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CHAPTER VII

PRODUCTION-EXPORT POTENTIALS OF SERBIA AT THE EUROPEAN HEALTHY FOOD MARKET

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CHAPTER VII

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1. Introduction

According to demographic and economic indicators, agriculture represents one of the most significant economic activities in the Republic of Serbia. According to the results of the Census (2002), the share of agricultural population in the total population made 10.9% and active agricultural producers made 15.6% of the total active population in Serbia[1]. In 2009, the share of agriculture in the total gross value added of the social product of Serbia[2] was 12.6%. During that same year, agricultural-food products made even 23.6% of the total value of export of Serbia while economy and food industry of Serbia belong to the small group of economic activities that recorded surplus in foreign trade exchange (635 million US $) and a high rate of coverage of import with export (148.7%).

Serbia disposes with 0.69 ha of agricultural and 0.44 ha of plough land per capita[3] , which is twice more compared to the average in the European Union Member States (0.33 ha of agricultural and 0.20 ha of arable land per capita[4]). The available land per capita shows that Serbia is indisputably potentially agrarian export land.

However, the available natural conditions in Serbia are used insufficiently and they still not fully in the function of dynamic and more export oriented development of agricultural production. This is also confirmed by indicators of aggregate productivity and accomplished gross value added per hectare of used agricultural and plough land, which are twice lower in Serbia than the average in the European Union Member States.

Low productivity in agricultural production is the result of poor intensity of production that is also reflected in a small share of animal farming in agriculture of Serbia. The analysis of the structure of value of agriculture of Serbia for the year 2009 shows that crop production participates with 69.5% (56.5% field crops, 10.5% fruit growing and 2.5% viticulture) while animal farming participates with only 30.5%[5] . This is significantly less favourable compared to the EU Member States (30% of crop and 70% of animal farming production).

A relatively low productivity of work in agriculture of Serbia is also confirmed by the fact that one agricultural producer produced food for 18 inhabitants in 2009. That was less than in Hungary (23), Italy (50), France (60), and in particular in Germany (153), but at the same time that was more than in two neighbouring countries which were the last to access the EU – Bulgaria (16) and Romania (11)[6].

Compared to the EU average, agriculture of Serbia is also characterized by highly unfavourable property structure of family holdings[7] . According to the Census from 2002, small holdings (measured even by the

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[1] Statistical Yearbook of the Republic of Serbia 2009, pp. 73-75, Statistical Office of the Republic of Serbia, Belgrade

[2] Press Release no. 179 dated 30.06.2010, Statistical Office of the Republic of Serbia, Belgrade; http://webrzs.stat.gov.rs/axd/dokumenti/saopstenja/nr40/nr40032010.pdf (taken over on July 4th, 2010)

[3] Calculation of authors based on the data on the number of inhabitants and land surfaces, Statistical Yearbook of the Republic of Serbia 2009, pp. 73-75 and 206, Statistical Office of the Republic of Serbia, Belgrade

[4] http://epp.eurostat.ec.europa.eu/portal/page/portal/product_details/publication?p_product_code=KS-CD-09-001-09 (taken over on July 4th, 2010)

[5] Calculation based on the data of Statistics for agriculture for the year 2009, Statistical Office of the Republic of Serbia, Belgrade

[6] Calculation based on the data of the FAO Statistical Yearbook, 2009 (issues 1 and 2); taken over from an article titled “A lat of hands but small performance“, Politika, Belgrade, 29.03.2010.

[7] For understanding of differences in size of family holdings in the EU Member States and in Serbia it is necessary to point out that “individual agricultural holding“ in Serbia (according to methodological documents of the Census from 2002)

conditions present in Serbian agriculture) dominate among the total of 779 thousand of family holdings (60.2%) and they are made up of two groups (27.5% with an estate having less than 1 ha and even 32.7% with an estate having from 1 to 3 ha), followed by holdings with an estate having from 3 to 5 ha (17.4%) and from 5 to 10 ha (16.8%), while the share of our “large“ holdings having more than 10 ha is relatively small (5.5%) 157.

They are made up of two sub-groups (4.7% with an estate having from 10 to 20 ha and only 0.8% with an estate having more than 20 ha)[8].

This has resulted with and exodus of the working members of households possessing family holdings into non-agrarian activities – with the extended dwelling at the holdings or permanent leaving from rural regions. That is shy the socio-economic structure of households possessing family holdings is dominated by non-agricultural households without active members living exclusively on the work at the farm (62.3%) – the share of which is constantly increasing, followed by agricultural holdings where all active members work at the holding (17.8%) – the share of which is constantly declining, and mixed holdings where one or more active members work at a holding and other active members deal with non-agrarian activities (16.4%) – the share of which is also declining[9].

Based on that, it can be concluded that the current average holding size and usual structure of production at family holdings in Serbia does not provide the revenues that is sufficient for subsistence of members of agricultural and mixed households. The argument in favour is reflected in the results of the research of Sevarlic M. and Nikolic Marija (2007-a), according to which only 22,625 family farms, or 2.9% of the total number of individual agricultural holdings in Serbia have at least one active farmer and the holding that is larger than 10 ha of arable land – who could be considered potentially competitive farmers in less developed EU Member States.

Domestic market of agricultural-food produce in Serbia makes a significant limiting factor of development of agriculture and more rational utilisation of available resources since it is in direct correlation with economic conditions and standard of living of the population. The standard of living and salaries that the population earns affect the reduced scope of consumption of the basic agricultural-food produce. People in the developed European countries allocate around 20% of their family budget to food, while the citizens in Serbia allocate even more than a half of their monthly earnings. The consumption of bread per capita makes 109 kg in Serbia, which is three times more than in Europe, while the consumption of milk and dairy products is four times smaller than in the European countries; consumption of fruit and vegetables is three times smaller, and so is the consumption of meat – with the tendency of further decline. Apple and potato dominate in the consumption of fruit and vegetables, while pork makes a half of the average total consumption of meat per capita.

More complete and rational use of agricultural resources, constant and increased investing into technological improvements in Serbia can contribute to accomplishing of much larger scope of agricultural production. Commercialisation for the purpose of accomplishing of profit accelerates the activities that farmers and food industry undertake aiming at fulfilment of requirements set by domestic and foreign markets. The enhancing of export orientation of Serbian agriculture and food industry require more significant production re-structuring, innovating of production technology, and improving of management in agro-business companies. Approximation with the standards of the developed countries in healthy food production (GLOBALGAP, HACCP, Hallal, Kosher, …) leads not only to enhancing of export performances of Serbian agriculture and food industry but also to raising of the level of quality and control in agricultural production of processing of agricultural-food

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implies *“any household that used at least 10 a of arable land at the time of the Census, as well as household that used at least 10 a of arable land and owned: 1 cow and a calf or 1 cow and bull-calf or 1 cow and two fully grown heads of small cattle or 5 fully grown sheep, or 3 fully grown pigs, or 4 fully grown sheep and pigs together, or 50 heads of fully grown chicken, or 20 bee hives“*

[8] Calculation of authors based on the data from publication titled “Census of population, households and housing units 2002 – Agricultural funds”, book 1, pg. 20; Statistical Office of the Republic of Serbia, Belgrade, 2003

[9] Calculation of authors based on the data from publication titled “Census of population, households and housing units 2002 – Agricultural holdings according to activities and sources of revenues”, book 2, pg. 334; Statistical Office of the Republic of Serbia, Belgrade, 2004; See more in papers of Sevarlic M. and Nikolic Marija (2006 and 2007-b).

produce designated to the domestic market. With the accession to the regional market of CEFTA Member States (2006), and pre-accession negotiations that commenced with signing of the Stabilisation and Association Agreement of Serbia with the EU (2008)[10] and WTO[11], the agrarian and foreign trade policy of Serbia started harmonising with the conditions and rules of the international market in a more dynamic way.

Despite the fact that favourable agro-ecological conditions enable diverse plant and animal farming production and accomplishing of high yields per capacity unit and higher scope of agricultural production, Serbia has a small share in available capacities for agricultural production (Table 1) and scope of production of agricultural-food produce (Table 2) compared to Europe and the world. This points to the fact that export orientation and recognisability of Serbian agricultural-food produce at the international market cannot be provided via their quantity (except for raspberry according to export and production of which Serbia takes the first, namely second place in the world, as well as plum, according to production of which Serbia takes between fourth and fifth place in the world), but rather via quality, namely health safety and price competitiveness of those produce.

Despite the delay in harmonisation with European integrations, after the political changes in the year 2000, Serbia was also keeping up with changes in the EU Common Agricultural Policy (CAP) that was changing all the time and setting new development priorities. In that respect, we can distinguish three periods of harmonisation of Serbian agricultural policy with the EU CAP.

Table 1. Agricultural production capacities in Serbia and their share in Europe and the world

Indicator	Republic of Serbia	Share of Serbia (%) in	
		Europe	World
Population (000 persons)			
Total population	7,498	1.03	0.11
Number of agricultural population	817	1.64	0.03
Total working population	3,398	0.92	0.10
Population active in agriculture	529	2.05	0.04
Land surface (000 ha)			
Total land	8,836	0.38	0.07
Agricultural land	5,066	1.07	0.10
Arable land	3,618	1.23	0.23
Plough land	3,318	1.19	0.24
Meadows and pastures	1,448	0.80	0.04
Number of heads of cattle (000 heads)			
Bovine animals	1,096	0.86	0.08
Swine	3,212	1.67	0.32
Sheep	1,609	1.17	0.15
Goats	139	0.77	0.02
Poultry	17,905	0.95	0.11

Source: Calculation of authors based on the data taken over from the Statistical Office of the Republic of Serbia – Belgrade and FAOSTAT.

The first period lasted from 2000 to 2003, when agriculture of Serbia relied on grants coming from the EU Member States (as well as the USA and Japan) in inputs for agricultural production (diesel fuel, mineral fertilisers, machinery, soybean meal, etc.) and food for the population (edible oil) for the purpose of resolving acute agricultural-production and food-safety needs in Serbia. During that period, Serbia was

[10] See more in the paper by Tomic D., Sevarlic M. M., Lukac D. (2008)

[11] During the transformation of GAT into the WTO (1995), Serbia could not accomplish an automatic transfer of membership rights due to a multi-annual action of the UN Security Council sanctions towards the former FR Yugoslavia (1992-1996) – which included Serbia and Montenegro. Serbia started negotiations for membership in the WTO in 2005 and the earliest possible finalisation of negotiations could be expected by the end of 2011.

only the “observer“ of changes in the EU CAP, which were in the function of improving the elements of competitive agricultural sector, production of quality and healthy food, diversification of agriculture, rural development, and preservation of the environment. That support to agriculture was present through two CAP pillars: support to the market through the system of guaranteed prices and support to agricultural regions via rural development. The first Law on Organic Agriculture (“Official Gazette of the FRY“ no. 28/2000) along with other bylaws pointing to the commitment of Serbia to enhancing of the development of organic agriculture were enacted during that period.

The second period is the stage of initial agricultural-political reforms in the period from 2004 to 2008 when agricultural policy of Serbia was in the initial stage of harmonisation with the EU CAP[12] , which reflected in introduction of the Register of agricultural holdings and application of subsidies (per hectare of land and head of cattle) and other forms of incentives to registered agricultural holdings. Having in mind the changes of the CAP that was valid at that time and implementation of two main groups of measures (direct payments and market interventions – which support earning of revenues in agriculture; and support to rural development policy), agricultural policy of Serbia started paying more and more attention to harmonisation of agricultural-political legislation with the EU. That also reflected in paying more attention not only to strengthening of competitiveness of production but also to enhancing of quality and health correctness/safety of food, with simultaneous rational and sustainable use of natural resources and preservation of natural and cultural heritage of rural communities.

In that period, a unique payment scheme was introduced in the EU through which agricultural producers were getting incentives for agricultural production. Obtaining of that form of direct assistance required agricultural producers to fulfil certain conditions and satisfy certain requirements (preservation of the environment, land in production state, public health standards, plant health, and animal welfare). The priorities of CAP referred to ensuring the revenues to the rural population and rising of productivity and competitiveness in the process of food production. The objective of CAP measures was also to attempt to get farmers as close to the market as possible and to fight for better position on domestic and world market based on their own competitiveness. The support from the common EU funds would be reduced in time throughout that process. However, it should be pointed out that CAP has kept certain measures of market management in its changes aimed at stabilisation at the food market, such as: system of quotas for certain products, export subsidies, intervention stocks and setting aside of agricultural land.

Based on the rules and standards that have been set within the World Trade Organisation and based on negotiations that commenced in the Doha round – which is still in progress, the measures that refer to market intervnet6ions in the form of export support and import customs duties will be radically reduced aiming at higher liberalisation at the world food market. In addition, reduction of support to agriculture through different forms of subsidies is also in the context of reforms requested by the WTO. The measures within the CAP will be harmonised with the WTO requirements and what is left is the rural development policy to which these limitations refer. Through this policy, it is possible to stimulate the development of agricultural communities and provide support to revenues in agricultural production itself.

For a number of years now the negotiations of Serbia to become a member of the WTO again have been progress but significant changes in agricultural and foreign trade policy remain to be implemented until the final accession. Serbia will have to accept the Common Agricultural Policy, just as all other countries that are in the process of EU accession. The current agricultural policy will be gradually transformed through the implementation of necessary measures and enacting of necessary legislation. The process of harmonisation is highly complex and long since we are lagging behind quite a lot in the level of agricultural development compared to the developed EU Member States. The experiences of the neighbouring EU Member States (Slovenia, Hungary, Romania, and Bulgaria) can be useful to us in that process. Prior to accession into the EU, those countries fulfilled certain conditions and they are still harmonising to new requirements.

The experiences of Croatia, which signed the Stabilisation and Association Agreement in 2001 and which is in the group of candidate countries together with Turkey and FRY Macedonia, show that opening towards the European market emphasised the problem of low competitiveness of domestic products that could be offered to the EU market. Despite the fact that the EU provided favourable

[12] See more in the paper by Vasiljevic Zorica and Sevarlic M. (2005).

conditions for export of agricultural produce, Croatia failed to accomplish the approved quotas due to a small scope of production and low export rate of agricultural produce (Juracak and Gelo, 2009).

During the second period of harmonisation with the process of European integrations, Serbia signed (2006) and started implementing the Central European Free Trade Association – CEFTA on January 1st, 2007 as the „lobby“ for preparation of the remaining European countries for accession into the EU (Albania, Bosnia and Herzegovina, Macedonia, Moldova, Serbia, UNMIK on behalf of Kosovo and Metohija, Croatia, and Montenegro).

A new Law on Organic Production and Organic Products ("Official Gazette of the Republic of Serbia" no. 62/2006) was enacted in that period. Based on that Law new bylaws[13] were enacted later for the purpose of harmonisation with changes in the EU, which regulate comprehensively the issues related to organic agriculture in Serbia.

The third period of more intensive harmonisation of Serbia with European integration processes dates back to 2008. For that purpose, Serbia signed the Stabilisation and Association Agreement and Interim Trade Agreement with the EU on April 29th, 2008, which was ratified by the Parliament on September 9th, 2009. Serbia started implementing unilaterally the Interim Trade Agreement of the EU with Serbia, the aim of which is to create free trade zone within the period of six years, on February 1st, 2009 and the EU started implementing it only on February 1st, 2010. In that document, agriculture and trade with agricultural-food products were granted and important place and a six-year dynamics of reduction of customs tariffs defined the interim period during which Serbian agricultural producers should adapt to the conditions of exceptionally sharp competition at the EU market. The system of annual quotas for export of Serbian products to the EU market was approved as follows: 8,700 t of beef, 180,000 t of sugar, 63,000 hl of wine, 15 t of trout and 60 t of carp. At the same time, the issue of geographic origin marks was also regulated for certain products.

However, except in the case of sugar, we cannot praise that we fulfilled the approved quotas, in particular when it comes to beef (20% of the approved quota the most). Planned harmonisation of our agro-economy with the European standards is necessary in order to enable Serbian agriculture to take the advantage of those opportunities in the best possible way providing that the main priorities are defined.

That is why numerous authors have been dealing with those issues. Vlahovic et al. (2006) are of the opinion that it is necessary to modernise agriculture and adapt to the EU norms and standards as well as to direct to the increase of productivity, competitiveness and education of agricultural producers in order to prepare agro-industry of Serbia for European integrations. The same authors emphasise in particular that possibilities of placement of products at the international market will largely determine the production structure in agriculture.

According to Sevarlic and Tomic (2007), the main objectives of agricultural and rural development can be recognised in increase of competitiveness of agricultural production and providing of compatibility of agricultural institutions in Serbia.

Tomic et al. (2008) point out that harmonisation of Serbian agriculture with changes at the European and global levels requires the following main development directions: constant increase of competitiveness according to price and quality; systematic market research so that production structure can be changed in accordance with the market requirements (EU and CEFTA); higher share of certain productions that are based on the marketing concept – those can be productions based on ecological principles and on organic production methods; faster implementation of quality standards in food production (ISO, HACCP, and GlobalGAP) for the purpose of fulfilment of market demands and protection of consumers; health.

Entering into the streams of European integrations, Serbia has got the opportunity to take its comparative advantages and planned EU funds in order to improve the placement of its own agricultural production at the European market. Having signed and ratified the Agreement in 2006-

[13] They include the following: Rules on the appearance of labels and national trademark for organic products; Rules on conditions and ways of trade with organic products; Rules on the way of keeping records and contents of reports base don which the records on organic production are kept; Rules on packing, storing and transport of organic products; Rules on conditions that a legal entity issuing certificates, namely re-certificates for organic products needs to fulfil and on the methods of their issuing; Rules on the form of official ID for organic production inspectors; Rules on the methods of organic plant production and collecting of forest fruits and medicinal herbs as organic agricultural produce; and the Rules on methods of organic animal farming

2007, Serbia became a member of CEFTA together with 7 other countries (BiH, Croatia, Macedonia, Montenegro, Albania, UNMIK Kosovo and Moldova) recording surplus in foreign trade exchange of agricultural-food products based on the fact that it took the advantage of good co-operation relations with former Yugoslav republics from the previous period. Serbia records the largest part of foreign trade exchange with BiH, Montenegro, and Macedonia (Sevarlic M.M., 2008). CEFTA Trade Agreement is only the first level of liberalisation of smaller regional market until final accession into the WTO and EU. Until that moment, Serbia should take the best possible positions in export of agricultural-food products and to direct its export potentials up to the maximum possible extent towards the return onto the previous and conquering of new markets, primarily of the EU one.
In addition to regional and global markets, a special significance for the future development of our agriculture and food industry will belong to bilateral free trade agreements that Serbia signed with the Russian Federation, Byelorussia, and Turkey.
Most authors include the increase of competitiveness of production among development priorities of our agro-economy. According to the OECD definition, competitiveness is the measure of a country's capacity to produce goods and services that pass the test of the international market in free and equal market conditions. Analysing the notion of competitiveness we can conclude that competitiveness refers, on the one hand, to increase of productivity, efficiency, and quality of production, and, on the other hand, it largely determines the standard and quality of living.
According to the report of the World Economic Forum (WEF) on global competitiveness, which included 102 countries making up 97.8% of the world GDP, the analysis of the Business Competitiveness Index and Growth Competitiveness Index included Serbia for the first time in the period 2002/03 when it could be found at the 77th place. Until 2006, its competitiveness position worsened (84th place). The tendency of decline of competitiveness continued in 2009 as well since Serbia was at the 93rd place according to the Competitiveness Index of the World Economic Forum, the report of which included 133 countries.
In the analysis of enhancing of competitiveness of agro-economy and defining of activities that need to be undertaken, Vlahovic et al. (2009) point out that it is necessary to improve the quality of products with observing of standards of importing countries; direct producers towards production of quality fruit and vegetables varieties that can be processed in accordance with updated technologies aiming at obtaining of products of higher nutritive value; introduce changes of the existing products and work on creating of new ones depending on requests of foreign markets; create trademarks and brands and acquire trust of foreign consumers; reduce costs of production and accomplish more favourable prices at the international market and price competitiveness.
In accordance with the development priorities at the world and European markets, Serbian agriculture should direct itself in particular towards increasing of competitiveness and quality in production of healthy food. Competitive advantages should certainly be developed using diversities of favourable natural potentials (land, climate, water resources) and unpolluted areas in our country (Sevarlic M., 2001; Sevarlic and Vasiljevic, 2003; Sevarlic et al., 2008; Veljkovic et al., 2004). The advantage should be certainly given to production of quality and healthy food, taking into account that organic agricultural represents an unused potential for Serbia. Based on that, the support to certification of the system of health safety of food and support to the development and promotion of organic production were introduced in the structure of agrarian budget of Serbia in 2006.
The largest number of laws in the field of agriculture, rural development, and health safety of food was enacted in that period for the purpose of harmonisation of legislation of Serbia and with the EU. The most significant from the aspect of agricultural-political aspect was the Law on Agriculture and Rural Development ("Official Gazette of the Republic of Serbia" no. 41/09) and the most significant from the aspect of health safety of food was the Food Safety Law ("Official Gazette of the Republic of Serbia" no. 41/09).

2. Quality standards and health safe food

Introduction of the system of standards and control in food production process meant the fulfilment of the most important condition for entering into foreign markets. Food production in many countries is regulated by the law, for the purpose of safety and quality in food production. Food production is a highly complex system and it represents the chain consisting of a large number of elements (primary agricultural production, manufacturing, transport, sale, use by the buyers, fulfilment of state legislation, and education of participants in the chain). All the above-mentioned segments can affect significantly food quality and safety. The stakeholders that are included in food production chain (primary producers, processing plants, distributors, consumers) need to have their share in responsibility in healthy safe food production. Food has to be acceptable for consumption by the end users. Standard systems have versatile functions and they provide safety of consumers in terms of quality and safety of food that is consumed. At the same time, they conduct better control and supervision in trade with food so that products that do not meet the set standards can be excluded more easily.

The legislation of the developed countries and EU Member States is also very strict during the food production process. The import into those countries will not be possible without the certificate that is also the evidence of food quality. The introduction of quality standards in food production creates conditions for approximation with the EU.

The Food Act was enacted on January 1st, 2009 with the objective to accomplish uniform implementation of standards in food production in the Republic of Serbia. The Law defines clearly the issue of health correctness of food, hygiene and food quality and responsibility throughout the production chain. This Law ensures a comparable control in food production chain with the legislation set forth by the WTO and EU. The implementation of quality standards in food production eliminates the obstacles for export of food that is produced in Serbia, which enables its competitiveness at foreign markets.

Among international standards, **ISO standards** were the first to be implemented in Serbia. This group of standards has been present in our economy for a long time now. The International Organisation for Standardization is the largest institution in the world for development of standards that are implemented in 162 countries. ISO standards that are implemented in Serbia include:

- Quality Management System – ISO 9001
- Environmental Friendly Management System – ISO 14001
- Food Safety Management System – ISO 22000
- System of Protection and Safety at Work – OHSAS 18001

ISO 22000 standard systems refer to production of food and it can include all organisations that participate in that chain. A new ISO 22000:2005 standard is based on HACCP system principles and it is compatible with that system.

HACCP quality standard is applied in the developed economies of certain European Union Member States and it is legally mandatory, as regulated by the Council Directive 93/43/EEC. Other countries, which are not the EU Member States, accept this standard and introduce it as a legal obligation in order to continue being present at the European market. The Hazard Analysis Critical Control Points (HACCP) system of food safety is based on the analysis and control of potential biological, microbiological, chemical, and physical threats during the food production process. In food production process, HACCP system is adapted to all types of food products and all types of production and handling with food up to the end users.

The implementation of the HACCP system is also the legal obligation in Serbia based on the Veterinary Law (”Official Gazette of the Republic of Serbia” no. 91/2005) and Food Safety Law (”Official Gazette of the Republic of Serbia” no. 41/2009). The data of the Ministry of Agriculture show that 800 companies have submitted applications for certification, and around 450 of them have already got the HACCP certificate. The companies with this certificate eliminate international barriers at the international market and accomplish better competitiveness level. The obtained HACCP certificate is valid for three years and annual supervision inspection is mandatory to confirm or revoke the right to that quality level.

GlobalGAP quality system was created aiming at introduction of unique standard in primary agricultural production. It was developed from the good manufacturing practice in accordance with the requests of consumers related to agricultural production. GlobalGAP certification is carried out in more than 80 countries in the world and it is mandatory in 60% of European retail trade network. The standard refers to all production processes and work activities that are carried out at a farm.

Essentially speaking, this quality standard monitors the correctness of a product ”from the field to the table” and it is in accordance with the HACCP standard (Veljkovic et al., 2007. and 2010; Strbac, 2009).

Obtaining of GlobalGAP certificate confirms safety and control in food production, and provides for better competitiveness of a company at the world market through reducing barriers at the international market and creating conditions for acquiring of higher profit.

Hallal standard is another important international standard that is applied in countries with consumers of Muslim confession. It originates from the Scheriat law that determines the method of food preparation accepted and applied by Muslim all over the world. The word *hallal* means ”allowed” in Arabic language. The number of inhabitants of the Muslim confession in the world reaches around 1.6 billion, which means that there is the demand for Hallal certified food at the market. Out of the total turnover of food and food products at the world level, the Hallal market makes 12% of global trade. Certification according to Hallal is compatible with HACCP and ISO standards according to provisions of health, hygienic and sanitary measures. The introduction of this standard requires submitting of the application to the Agency of Islamic community, which carries out the control and certification procedure. The obtained certificate is valid for one year and hallal controllers conduct regular control at the food market.

Kosher Certificate guarantees the correctness of food products among members of the Jewish community. The original meaning of the word kosher is ”correct” and there are detailed explanations for food production and preparation depending on the groups of food products. Kosher rules are in accordance with the religious and traditional customs of the Jewish population and they refer in particular to certain groups of products such as meat and meat products, chicken and other poultry meat, fish, cheese, fruit and vegetables, etc. The Certificate can be obtained from the authorised rabbi and the procedure can be highly complex and demanding. If an entity has already got some of the international standards (HACCP, Hallal ...) it will be much easier to establish Kosher standards as well.

In addition to the above-mentioned standards that take a significant place in the world trade, there are also specific standards that refer only to certain countries. Export of food from Serbia to Great Britain requires the **British Retail Consortium (BRC) Standard Certificate.** This group of standard is applicable to all food industry and it is aimed at introducing of good manufacturers’ practice.

Export of products to the Russian Federation, which is a significant market for export of fruit from Serbia, requires the fulfilment of requirements of the **GOST quality standards.** In addition to other industries, this group of standards also includes food industry. The Euro-Asian Standardisation Council maintains the group of GOST Standards and it is accepted in the countries of former USSR. Obtaining of GOST-R standard Certificate is necessary for export and placement of products onto the Russian market. The standard defines the list of products that imply mandatory, namely voluntary compliance and the obtained Certificate is valid for three years.

The group of special food quality standards also includes certificates guaranteeing that food has been produced in an organic process. **Organic Certificates** are also called **Bio-certificates**, and food producers possessing those certificates have a strictly controlled production that has to satisfy high requirements. Such form of food production excludes the use of chemical means and obtained products dispose with high biological and nutritive value, while they reach much higher price at the world market.

The above-mentioned quality standards that help in overcoming of market limitations and to establish a competitive market relationship in time need to be implemented and introduces depending on export orientations and strategic commitments and positions at the international market.

In addition to the above-mentioned, and having in mind a small-sized holdings, low competitiveness and relatively small market surpluses of most family holdings in agriculture of Serbia, it is particularly necessary to revitalise the co-operative sector in agriculture and stimulate agricultural producers to associate in co-operatives[14] , procure jointly the production material and place market surpluses, use services of agricultural consulting aiming at improvement of production technology, ensuring of food quality and safety, as well as the increase of competitiveness of their products.

[14] See more in the paper by Sevarlic M., Nikolic Marija (2009).

3. Analysis of foreign trade exchange of agricultural-food products of Serbia

The integrations that the entire agro-sector of Serbia will be faced with will imply the necessity of harmonisation to the conditions and requirements imposed by the world market. In addition to relying on resources and available capacities in agriculture, intensive investments into rising of competitiveness level of agricultural-food products will be necessary both in terms of prices and in terms of quality.

The advantages of natural conditions and a long tradition in production have resulted with diversity of agricultural production in Serbia, and representative products that our country has become well-known after are presented in Table 2. In addition to corn and other cereals, the share of which is the highest, through production of industrial plants, we are also well-known after production of fruit and vegetables that takes a significant place in the overall export of Serbia.

Table 2. Production of agricultural produce in Serbia and their share in Europe and the world

Production in 2009 (000 t)	Republic of Serbia	The share of Serbia (%) in	
		Europe	The world
Cereals – total	8,849	2.19	0.40
Wheat	2,067	1.08	0.31
Corn	6,396	8.27	0.86
Sugar beet	2,798	1.60	1.26
Sunflower	378	1.92	1.21
Vegetables(including melons)	1,337	1.36	0.15
Potato	898	0.71	0.3
Cabbage and other vegetables	326	2.62	0.47
Fruit (without melons)	1,444	2.00	0.29
Plum	663	24.02	5.76
Apple	282	1.87	0.38
Grape	431	1.48	0.54
Raspberry	87	27.19	20.23
Meat – total	457	0.89	0.17
Meat of bovine animals	100	0.90	0.16
Meat of swine	252	1.00	0.24
Poultry	80	0.61	0.09
Milk – total	1,503	0.70	0.23
Cow's milk	1,478	0.71	0.27
Eggs (000,000 pieces)	1,026	0.72	0.11

Source: Calculation of authors based on the data taken over from the Statistical Office of the Republic of Serbia – Belgrade and FAOSTAT

The scope of realised production affects significantly the realisation of potential export. Based on foreign trade exchange, Serbia recorded 1, 237 billion dollars on the average through export in the food sector, while it recorded 168 million dollars on the average in the sector of beverages and tobacco during the period from 2005 to 2009. The surplus was recorded in both of the observed sectors (Table 3).

Table 3. Foreign trade exchange of agricultural-food products of the Republic of Serbia according to commodity sectors (average 2005-2009)

Product	Export		Import		Balance
	000 $	%	000 $	%	000 $
Live animals	27,302	2.2	12,627	1.5	14,676
Meat and meat preparations	71,627	5.8	31,693	3.8	39,934
Dairy products and birds' eggs	48,691	3.9	22,916	2.8	25,775
Fish and fish preparations	4,133	0.3	80,139	9.7	-76,007
Cereals and cereal preparations	331,292	26.7	65,894	8.0	265,398
Vegetables and fruit	397,332	32.1	244,299	29.5	153,033
Sugars, sugar preparations and honey	168,884	13.6	42,296	5.1	126,588
Coffee, tea, cocoa, spices, and manufactures thereof	69,069	5.6	166,485	20.1	-97,416
Feeding stuff for animals (not including unmilled cereals)	47,630	3.9	56,920	6.9	-9,289
Miscellaneous edible products and preparations	71,947	5.8	104,536	12.6	-32,589
Food and live animals –total	1,237,907	100.0	827,804	100.0	410,103
Beverages	139,062	82.6	63,225	40.5	75,837
Tobacco and tobacco manufactures	29,376	17.4	92,921	59.5	-63,546
Beverages and tobacco – total	168,438	100.0	156,147	100.0	12,291

Source: Foreign trade statistics, Statistical Office of the Republic of Serbia, Belgrade

The largest share in export belonged to the vegetables and fruit sector (32.1%, namely 450,706 tons of fruit on the average with the positive balance of 147,638 tons of fruit, which makes 153 million dollars). The second place in the total export belonged to cereals with 26.76% for the observed period when 1,337,282 tons were exported and the highest positive balance of 265 million dollars was recorded. During the analysed period, the share of sugars and sugar preparations in the total export was 13.64% with the balance of 194,155 tons and the earning of 126 million dollars. The following products also recorded surplus in export: meat and meat preparations, dairy products and birds' eggs and live animals. Significant revenue in the sector of beverages and tobacco was recorded thanks to the export of beverages – twice more compared to import of beverages and the balance of 75 million dollars (Table 3).

In addition to a large share in export of 32.10%, vegetables and fruit also recorded the highest share in import (29.51%) amounting to 244 million dollars. It should be pointed out that this group recorded surplus in the total balance. The analysis of import (Table 3) shows that deficit was recorded for the following groups of products: coffee, tea, cocoa, spices, and manufactures thereof, fish and fish preparations, tobacco and tobacco manufactures and feeding stuff for animals. The share of those products in import was as follows: coffee, tea, cocoa, spices, and manufactures thereof – 20.11%; miscellaneous edible products and preparations – 12.63%; fish and fish preparations – 9.68% and feeding stuff for animals – 6.88%. The group of non-competitive products with recorded deficit included coffee, tea, cocoa, spices, and manufactures thereof (-97 million dollars); fish and fish preparations (-76 million dollars); miscellaneous edible products and preparations – 32 million dollars; and feeding stuff for animals (-63 million dollars) (Table 3).

Many countries participate in foreign trade exchange of Serbia. In our analysis, we have singled out the leading countries with which Serbia co-operates the most in the total import and export (Table 4). When it comes to export (this refers to all sectors), Serbia exports the largest quantities of goods to Bosnia and Herzegovina (12.6%), Italy (11.8%), Republic of Montenegro (11.8%), and Germany (10.3%). When it comes to import, Serbia imports the largest quantities of goods from the Russian Federation (14.8%), Germany (11.4%), and Italy (9.3%). Serbia recorded surplus in foreign trade exchange with former Yugoslav republics – the share in export amounts to 37.7% and in import, it amounts to 10.9%. Serbia has also maintained the export and leading role in the CEFTA group that includes former Yugoslav republics (except Slovenia).

Based on the analysis of the leading countries that participate in the total foreign trade exchange of Serbia and turnover of food we singled out the leading countries according to the scope of turnover. Those eight leading countries are also the representative examples since they represent export and target markets for Serbia. The CEFTA Group includes BiH, Montenegro, Macedonia, and Croatia, while the European market is represented by Germany, Italy, and Slovenia. Russian Federation is also a significant market since Serbia has had a long-term co-operation with it and the signed free trade agreement (signed in 2000 and extended in 2009).

Table 4. Leading countries in foreign trade exchange of Serbia (2005-2009)

Country	Export		Import		Balance (000 $)
	000 $	%	000 $	%	
BiH	977,778	12.6	447,365	2.8	**530,413**
Italy	924,343	11.8	1,504,237	9.3	-579,894
Montenegro*	922,546	11.8	164,060	1.0	**758,486**
Germany	804,559	10.3	1,836,389	11.4	-1,031,830
Macedonia	383,920	4.9	258,095	1.6	**125,825**
Russian Federation	377,437	4.8	2,380,065	14.8	-2,002,628
Slovenia	356,398	4.6	475,462	2.9	-119,064
Croatia	298,134	3.8	414,589	2.6	-116,455
Romania	290,376	3.7	454,146	2.8	-424,770
Austria	270,709	3.5	421,489	2.6	-150,780
France	256,495	3.3	495,773	3.1	-239,278
Hungary	229,644	2.9	519,903	3.2	-290,259
Sum	**6,092,339**	**78.0**	**9,371,573**	**58.1**	**-3,279,234**
Other countries	1,716,871	22.0	6,754,557	41.9	-5,037,686
Total	**7,809,210**	**100.0**	**16,126,130**	**100.0**	**-8,316,919**

**For the Republic Montenegro in the period from 2006 to 2009*
Source: Foreign trade statistics, Statistical Office of the Republic of Serbia, Belgrade

Further analysis contains the calculation of the average export and import of food for Serbia in the period from 2005 to 2009, with the emphasis on two sectors: food and live animals; and beverages and tobacco. Food and live animals sector recorded surplus in foreign trade balance of Serbia amounting to 410 billion dollars, as so did the beverages and tobacco sector (12 billion dollars). The analysis of the food sector shows that Serbia exported mainly food to countries listed in Table 5 and it recorded surplus – except in the case of trade with Croatia.

When it comes to trade with food, cereals (corn, wheat), vegetables and fruit, sugars and sugar preparations make the most frequently exported items for Serbia

Serbia exports the largest quantities of vegetables and fruit to Germany, Russian Federation, Italy, and the neighbouring countries (BiH and Montenegro). It exports the largest quantities of cereals to BiH, Montenegro and Macedonia, while the largest quantities of sugar go to Italy, Germany, Slovenia, and the neighbouring countries. In addition to the above-mentioned products, Serbia also exports other products to the CEFTA Member States, such as meat and meat preparations, coffee, tea, cocoa, spices, and manufactures thereof, feeding stuff for animals and other products. Serbia largely imports miscellaneous edible products and preparations from the developed countries. It also imports vegetables and fruit, in particular seasonal ones, from Macedonia and Italy. Import items also include meat and meat preparations, dairy products, fish and fish preparations, coffee and partly cereals.

Table 5. Leading countries in trade with food with Serbia (2005-2009)

Country/Sector	Export (000 $)		Import (000 $)	
	Food and live animals	Beverages and tobacco	Food and live animals	Beverages and tobacco
BiH	219,575	74,577	36,707	3,327
Montenegro*	201,707	67,023	8,060	17,868
Macedonia	99,271	8,973	58,213	22,000
Russian Federation	41,618	3,997	12,956	9,084
Germany	111,988	1,870	53,231	19,458
Italy	105,199	652	43,231	8,560
Croatia	32,428	4,037	45,041	14,101
Slovenia	18,407	768	14,945	3,025
Sum	**830,193**	**95,166**	**272,384**	**97,423**
Other countries	407,714	73,272	555,420	58,723
Total	**1,237,907**	**168,438**	**827,804**	**156,146**

**For the Republic Montenegro in the period from 2006 to 2009*
Source: Foreign trade statistics, Statistical Office of the Republic of Serbia, Belgrade

The analysis of beverages and tobacco sector shows that Serbia recorded surplus only in trade with BiH and Montenegro, while it recorded deficit in trade with other countries. When it comes to export and import of beverages and tobacco and tobacco manufactures, Serbia is most frequently larger exporter of beverages, but also a larger importer of tobacco. Tobacco and tobacco manufactures are mostly imported from Macedonia and Croatia, but also from the developed countries such as Russia, Germany, and Italy. When it comes to trade with beverages, we export the largest quantities to BiH, and Montenegro and we import the largest quantities from Macedonia, Italy, Croatia, and Slovenia.

Based on the analysis of import and export of agricultural-food products from Serbia we can notice the primary role of trade with the former Yugoslav republics, in particular with BiH, Montenegro, and Macedonia, as it has been confirmed by the CEFTA Agreement as well. Serbia exports a part of agricultural-food products to the European and Russian markets. In the analysis of export of food, we can single out vegetables, fruit, and cereals as leading agricultural products. It is a well-known fact that export of agricultural-food products is not going to be possible without certificates that will confirm the quality of products, and many countries have already introduced this form of protection as mandatory legislation.

Products coming from organic agriculture will have more and more important role in export of agricultural products from Serbia. Although the certified surface for organic agriculture is relatively small in Serbia (around 2,500 ha) and it mainly refers to production of fruit in the southern and western Serbia and production of field and vegetable crops in Vojvodina (in particular in the region of Subotica), more than 90% of those products are exported to the USA, Japan, and the EU Member States. In addition to the support for the establishment of “Serbia Organica“ (2009), which is the National Association for Organic Production, the Ministry of Agriculture also supported the appearance of producers of organic food at the specialised international fair "Biofah" that was held in Nuremberg in 2010 and approved subsidies in the amount of 450 euro per hectare of land that was certified for organic agriculture – which is the largest amount of subsidies that is approved in Serbia for certain defined purpose of land use.

4. Conclusion

Taking into account the capacity for export of food from Serbia it is necessary to define the current export priorities, as well as development opportunities, namely potentials. Entering into the stream of more and more liberal trade that is imposed by the rules of international trade and aiming at survival, we will have to increase the level of competitiveness of food from Serbia up to a significant extent. This implies necessary harmonisation with the market requirements in terms of continuity and quality. Adopting of certain international quality certificates (ISO and HACCP, GlobalGAP) provides for acquiring of much better position in international trade and easier obtaining of other specific certificates. Market orientation towards the world and European markets will be more and more directed to quality of products, which means that one of the development directions can be recognised in production of traditional products from family businesses, organic products and products of known geographic origin. It is certain that we can find many export and development opportunities if we look in that direction and take the advantages of the existing potentials of Serbia.

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