

IMPLEMENTATION OF GLOBALGAP STANDARD AS THE COMPARATIVE ADVANTAGES OF THE SERBIA¹

Boris Kuzman², Aleksandra Tešić³

Abstract

Increased competition in the domestic market should improve product quality and supply. Implementation of GLOBALGAP type of standard in the agriculture can greatly increase a supply of high quality agricultural and food products and influence the positioning of Serbia as a leader in the production of high quality agricultural products. Foreign trade liberalization and the creation of a free trade zone, excluding the above uses, raises a number of challenges. In fact, there is a significant presence of foreign supply and increased competition in the market of agricultural and food products. It is realistic to expect a decline in the product price, which may be a problem for domestic producers reducing their income.

Keywords: *the Republic of Serbia, Globalgap, Standards, HCCP, CEFTA, EU*

Introduction

Growth in exports of a country is determined by the both natural resources and quality of end products which are considerably determined by the quality standards. The Republic of Serbia must not overlook the fact that in order to fully use the natural resources of the country, it is necessary to substantially increase the intensity of production, or invest in

¹ This paper is a part of the Research in the Project III 46006 "Sustainable Agriculture and rural development aiming to achieve strategic goals of the Republic of Serbia in the Danube Region", funded by the Ministry of Education, Science and Technological Development of the Republic of Serbia.

² Boris Kuzman, PhD, Research Associate, 21000 Novi Sad, Faculty of Agriculture, Novi Sad, Trg D. Obradovic 8, Serbia, Phone: +381 (063) 590 129, e-mail: kuzmanboris@yahoo.com

³ Associated Professor Aleksandra Tešić, Ph.D. The Faculty of Economics and Engineering Management, University Business Academy, 21000 Novi Sad, Serbia, tel.+ 381 69 200954, E-mail: prof.aleksandra.tesic@gmail.com

current production and development, as well as in the introduction and implementation of the modern standards in agricultural production. GLOBALGAP standard is the standard that can provide to Serbia a long-term preservation of the leadership position in the CEFTA market (primarily), and in other markets such as the EU market. Introduction of *GLOBALGAP* standard and its full implementation is undoubtedly a comparative advantage available to the Serbian agriculture. In order to achieve the growth prospects and the increase in the intensity of the Serbian agro-industrial complex, it is necessary to constantly monitor the market (marketing opportunities and conditions) and the price parity (price ratios: raw material-product, product-product and product-processing). EU and CEFTA markets offer some great opportunities for launching Serbian agricultural products, but also they carry a great risk if the economy of a country falls asleep.

Data sources and methodology

Primary data sources are sources of the Ministry of Agriculture, Chamber of Commerce and other relevant sources. A comparison of regulations for the groups of products was made according to the Standard International Trade Classification (SITC). This research is based on the so-called "Desk research", which implies a processing and comparing of available data. Also, the content analysis of adopted documents has been performed taking into account previous results of the studies discussing this issue.

Research results

There are a number of aggravating measures that directly or indirectly affect the foreign trade, and standards in the food production stand out as particularly sensitive limiting factor in import - export. Many standards have been in force for many years, and some of them (ISO standard or HACCP) do not require further analysis. A food production itself as the production of consumer goods is subject to a specific standardization. It was necessary to standardize the production in order to ensure the consumption of a safe and healthy food product to the end consumer. Food sector makes demands on agriculture as a source of raw materials. As a result, the agriculture already includes modern solutions such as GPP (Good Production Practice), ISO system, HACCP and others. Currently a delay in fulfilling the quality requirements of the market has

been recorded. Quality development is associated with a number of difficulties in the existing organizational and fragmented agriculture. Therefore, it is necessary to gradually introduce quality standards and regulations on packaging and labeling, which would be harmonized with the health and environmental protection standards (ISA) set out in the EU. The GLOBALGAP standard which is under intensive implementation within the EU, may represent an obstacle to the new members of the European Union that come from CEFTA region. In fact, GLOBALGAP (formerly known as EUREPGAP) is a body that has set its own standards of good agricultural practices in order to perform certification of agricultural products around the world. This body was founded in 1997 by *Euro Retailer Produce Working Group* (EUREP) as an initiative of the British and European supermarket chains (*FAOSTATDataBase, 2007*). Due to the successful expansion of the certification scheme, in 2007 changed its name to GLOBALGAP. Today, it is an association of wholesalers and retailers, manufacturers and other participants in the production, distribution and retailing of agricultural products. In all GLOBALGAP decision-making bodies producers and merchants equally participate (www.fao.org, 2008). The basic underlying principles of GLOBALGAP are:

- Limited and controlled use of all types of agricultural chemicals,
- Hygienic handling during production and handling of agricultural products,
- Providing guidance and records of all activities to ensure traceability
- Unique rules allowing impartial verification (confirmation that everything was as it should),
- Mutual communication and exchange of views between producers, merchants and product users,
- Protecting the environment and sustainable development,
- Responsible treatment of employees on the farm,
- Concern for the welfare of animals on farms,

Certification is conducted by the certification bodies, qualified and authorized for product certification by the national accreditation organizations and the GLOBALGAP secretariat that carries out the certification. The product certification is carried out by checking the entire production process from the beginning to the end. This includes

control of all inputs and all activities during the production, storage and transportation. The farms that produce multiple products are checked once a year regularly. The certificate is for the communication between producers and merchants and is not visible to the product end users (www.sme.sr.gov.rs, 2008). Certification includes annual inspections of producers and additional unannounced visits during the year. Certification applies to the registered land and products of individual producer (producer groups, cooperatives), and the certificate is valid for one year. GLOBALGAP is applicable to all types of agricultural products whose production requires development of specialized requirements. Standard of this type functions as a service which provides to its users a reliable general and specific "tools", allowing the positioning to each partner in the supply chain, warehousing, transportation and trade, on the global market in accordance with the requirements of end users (*Zygmunt Janise, 2008*). Complete documentation consists of:

- The general requirements contained in the system: "General Requirements (GR-General Regulations)
- Requirements for good agricultural practices contained in "Control Points and Compliance Criteria" (CPCC Control Points and Compliance Criteria)
- Documents for inspection: " Checklist" (CL - Checklists)
- National requirements for good agricultural practice given as documents that have been developed by some countries (England, France, Germany, Netherlands, Belgium...)
- Tools for standardization of practice given as: Comparison Checklist (Benchmarking Cross Reference Checklist-BMCL)

General requirements contain information about:

- basic rules of certification and certification rules,
- rules for certification bodies,
- certification of producer groups.

The "Control points and compliance criteria" set out the basic guidelines to producers for meeting the requirements set out by standards that will be checked during certification. This document is divided into areas and sub-areas in which are listed:

- all control points that the producer must adhere,
- how to comply with the request,
- conformity criteria for each request.

The checklists contain only the control points. There are three types of checklists:

- for producers, also used by certification bodies, and may be used by producers during self-inspection- internal control,
- list for a quality management system that is used for the certification of producer groups and used by certification bodies as well as by the producers for self-inspection.

In addition to the standards related to the agricultural production, two more standards were developed:

- The production of seed and planting material (PPM- Propagation Material)
- Animal food production (CFM - Compound Feed Manufacturers)

In addition to the basic standards set forth above, there are other useful documents, such as the standard for pesticide content in a product.

Benefits of certification according to the GLOBALGAP requirements

The large supermarket chains that dictate the rules of trade in agricultural products sold to the end-consumers recognize the demands of their customers and pass them to the suppliers - manufacturers in the form of a request of GLOBALGAP standard. The basic requirements of end users are:

- healthy, quality and biologically valuable food,
- manufacturer's responsibility to protect the environment,
- humane treatment of employees on the farm,
- concern for animal welfare.

Knowing how hard is to achieve the reputation among consumers, and very easy to lose, more and more large supermarket chains operating in the CEFTA market, are taking control measures to prevent any possible

compromise to the quality and safety of goods they sell. Economic logic made them become the protectors of their customers. A responsible primary agricultural production is an essential precondition for the safety of agricultural products. Therefore, farmers are increasingly focused on the implementation of guidelines for good agricultural practice, including maximum control of use of agro chemicals and hygienic handling of food.

A product certification system provided by GLOBALGAP is currently no mandatory standard within the CEFTA region, but is considered to be sufficiently reliable control system for agricultural producers, which guarantees to the customer the expected quality of agricultural food products (*World Agriculture, 2004*):

- large supermarket chains are not willing to develop their own services that would control agricultural producers on the field,
- laboratory control of each shipment of agricultural product would raise the end product price to an unacceptable level,
- level of control applied by the certification bodies is sufficient to determine all the serious irregularities in the performance of agricultural manufacturers.

GLOBALGAP is present in 80 countries. By 2008 more than 100,000 manufacturers in the European Union certificated their products in order to ensure its distribution through the large retail chains that preferably distribute such certified products. Some retail chains fully condition shopping by holding these certificates, and it is expected that the GLOBALGAP standard will be binding on CEFTA markets in future, since many of the large retail chains have aspirations to expand in Southeastern Europe. This standard enables producers, regardless of their size and organizational form (individual /cooperative) to appear on the market in any part of the world, if they have the GLOBALGAP certification. In Serbia, certification according to the GLOBALGAP standard has not yet found wide application. But the food industry is the best example of why we should not give it up. A few years ago the HACCP standard represented an enigma, as well as the standard requirements for the production of healthy food products issued by the Codex Alimentarius Commission. Today, all our food manufacturers are conditioned by the large supermarkets in Serbia and foreign customers from the CEFTA and European Union to have a certified food safety

management system - HACCP, which gave priority to those who introduced and certified HACCP system on time (*EBRD Transition Report, 2002*). Implementing the GLOBALGAP standard as a good manufacturing practice, would undoubtedly enable the realization of the competitive advantages of the agricultural food products from the Republic of Serbia in the markets of the CEFTA agreement.

The manner of implementation of GLOBALGAP standard

The manufacturers involved in production of agricultural and food products in the zone covered by the CEFTA agreement would be trained by a competent organization for the implementation of GLOBALGAP standard. A manufacturer or producer groups, independently or with the assistance of the consultants, in line with standards should (*Weidenfeld, W. Wessels, W., 2005*):

- enable facilities and equipment for good agricultural and hygiene practice,
- provide inputs from legal flows supported by the adequate proofs of quality and health safety,
- prepare written work instructions necessary,
- establish necessary records and regularly keep records to provide evidence of applied activities and traceability identifying what is made from which material, how and by which substance the product was treated and where was dispatched,
- provide adequate transportation and storage of inputs and products,
- ensure adequate water supply,
- provide adequate waste management,
- provide conditions for the proper handling of agro chemicals,
- train employees on the rules of good agricultural and hygiene practices and maintenance of personal hygiene,
- establish pest control,
- establish a system of marking everything on the farm,
- establish a system of declaring-labeling prior to delivery,
- establish a system of control at the end of production process and before delivery,

- conduct an internal self-check inspection to determine whether everything is fine and recorded in the checklist.

Producer groups (organization, cooperatives, associations ...) should meet the following requests:

- to document the legality of organization,
- to document the organizational form of organization and relationships between manufacturers,
- to identify contracts made between each manufacturer and organization,
- to establish a register of manufacturers,
- to appoint a management representative with full responsibility,
- to appoint a representative for GLOBALGAP and for QMS Quality Management System,
- to implement QMS
- to organize internal monitoring for GLOBALGAP and for QMS
- to employ agricultural / livestock engineer
- to document the responsibility and tasks of each member in organization,
- to ensure the competence and training of all employees and members in organization,
- to document Rules of quality and procedures,
- to determine and document the manner of conducting control of documents and records (to determine the type of documents and forms, to prepare and distribute).

Model in which the producer groups are applying for certification is specifically interesting to agricultural producers in the Republic of Serbia. In fact, due to lack of funds, this type of organization for the sake of certification significantly facilitates the financing thereof. It should also be borne in mind that the farms in the Republic of Serbia are fragmented, and if individuals are included in the certification process and want to finance through loans, they are often not able to receive the funds due to the small plots on which they put the mortgage. This problem should be primarily located of the local government and it should help manufacturers with FF territories to organize in the form of cooperatives or clusters. On the other side, the other higher forms of government

(Ministry of Agriculture) this form of organization should encourage with subsidies or favorable credits to be spent specifically. If the individual decides for the whole certification, all process as well as the cost of it shall be borne by individual households, that can be a limiting factor in the process.

The manufacturer addresses to the certification body and apply for the certification when he finds that has fulfilled all requests required by the standard. The certification process involves the assessment of practice and registries for the entire production cycle of the product to be certified and therefore the application for certification must be submitted in a timely manner. The certification according to the GLOBALGAP standard shall be implemented through the certification body approved by GLOBALGAP, to which a producer or group of producers of primary agricultural products submit an application for certification (*Ranchev Georgi, 2002*).

Manufacturer's Rights

Manufacturer receives the GLOBALGAP registration number issued by the GLOBALGAP accredited certification body, maximum 14 days from the date of application (*Atkins, P., Bowler, I., 2001*). After obtaining the number, the manufacturer enters into an initial contract with the certification body for at least 3 years. This contract may be later renewed or terminated. Any appeal or petition submitted to the certification body shall be considered by the certification body. If a producer is not satisfied with the response, the appeal may be submitted to the GLOBALGAP Secretariat on a special form, available to the manufacturer which has been registered or has the unique GLOBALGAP number (www.fao.org, 2009). The manufacturer may apply for different certification options, but cannot apply by using more different certification options for the same product. Application can be submitted to the one certification body for one product, and for another product to another certification body in the following cases:

- a) The manufacturer wants to certify more than one product in a variety of certification options;
- b) The manufacturer is a member of several groups of producers;
- c) The manufacturer requires cross-certification of areas and/or sub-areas.

Any group of manufacturers can seek suspension of a certificate from the certification body authority, if, for example, is unable to meet the required criteria.

Obligations of the manufacturer/group

Manufacturer or group of manufacturers that possess certificate are responsible themselves for the compliance of certified products. The manufacturer shall be registered by an accredited certification body, and registration must be completed prior to the inspection. A producer sanctioned by the certification body can change the certification body only when eliminates non-conformities or when the penalty period determined by the certification body expires. When applying for the GLOBALGAP, the manufacturer must report all locations and areas under a product for which certification has been requested (*Kuzman, B., Potrebic, V., 2011*). It is important to note that in checking the areas it is needed to pay special attention to areas that are close to the surface to be certified. It often happens that the areas that are close to, or even have a line of demarcation, contaminated with various chemicals. Particular attention should be given to the use of insecticides, fungicides, herbicides and fertilizers. The use of these products in the near surface for which the manufacturer seeks certification undoubtedly limits the receipt. The movement of these types of chemicals when they are used in the immediate vicinity of land that is certified, it is virtually impossible to limit. All of the above products in a very short period of time contaminate untreated surfaces as through air and through water or due to irrigation. So the areas and the locations for introducing the GLOBALGAP standard have to be free of chemicals. The manufacturer shall inform the certification body on all amendments to internal procedures, such as changes in the areas under a product or in case of the changes in the number of members within the producer group.

Certification process

The standard has been developed in the different modules whereby each covers different areas or activities undertaken during the production:

- **areas:** the entire farm, crops, livestock and aquaculture
- **sub-areas:** covering specific products - fruits and vegetables, coffee, tea, poultry, dairy ...

When applying for the certification of a product a group of manufacturers is required to report all surface areas under such product and to include every manufacturer that produces a product that will be certified.

Crops Certification

Records on the crop must be kept at least 3 months prior to the harvest-picking and after completion of the registration, in order to meet requirements for certification (www.fao.org, 2009).

a) Inspection at the time of harvest

The best time for inspection is when is possible to check all the records and all the control points.

b) The first alternative inspection

When there are no conditions to carry out an inspection at the time of harvest, the first alternative inspection will be performed before or after the harvest. Certification body must provide explanation and include it in the inspection report. In this case the unannounced or subsequent inspections by the certification body are possible.

c) The first inspection when more than one crop that are not harvested at the same time

1. Crops that ripen at the same time

The certification body selects representative crop, as close as possible to the time of harvest, that will be checked and on which basis a conclusion regarding other crops will be made in terms of whether are being cultivated under the same conditions (control points and conformity criteria).The certification body may decide to carry out a subsequent inspection of other non-represented crops.

2. Crops that do not ripen at the same time

The first inspection must be carried out during the harvest of the first crop while the next crops will be checked during the same year and can be included in the certificate if the control points are verified either by checking the places of production or in the harvest.

If the crop or product is not present at the time of the first inspection, the certificate shall be extended for three months, and the total term of the certificate is 15 months. This means that the manufacturer must renew the registration issued by the certification body extending in such a way the validity of the certificate. The following inspections may be conducted at any time, and no earlier than 6 months before the expiry of the first certificate and also 3 months before the expiry of the certificate (www.fao.org, 2009).

Livestock Certification

- a) A registered livestock must be present during the first inspection;
- b) Subsequent inspections are performed in the same way as for the crops except in the case of cattle, sheep and dairy;
- c) For cattle, sheep and dairy production the extension of the certificate can be made every 18 months, but only if the manufacturer has fulfilled all the conditions listed in the specification.

Registration of manufacturers and products must be renewed during the year, and before the expiration. The certificate cannot be issued until all the questions from the evaluation list are checked.

Certification Options

In order to hold certificate, the manufacturer must be registered and certified each year. There are 4 options of certification:

- Option 1-certification of the individual manufacturer or company
- Option 2 - certification of producer groups
- Option 3-comparative certification of individual producers
- Option 4-comparative certification of producer groups (Benchmarking)

Benchmarking certification is applied on request of the clients who check their equivalence by comparing content and criteria in relation to the GLOBALGAP. Each manufacturer has its own unique identification GLOBALGAP number. This number is placed on the packaging of the product for which the manufacturer holds the certificate, and uses it for the purpose of traceability. The term traceability is very indicative about

the product, method of cultivation, land and even about the manufacturer. Choosy market – with stronger purchasing power increasingly insist on traceability of products, both primary agricultural and food products and the produce. European Union market in particular insist on traceability, but we can not overlook the fact that the Republic of Serbia raises another very important markets such as the market of the Russian Federation and China. The Russian Federation in the future should be one of the most interesting markets for the Republic of Serbia, if we take into account the agreement between the two countries on the zero rate of sales of goods produced in Serbia. You should also take into account any significant buying power of the market which is directly proportional to growth in consumption of organic products (certified), where you can clearly demonstrate traceability in manufacturing. It should be payed special attention to the certification and conduct cotrol in the terms provided in order not to violate the postulate of the quality of such products. Organization dealing with certification must be competent in the field of the issued certificate. The certification body determines the registration number which is used for identification together with a manufacturer's number. This is composed of the abbreviated name of the certification body and digits (www.fao.org, 2009). Therefore, it can be clearly concluded that the certification process requires, in addition to time, the considerably material resources. Standardization and certification can be a limiting factor for export and an important tool in gaining competitive advantage when exporting to the developed countries (European Union) or to the market that includes CEFTA agreement. It is important to note that the Republic of Serbia could protect its market of agricultural and food products by the measures of standardization as a form of non-tariff barriers to the uncontrolled import of agricultural and food products. Non-tariff barriers are all forms of controlling imports and exports, with the exception of customs. The World Trade Organization has been notified of more than 2,000 non-tariff barriers (www.siepa.gov.rs, 2007). If the non-tariff barriers are necessary to protect the health and safety of people, animals, plants or the environment, then their introduction is justified. Every government recognizes that some trade restrictions may be necessary to ensure safety food and health protection of plants and animals. But sometimes governments are under pressure to agree on more than what is considered sufficient for the protection of plant and animal health and food security. They are sometimes required to implement sanitary and phytosanitary restrictions to protect domestic producers from economic competition.

Sanitary or phytosanitary restrictions that require the protection of human health can be extremely powerful and effective protectionist tool, and because of its technical complexity can be a barrier to trade of agricultural and food products. Standardization itself is significantly more elegant way to protect the domestic market, and therefore consumers of agricultural and food products.

Conclusion

In order to achieve a better perspective of the results in terms of agricultural production and in terms of foreign trade, it is realistic to consider all the factors that determine the position of the Republic of Serbia in the globalization of trade. If we analyze the competitiveness of the agro-industrial complex of the Republic of Serbia, the same can be seen only integrated (primary agriculture and food industry). This is because the very primary production as raw material sector is not competitive to other areas of the economy because of its specificities (long production process, the major impact of natural factors, slow turnover, production of strategic products, etc..). The output from these fields of agroindustrial complex Serbia should seek in the production of high quality organic food. Namely, with the production of certified agricultural food products which are standardized and recognized as such in the market, the Republic of Serbia can in a very short period of time achieve the leading position in the production of organic food. When introducing the certification of its products the CEFTA countries must implement EU principles. If the Republic of Serbia wants to participate equally in the market of the European Union must have a clear vision for the future implementation of GLOBALGAP standard and other standards required by the very selective EU market. Implementation of GLOBALGAP standard is not only imperative for appearing on the EU market. GLOBALGAP standard allows easier access to CEFTA market and its finicky consumers.

Also, in the future special attention should be paid to Russia and China, where consumers are becoming extremely choosy while purchasing power of this market has a tendency of constant growth. Serbia has a relatively well-preserved natural environment and therefore the implementation of GLOBALGAP should not be a particular problem. However, the funds required for standardization are not low, therefore the manufacturers from the Republic of Serbia must work closely with the administrative authorities. Besides the organization at the highest level, where is primarily the

Government of the Republic of Serbia - Ministry of Agriculture, manufacturers must focus on local government, where this type of standardization must be recognized as a potential opportunity for local development. Local governments should need to recognize these farms and their development to implement in the development strategy of local governments. Fragmentation of land in the Republic of Serbia, which has regarded fallacy of Serbian agriculture, in the future can become a competitive advantage of its agriculture. The introduction of GLOBALGAP small land holdings (from 1 to 10 hetars arable land) can become very prosperous farms for organic food, which are becoming more popular in the world market of agricultural and food products. In regard with this, the Republic of Serbia should recognize this type of production and to support the same as a consultant, through advisory services that would be established at the regional level and through favorable credit lines, subsidies and other measures that are available to individual institutions. Standardized production of agricultural products which is certificated and the product that has traceability in production should easily found their way to the final (more choosy) consumers. These ways of production the state government needs to stimulate only in the early stages of their launching. The practice in Western European countries showed that after four to five years, for the farms with the standardized form of production of agricultural and food products it is very easy to realize the financial support from commercial banks, because they don't have significant problems with the placement of the final product. Developed markets (markets with higher purchasing power) now recognize the certified agricultural and food products. Traceability in the production and sale is undoubtedly a comparative advantage in these markets. The consumer is entitled to have access to the movement and production of food products. A clear path from farm to table is inevitable that more and more imposing to the processing complex which has to guarantee for the final food product by the declaration of origin of the product. The Republic of Serbia, due to the limited natural resources and the fragmentation of agricultural holdings, should see its chance in the production of organic food. Certification of agricultural products in the future should be imperative to higher authorities in the Republic of Serbia (strategic objective). Specifically, if the expediency of introducing the GLOBALGAP is recognized on time, and the government bodies through the subsidies or grants decide to finance producers in order to initiate the process of certification of its products, the future export potential of the Republic of Serbia to the CEFTA market could be greatly improved, and to the European Union market in the future.

Literature

1. *Agra Food East Europe*, Agra Europe, various editions.
2. Atkins, P., Bowler, I., *Food in Society*, Oxford University Press, New York, NY, 2,001th
3. *EBRD Transition Report*, 2002.
4. *EU Taric Data Base*.
5. *FAO STAT Data Base*.
6. Kuzman, B., Potrebic, V. (2011): *Strategic Decisions in Agribusiness*, StinteEconomice, Bulletin, University Ploesti, Satu Mare, 2011.
7. *OECD Data Base*.
8. Ranchev, G. (2002): *Free Trade Zone in Southeast Europe*, Achieving Genuine Regional Economic Integration, Research paper, Center fir Policy Studies, Budapest, 2002.
9. Weidenfeld, W., Wessels, W. (2005): *Evropa od A do Š*, Handbook of European integration, Konrard Adenauer Stiftung, Bonn, 2005.
10. *World Agriculture: Towards 2015-2030-AnFAO perspective*, FAO, Rome, 2004.
11. Zygmunt, J. (2008): *US organic fruit: export opportunities and competition in the international market*, USDA, Foreign agricultural services Washington, 2008.
12. www.siepa.sr.gov.sr
13. www.fao.org