009), for the purpose of food and feed safety, measures based on scientific principles, international standards, guidelines and recommendations are applied to the extent necessary to protect life and health, and in a way that does not constitute a hidden restriction on foreign trade. Food and feed imported into the Republic of Serbia for the purpose of placing on the market must meet the requirements in accordance with the food regulations or the conditions recognized by the Republic of Serbia as identical to them or if there is a special international agreement, the conditions of that agreement. Food and feed for animals exported or imported for export from the Republic of Serbia must meet the requirements in accordance with food regulations, unless otherwise requested by the competent authorities of the importing country or unless otherwise determined by the regulations, standards and practice codes which are in force in the importing country<sup>5</sup>.

The Law on Food Safety prescribes the obligation to establish a food safety system at all stages of production, processing and trade in food, except on the level of primary production in accordance with the principles of good manufacturing and hygiene practice and Hazard Analysis and Critical Control Points (HACCP)<sup>6</sup>. Within the framework of pre-accession obligations, harmonization of domestic legislation in the field of food safety with EU *acquis communautaire* is being carried out, and the achievement of full compliance is expected in 2018.

There is no single legal framework in the Republic of Serbia for regulating the market for agricultural and food products. Some of the market regulation measures, such as market standards, exist but are not compatible with the EU *acquis*. The adoption of the Law on organisation of market of agricultural and food products will ensure partial compliance with Regulation (EU) 1308/2013 on the establishment of a common organization of the market for agricultural products (including market standards)<sup>7</sup>, while full compliance is expected after gaining EU membership (KEI, 2016).

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5 Owing a GOST-R certificate is a condition for placing agricultural and food products on the Russian market (TIK RF, 2017).

6 HACCP standard provides a systematic preventive approach to food safety.

7 EU public marketing standards enable the market to be easily supplied with products of a standardised and satisfactory quality, and in particular relate to technical definitions, classification, presentation, marking and labelling, packaging, production method, conservation, storage, transport, related administrative documents, certification and time limits, restrictions of use and disposal (Reg 1308/2013). Evaluation of marketing standards is planned for 2017/2018 (EC, 2017).

## Public Voluntary Food Quality Standards

In 2015, Serbia had 334 *certified organic producers* (with co-workers around 2,000) (Simić, 2017). Organic producers have favorable natural conditions for production and good prospects for placing their products, primarily on the EU and US market, but also on the domestic market (Belgrade, Novi Sad) (Filipovic et al., 2013; Simić, 2017).

Organic production in Serbia is regulated by the Law on Organic Production (Official Gazette of the RS, No. 30/2010) and the Rulebook on the control and certification of organic production and organic production methods (Official Gazette of the RS, No. 48/11, 40/2012). In May 2012, the Accreditation Body of Serbia (ATS) signed the Multilateral Agreement (LA) with the European accreditation organisation (EA) on recognising accreditations. In 2013, the European Commission placed the domestic control house Organic Control System (OCS) on the list of recognized equivalent control bodies. This enables the direct export of organic products from Serbia to the EU market without additional documentation and import licenses (Simić, 2017). Full harmonization of national legislation with the EU *acquis* in the field of organic production is expected until Serbia joins the EU (KEI, 2016).

Serbian farmers do not have possibility of *integrated production certification*<sup>8</sup>, such as farmers from countries in the region, who have adopted rulebooks on integrated farming with defined obligations of producers, technical and organizational conditions of production and rules of control, certification and product marking organization. Given the excellent natural conditions for integrated production, primarily fruits and grapes (Popović et al., 2011), the adoption of this regulation is of great importance for Serbian farmers (Subić et al., 2016).

According to World Intellectual Property Organization (WIPO, 2017a) *geographical indication* is a sign used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin. Geographical indications are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts and industrial products. The Republic of Serbia has obligation to protect geographical indications in accordance with the Lisbon Agreement for the Protection of Appellations of Origin and their International Registration (Official Gazette of the FRY - International Treaties, No. 6/1998). Only two Serbian food products are in the international register of appellations of origin kept by the WIPO International Bureau – “Homoljski med” and “Leskovački domaći ajvar” (WIPO, 2017b).

The area of protection of geographical origin of agricultural products and foodstuffs is defined in the Law on Indications of Geographical Origin (Official Gazette of the RS, No. 18/2010). Full alignment of national legislation with EU *acquis* in this area is foreseen by the end of 2018 (KEI, 2016). According to the data from 2016, there are 36 agricultural

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8 No Community-wide regulation exists on integrated farming. The Framework Directive on the sustainable use of pesticides (Directive 2009/128/EC) only regulate the plant protection element of integrated farming, i.e. integrated pest management (IPM). National and regional authorities develop their own production and marketing standards (EC 2011). The harmonization of Serbian legislation with EU Directive 2009/128/EC is in progress (KEI, 2016).

products and foodstuffs with geographical origin registered at the national level. In the same period there were no requirements for the protection of geographical origin at the EU level, in line with Regulation (EU) No. 1151/2012 on quality schemes for agricultural products and foodstuffs (KEI, 2016).

The public voluntary high quality standard “Srpski kvalitet” (“Serbian quality”) was established in 2016 by the Regulation on the labelling of agricultural and food products with the national mark of higher quality “Serbian Quality” (Official Gazette of the RS, No 90/2016). This national high quality mark is dedicated for processed agricultural and food products in the sectors of production and processing of milk, meat, fruit, vegetables, cereals, oilseeds, grapes and honey (except spirit drinks, wines and aromatized wine products) that clearly differ from other agricultural and food products of the same category by their chemical composition, physical, microbiological and organoleptic properties, the production method, the raw materials and/or the ingredients or some other characteristic and are produced from basic raw materials that originate solely from the territory of the Republic of Serbia. In May 2017, the “Serbian quality” mark was approved for eight meat products from food processing industry (MAFWM, 2017).

This scheme of higher quality agricultural and food products is most similar to the French public voluntary standard *Label Rouge* (Code rural et de la pêche maritime, art. R.641-1à R.641.10) which in 2015, after several decades of development, possessed 425 products with an annual turnover of 1.4 billion euros (INAO, 2017; EBRD, 2017).

#### **Private voluntary food safety and quality standards**

Global food producers and traders, driven by the need to develop a sustainable supply chain (Fox, Vorley, 2004; Jones et al., 2008; Smith, 2008, Lee et al., 2012) most often require suppliers to apply the following private voluntary safety and/or quality standards<sup>9</sup>:

- *GlobalG.A.P. – a global standard of good agricultural practice*

GLOBALG.A.P. also known as the Integrated Farm Assurance Standard (IFA), V5 (2015) is the internationally recognized standard of good agricultural practice for farm production. GLOBALG.A.P. certification covers food safety and traceability, environment (including biodiversity), workers health, safety and welfare and animal welfare and includes Integrated Crop Management (ICM), Integrated Pest Control (IPC), Quality Management System (QMS), and Hazard Analysis and Critical Control Points (HACCP) (GlobalG.A.P, 2017).

- *FSSC 22000 - certification scheme for food and feed safety/quality management systems*

FSSC 22000 V4.1 (2017)<sup>10</sup> is in compliance with ISO 22000/9001<sup>11</sup> requirements, sector

9 The standards that are recognized by Global Food Safety Initiative (GFSI) as competent food safety management systems (GFSI, 2017).

10 In the application from 01 January 2018.

11 ISO 22000: 2005 is based on ISO 9001 and HACCP, applicable to all entities in the chain and internationally recognized (ISO, 2017a), but not from GFSI (GFSI, 2017).

specific Prerequisite Program (PRPs) requirements and additional Scheme requirements. The Scheme is intended for the audit, certification and registration of food safety management systems<sup>12</sup> for the following scopes and product categories: farming of animals for meat, milk, eggs and honey; manufacturing of food products, (bio)chemicals, food packaging and packaging material and food and feed for animals; transport and storage services; catering; and retail/wholesale (FSSC 22000, 2017).

- BRC- *global food safety standard*

The Standard is HACCP based and incorporates food safety management systems and internationally accepted best manufacturing practices to ensure product safety and quality in pre processing handling of plant products, processing of animal and plant perishable products and ambient stable products, production of (bio) chemicals and food packaging and the provision of storage and distribution services (GFSI, 2017; BRC, 2017). The BRC Global Standard for Food Safety Issue V7 (2015) focuses on label and packing management (areas which have traditionally resulted in recalls and withdrawals), transparency and traceability in the supply chain and strengthening the system's resilience to fraud (BRC, 2015).

- IFC- *international food standard*

The IFS Food Standard (V6, 2012) is used to audit food manufacturers regarding food safety and quality of processes and products in the following scopes: processing of animal and plant perishable products and ambient stable products, animal conversion, pre processing handling of plant products, production of (bio) chemicals and provision of storage and distribution services (GFSI, 2017). The Standard is especially important for food manufacturers producing private labels as it contains many requirements related to the compliance with customer specifications (IFS, 2017).

ISO 9001:2015 is the world's leading quality management standard and can be used by any organization who want to ensure consistent product quality improvement, regardless of its size and field of activity. This standard is often introduced as a basic management system, which is relatively easy to be upgraded with other management systems such as ISO 14001:2015 Environmental Management (ISO, 2017b).

Halal and Kosher certificates are provided with the aim to differentiate products on the market in order to meet the specific requirements of certain customer categories.

A small number of primary agricultural producers in the Republic of Serbia have certificates for GlobalG.A.P., organic production and products with a geographical origin. The improvement of the current situation is expected through the financial and advisory support of the state, with more active role of the associations of producers and cooperatives and the engagement of processors, exporters and traders, primarily large retail chains in the supply chain management, in line with the concept of *sustainable food supply chain* (Lee et al., 2012; Smith, 2008). Slightly better is the situation in food processing industry

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<sup>12</sup> As from 2015 the voluntary FSSC 22000-Q certification (add-on module to FSSC 22000 that combined FSSC 22000 and ISO 9001 certificate) is available for organizations wishing to integrate food quality management into their certified food safety scope (FSSC 22000, 2015).

and export. A large number of processors, especially suppliers to global retail chains are, in addition to HACCP, certified to ISO (9001, 22000), and exporters to BRC and IFS standards (SEEDEV, 2014).

### **Financial support to agricultural products certification**

One effect of standards proliferation worldwide is that, in particular, companies from developing countries and emerging economies have problems to comply with these standards. Another important effect is increasing marginal costs of certification and accreditation, which puts pressure on company profits in industrialized countries (Trienekens, Zuurbier, 2008).

In the terms of harmonization of national regulations with EU in the areas of the standardization and certification of agricultural products, Serbia expects support from the EU funds (KEI, 2016). Within the framework of the national and provincial support programs for rural development, the incentives are directed to registered farms for introduction and certification of food safety and quality systems (according to ISO 22000, FSSC 22000, BRC, IFS, GOST-R, GlobalG.AP, Halal and Kosher standards), organic products, products bearing the geographical indications and products with the “Serbian Quality” label (Official Gazette of RS, 8/2017, 67/2017; 41/2017; Official Gazette of APV, 69/2016, 29/2017).

Local communities can also allocate budgetary funds through their programs of agricultural and rural development policies implementation for co-financing certification of organic products and products with a geographical origin.

### **Conclusion**

The guarantee of food safety and quality is a basic presumption for successful access to the domestic and foreign markets. The Republic of Serbia is working intensively on the harmonization of food safety and quality regulations with the EU and processors and exporters, taking into account the role of voluntary public and private standards in placing their products, are investing in their introduction and certification of production. The biggest lag is in primary production, where a large number of small farmers remain out of these processes due to lack of financial resources and non-inclusion in modern supply chains. Improvement of the situation is expected through state financial and advisory support, the more active role of the producer associations and cooperatives and the engagement of processors and traders, primarily global retail chains in supply chain management in accordance with the concept of a sustainable food supply chain.

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## POLITIKA BEZBEDNOSTI I KVALITETA HRANE U REPUBLICI SRBIJI<sup>13</sup>

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### Rezime

*Bezbednost i kvalitet hrane imaju presudan uticaj na plasman poljoprivredno-prehrambenih proizvoda na domaćem i svetskom tržištu. U sektoru poljoprivrede i prehrambene industrije Srbije primenjuje se niz javnih i privatnih standarda, obaveznih i dobrovoljnih, koji pokrivaju različite faze lanca snabdevanja i nivo komunikacije, sa poslovnim partnerima ili potrošačima. Ipak, još uvek mali broj primarnih poljoprivrednih proizvođača poseduje sertifikate za GlobalG.A.P., organsku proizvodnju i proizvode sa oznakom geografskog porekla. Nešto bolja situacija je u prehrambenoj industriji i izvozu. Veći broj prerađivača, posebno dobavljača globalnih maloprodajnih lanaca je, pored HACCP, sertifikovan i za ISO (9001,22000), a izvoznici i za BRC i IFS standarde. Gubitak tržišta usled nepoštovanja standarda bezbednosti i kvaliteta proizvoda je realna opasnost, koja se mora preduprediti aktivnom politikom državne podrške.*

**Ključne reči:** *standardizacija, sertifikacija, konkurentnost, bezbednost i kvalitet hrane*

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