Organic Agriculture in Serbia

At a Glance

2011

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ABBREVIATIONS AND ACRONYMS

ADA	Austrian Development Agency
BSc	Bachelor of Science
CAP	Common Agricultural Policy
CEFTA	Central European Free Trade Agreement
EBIT	Earnings before Interest and Tax
EC	European Commission
EU	European Union
FAO	Food and Agriculture Organisation
FDI	Foreign Direct Investment
GAP	Good Agricultural Practice
GDP	Gross Domestic Product
GM	Genetically Modified
HACCP	Hazard Analysis and Critical Control Point
IFOAM	International Federation of Organic Agriculture Movement
IMF	International Monetary Fund
IPA	Instrument for Pre-accession
IPARD	Instrument for Pre-accession and Rural Development
ISO	International Organisation for Standardisation
KfW	Kreditanstalt für Wiederaufbau
MAFWM	Ministry of Agriculture, Forestry and Water Management
NGO	Non-governmental Organisation
NRDP	National Rural Development Program
OECD	Organisation for Economic Cooperation and Development
R&D	Research and Development
SAA	Stabilisation and Association Agreement
SDC	Swiss Development Corporation
SIEPA	Serbian Agency for Foreign Investments and Export Promotion
SME	Small and Medium Enterprise
USAID	US Agency for International Development
USDA	US Department of Agriculture
WHO	World Health Organisation
WTO	World Trade Organisation

A WORD FROM MINISTER

Dr Sasa Dragin

Organic production is a system of managing a farming homestead wherein agricultural measures applied protect the environment from excessive use of pesticides and fertilizers.

In addition to Serbia's great and undisputed natural potentials which are a necessary prerequisite for organic food production, the Ministry of Agriculture, Forestry and Water Management has set up a legal framework that will secure the sector's more intense development.

A functional and efficient system of organic food production is in the process of being established, with the aim of developing the domestic organic produce market. The system is also expected to make produce from Serbia more competitive on the EU market, noted for its very stringent standards.

In the past several years a growing number of producers has entered organic food production, as the demand for organic produce is growing both at home and abroad. This comes as no surprise, since the motto of organic food producer is that the food we grow should be healthy and come from uncontaminated soil, for the sake of the general population's health. And this is what these agricultural producers aim to achieve.

Demand after organic food is continuously growing, to an extent as a reaction to the conventional production's negative effects. The realization that pesticides are harmful and that fertilizers may contain radioactive substances have given rise to a new type of production that avoids these dangers. Organic produce grown and manufactured without the use of insecticides, fungicides, herbicides and synthetic fertilizers, free of growth regulators, hormones, antibiotics and genetically modified organisms, are products that every nation intent on taking care of its health and its environment should choose for itself.

The quality of food today is measured by its influence on health. The consumption of organically produced food contributes to a higher quality of life, and the manner of its production helps preserve the environment. Because of that, the Ministry of Agriculture, Forestry and Water Management has designated organic food production one of its priorities in the general development of Serbian agriculture.

FOREWORD

Tobias Stolz
GIZ/ACCESS Program Leader

For several years now, Serbia has been undertaking enormous efforts to modernize its economy and join the WTO and EU. Various support measures are giving positive effects and the appointment of Serbia as a candidate country is expected in the nearest future. In this context, one of the areas which require considerable adjustments is Serbia's agricultural sector. Europe's Common Agricultural Policy (CAP) regulates markets and mechanisms for many agricultural products and the integration of Serbia's agriculture into the CAP is a manifold challenge.

The GGZ is assisting Serbia with modernizing its economic system and is supporting the country in meeting the EC's convergence criteria through a variety of programs. Agriculture and the food industry have always been at the core of the GGZ's programs, and in the past ten years Germany has launched many initiatives to assist the development of this sector. While conventional agriculture still forms the backbone of the agro-food industry in all European countries, organic agriculture is becoming an important component of it. This is not only a result of increasing consumer sensitivity vis-à-vis environmental issues, or better government programs; rather, the industry has noted the formation of a large and highly profitable segment.

Worldwide, organic food markets are governed and driven by the same economic principles as all other industries. The turnover from organic products in Europe has reached several billion euros and annual growth rates are typically close to 10%. Demand is growing much faster than domestic production. It is this trend which propels economies to translate organic food manufacturing potentials into export opportunities. With its abundant agricultural land and its long agro-industrial tradition, Serbia can look forward to transforming these advantageous factors into export opportunities and invigorating its domestic market.

The Serbian National Action Plan for Organic Agriculture shows that Serbian political decision-makers have realized

the country's potential for organic farming and started preparing the necessary framework to turn these opportunities into real business. The GGZ has supported the development of the National Action Plan and is assisting Serbia in reducing constraints and bottlenecks hampering the development of the agricultural sector in general, and of the organic sub-sector in particular.
This report provides a comprehensive overview of the current status of organic farming, processing and marketing in Serbia. It is intended for existing and potential stakeholders in the agro-industry and is expected to stimulate discussion and interest in the development of the organic sector in Serbia.

Belgrade, January 2011

SUMMARY

This Industry Study reviews the current status of organic agriculture in Serbia and examines the sector in the context of historical developments, future challenges and opportunities. Back in 1990, NGO Terra's established a promotional network of producers, farmers, advisors and academic staff involved in organic food production. Thirty years later and taking advantage of the support of many domestic and international institutions, ministries, donors and technical organisations, the organic sector in Serbia has attained a respectable base:

- Several associations promote the organic sector and develop it systematically as lobby organisations.
- Governmental institutions and ministries, spearheaded by the Ministry of Agriculture, Forestry and Water Management, monitor and take care of the sector's needs.
- About 20 academic institutes, faculties, R&D facilities and affiliated bodies help to design and propagate most appropriate farming and cropping systems, and
- More than eight certification bodies make sure that international rules for organic practices are respected and that the resulting product, manufactured by more than 3,000 farmers and partially processed in about 30 special companies, complies with all international standards and requirements.

Nevertheless, within the context of modernizing the economy in general, the agricultural sector in particular, and the need to shape the agricultural sector in such a way that it can integrate itself into the European Agricultural Policy framework, organic agriculture finds it hard to achieve a satisfactory rate of growth. On more than 8,000 hectares of agricultural land, a product portfolio mostly consisting of fruits, berries, vegetables, some cereals and some oil crops, generates a farm-gate value of some €25 million. Most of this product is exported, particularly to the EU, as domestic market development is hampered by the insufficiently increasing purchasing power of consumers. Demand for the organically grown product exists in many countries and Serbia has excellent eco-climatic and technical conditions to cultivate, in addition to the traditional berries and fruits, organic cereals and oil crops that are in high demand. So far, however, farms engaged in organic farming need assistance to procure the appropriate machinery, other technical devices and capital, in order to raise production efficiency to levels that ensure their competitiveness on the national, regional, and EU market. The forthcoming IPARD program is, therefore, a major chance for the organic sector in Serbia. By investment support from IPARD, both farmers and processors can begin raising production efficiency and gradually strengthening the country's role in the European organic industry, building on its existing advantages: the uncontaminated soil, profound and elaborate R&D facilities and education, closeness to product markets, and a long tradition in growing and processing highly sought after products – fruits, berries, cereals and oil crops.

1 CONTEXT

Development of the organic sector in Serbia began in 1990 when Association Terra's was established by producers, farmers, advisors and academic staff in the municipality of Subotica. This NGO began as part of the Open University of Subotica and had representatives of the University of Novi Sad as members. Terra's carried out a number of campaigns with the objective of promoting organic farming according to IFOAM standards, becoming a member of this foundation in 1992. In 1997 Terra's hosted an IFOAM Conference on organic agriculture in Central East European countries and remained the driving force behind the development of Serbia's organic sector, as formal and informal groups promoting the field began emerging elsewhere in the country as well. The first Law on Organic Agriculture in Serbia was passed in 2001, while it was still part of the Federal Republic of Yugoslavia. Following the change of government in 2000, foreign investments started coming in, with buyers, projects and donors bringing knowledge and export possibilities as well. Avalon from The Netherlands, SIDA from Sweden and Diaconia from Germany were the first foreign organizations to promote organic farming in Serbia with regional projects. In 2003, the GIZ supported Terra's in establishing cooperation with the German certification firm BCS, thereby laying the foundation for the first certification body in Serbia. The majority of these international organisations recognized the potential of organic production in Serbia and facilitated the establishment of new organic associations, primarily on local and regional level, and several companies began working on export-oriented organic production. In 2004, the GIZ supported the first participation of Serbian traders and processing companies on the Biofach international bio-fair in Nuremberg, Germany. Together with the Green Network of Vojvodina, Terra's started the development of the local market and, as a result, the first Biofest was held in Subotica in 2005. In subsequent years, in addition to the GIZ, SIPPO from Switzerland, USAID and MAFWM also supported participation of Serbian producers and businessmen at the Biofach fair. In 2006, MAFWM joined the Mediterranean Organic Agricultural Network and shortly afterward a cross-border project on organic agriculture financed by the EU and various Mediterranean countries followed.

In 2007/08, donor support for the development of the organic sector continued with sundry projects. ADA focused its activities on regional rural development in Vojvodina and Sandzak, trying to amalgamate small-scale organic farming with community development and local processing of agricultural raw materials. SDC embarked on a major program for introducing food safety standards such as HACCP and Global GAP The GIZ concentrated on policy advice, donor coordination and buildup of business associations. In 2009, a national association on organic agriculture, Serbia Organica, was founded with the objective of uniting the sector's participants under a joint objective and mandate, stimulating interaction and promoting organic farming and processing both at home and abroad. Serbia Organica currently comprises some 60 members, 50% of them being from the trader and food processing community, 30% from academia and official institutions, and the balance from farming. In 2010, the MAFWM began forming centres for organic production in different regions of the country.

The history of organic food production and processing stretches over 20 years. The sector is still only marginally organised, although a number of different locally acting associations, organisations, cooperatives and interest groups developed. Until early 2009, the Law on Associations restricted the formation of strong interest groups or associations, not only in organic agriculture but in general, as it did not allow associations to conduct business and accumulate capital. The situation changed on July 14, 2009, when the new Law on Associations was published in the Official Gazette No. 51. The new Law's main improvement was that it allowed associations to carry out business operations and build up capital reserves to a certain extent.

Table 1: Business associations and national NGOs active in the organic sector

Association's Name	Web page
National Association Serbia Organica	www.serbiaorganica.org
Green Network of Vojvodina	www.zelenamreza.org
Terras	www.terras.org.rs
Assocaition for Biodynamic production	www.biodinamika.org
NGO Natura Balkanika	balkanika@ptt.rs
Fund Organic Serbia	www.organskasrbija.org.rs
Centers for Organic production in Selenca, Valjevo, Svilajnac and Leskovac	

2 THE ORGANIC SECTOR: PLAYERS AND ACTIVITIES

2.1 PRODUCTION STRUCTURE AND MARKET VALUE

In the spring of 2010 the GIZ, in co-operation with the AFC/FIBL Consortium, conducted an organic sector survey with the aim of collecting data on the areas, crops, number of operators, regional distribution of organic produce, etc. This survey was supported by MAFWM and Serbia Organica. The methodology of the Swiss FIBL institute for World of Organic Agriculture has been used for the purpose. Standardised questionnaires were filled by both authorised and non-authorised certification bodies. The survey gives a concise overview on the areas and crops, and provides estimates on the number of operators. The survey also shows that around 230,000 hectares of land are currently either organically certified or in the process of certification. This area includes land used for harvesting wild berries, mushrooms and herbs. Arable land under organic farming accounts for about 8,500-9,000 ha or 3.5-4% of the surveyed land total. The survey results suggest that organic farming is

Table 2: Agricultural land organically certified by crop (2009)

Category	Crop	Area fully converted (ha)	Area in conversion (ha)	Total (ha)
Perennials	Apples	650	550	1,200
	Raspberries	360	20	380
	Strawberries	80	10	90
	Plums	420	170	590
	Cherries	100	50	150
	Others			2,560
Subtotal				4,970
Annuals	Maize	20	210	230
	Wheat	40	130	170
	Soybean	10	400	410
	Vegetables and others			427
Subtotal				1,240
Grassland		50	2,240	2,290

mostly practiced in southern and western Serbia, followed by Vojvodina. Out of total agricultural land under organic cultivation, perennial crops are planted on almost 60% and annual crops on 15%. The balance (25%) goes to grassland and pasture. Within the category of perennials apples dominate, followed by various berries, notably raspberries, and plums. Cereals, soybeans and vegetables are the main annual crops grown. Although berries are the main export crop, it appears that farmers are diversifying to other crops, opting mostly for apples and cherries (Table 3). There is also a significant increase of land under annual crops (Table 4).

The survey data suggest that at least 3,000 small-scale farmers are involved in organic production. Yields on such farms cannot be the same as in conventional agriculture, and prices obtained are usually not identical to those obtained for conventional crops. In the absence of clear empirical data, a first approximation comes to the conclusion that the farm-gate value of all organic crops grown in 2009 ranges from €20 to €25 million.

Table 3:
Agriculture land under organically certified annual crops

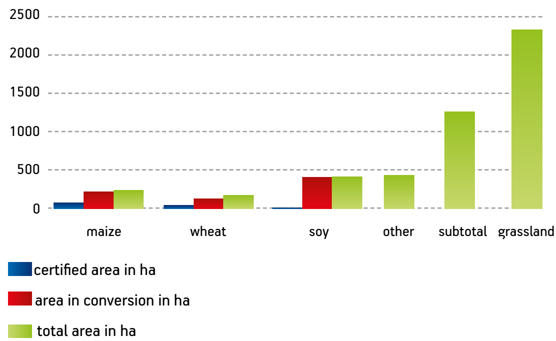


Table 4:
Agriculture land under organicly certified perennials

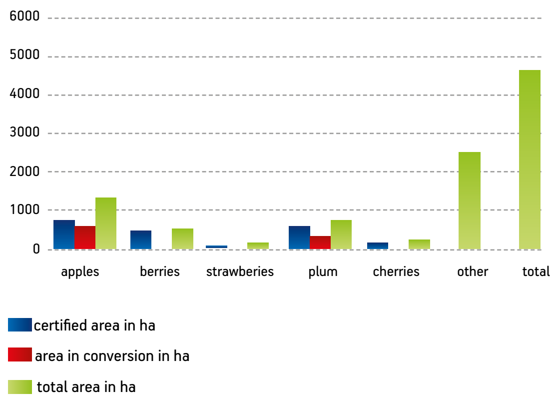
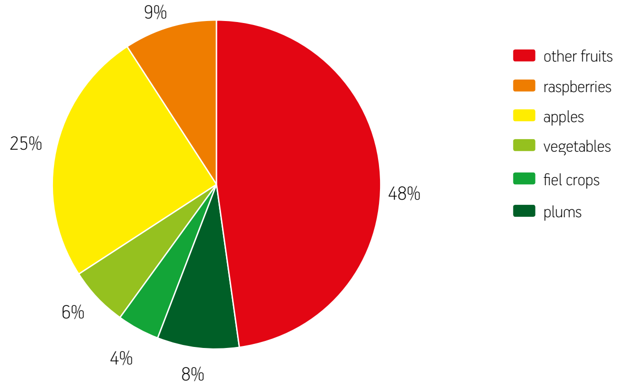


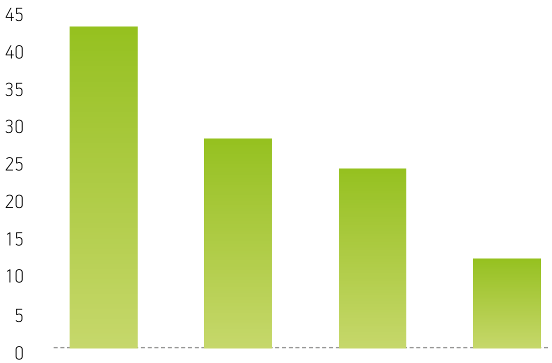
TABLE 5:
Structure of the production value of organically grown crops (2009)



2.2 THE ORGANIC FARMER[1]

On behalf of the GGZ, in August 2010 the AFC/FIBL Consortium and Serbian experts Mr. Nenad Novakovic and Dr. Slobodan Milenkovic conducted an organic farm survey. The number of farms which cultivate land according to organic practice in 2010 is estimated at 3,000. The Organic Farm Survey aimed to collect more detailed data on the typical Serbian organic farmer. The survey encompasses 140 organic farms. More than 60% of them operate on an acreage of less than six hectares and 25% on 10-20 hectares. Such areas are worked typically by household members, and every second farm hires seasonal labour for harvesting. Cropping patterns change with size: Farms with acreage larger than 20 ha plant cereals and oil crops. Fruit trees and berries are still cultivated, but

Table 6:
Farm size distribution



[1] Compiled from AFC/FIBL 2010: Organic Farm Survey; Facts & Figures

growing of vegetables has almost been discontinued. However, small farms with less than five hectares cultivate cereals on small plots and for home consumption only, growing fruit trees and berries on most of their land instead. Vegetables are grown mostly on farms whose size ranges from 5 to 10 ha. All farms having more than 5 ha, however, have land that is not cultivated and is used either as pasture or simply left fallow.

The larger the farm, the bigger its acreage under organic certification, but it never accounts for more than 15-25% of total land available. It generally goes to berry cultivation, which is mostly certified, followed by fruits and vegetables. Certifications for other crops are not reported.

In the category of berries raspberries dominate, while plums and apples are most important crops among the fruits. Raspberries, plums and apples are grown on more than 70% of all certified acreage.

There has recently not been much investment in organic farms: plantations are usually old, machinery likewise (usually older than ten years), greenhouses and organised stores are available only to every third farmer and leasing land or purchasing inputs or machinery on credit is practiced by just 5-20% of all farmers surveyed. Future investment plans are therefore very moderate. They concentrate on rehabilitating the irrigation infrastructure, deemed problematic mostly for fruit farmers.

Table 7:
Types of crops cultivated

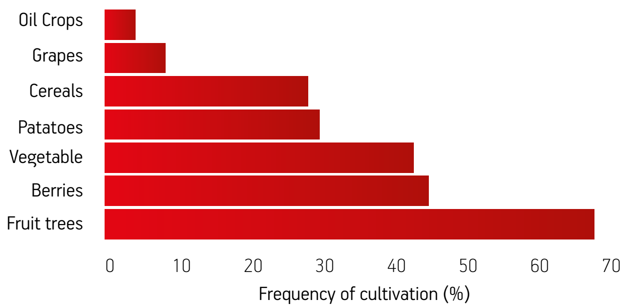


Table 8:
Equipment of organic farms with resources

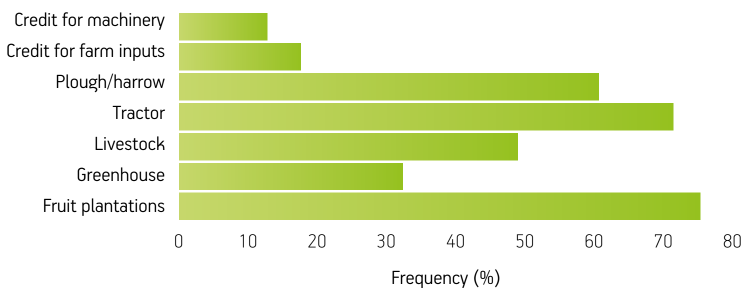


Table 9: Marketing profiles of organic farmers

Parameter	Value
Certified crops	82% of all berries; 20% of all fruits and 15% of all vegetables
Frequency of sales to wholesaler/ processor	> 75%
Frequency of contract farming	67%
Price markup for organic produce compared to conventional	10-20 %
Typical lot size	64% < 1 ton
Frequency of sorting	60%
Major marketing constraints	Low price (50%), high input costs (53%), no cooling for fruits (48%)

Obtaining organic inputs is considered by virtually all participants as a challenge. Certified seed is rarely available, pesticides permitted under the organic regimes practically non existing, and even fertilizing is an issue: organic farming relies on manure and compost. But considering that only every second farmer keeps animals, and if so only a few, manure available to them is hardly enough to provide 5-6 ha of land with sufficient nutrients for the optimum yields.

Organically certified produce is typically sold to wholesalers and to processing companies, with which almost 70% of the growers conclude contracts prior to the start of the season. Direct selling e.g. on the green market is practiced only by 20% of the farmers. Due to such a system, the markup in price they obtain for their organic produce is very moderate (with 10-20% on the average) and confirms that value-addition is not generated on the farm level. However, the produce offered is usually also not ready for optimum marketing: since there is often a lack of storage facilities, produce is available only during peak periods, when the growers flood the market. Sorting is only carried out by every second farmer and usually according to size, rarely according to quality. Products are packaged in plastic, in bulk mostly 40% lighter than 100 kg, with just some 36% of it heavier than 1 ton, rendering any kind of forwarding logistics a major issue.

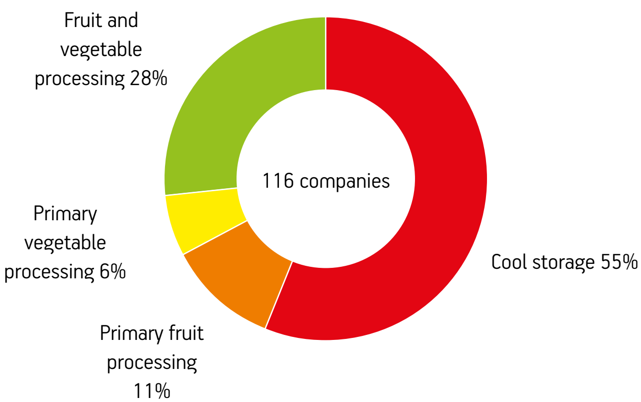
To some extent, farmers are aware of these problems: while low yields (insufficient fertilisation), diseases and pests (absence of appropriate pesticides), as well as irrigation, especially in case of fruit trees, are seen as major production constraints, advice and the quality of extension are not highlighted as major weaknesses. Although every second farmer enjoys a visit by an extension officer every month and the major topics discussed are plant protection and fertilisation issues, such advisory work could be improved if farm inputs were more available. Despite the respectable coverage with advisory services, the major complaint of farmers with respect to technologies and cropping systems is low productivity.

Such economic situation, however, has not motivated farmers to form cooperatives or associations. Only 5% of them are organised in associations and only 30% in business associations such as Serbia Organica, Terra's, and Topas – these three being the most popular.

2.3 THE ORGANIC FOOD PROCESSING INDUSTRY[2]

In 2004, the Serbian Government adopted an action plan for the removal of administrative barriers to foreign investments in agro-business. A national strategy and a planning document marking an investment roadmap until 2010 were developed. Investments in the sector have been rising recently, as has the number of takeovers, mergers and privatisations, frequently supported by foreign companies. Of relevance for the organic sector are companies operating in the fruit and vegetable sector. Capacities of most of these companies are small and the number of registered fruit and vegetable processors with more than 200 is still very high. About 50% of all fruit and vegetable processors are HACCP certified. Refrigeration companies dominate that sector, presumably because it takes less effort to certify a refrigeration plant under HACCP, than to invest in a full processing line for juices or jams. About 30 food processing companies manufacture organic products, virtually all of them processing conventional produce while operating an organic line additionally.

Table10: Structure of companies in fruit and vegetable processing, having HACCP/ISO certification (2009)



[2] Compiled from Agri-Livestock Consultant Ltd 2010: Fruit and Vegetable Sector Study for the IPARD programme, Republic of Serbia, Arcotrass Consortium 2006: Study on the State of Agriculture in Five Applicant Countries – Serbia Country Report; Privatisation Agency of the Republic of Serbia 2005: Impact Assessment of Privatisation in Serbia

Table 11: Selection of companies engaged in organic food processing

Company	WEB	Type of Produce
Atle, Belgrade	www.atle.rs	Frozen fruits
Biosil, Ugrinovci		Pasteurised vegetables
BMD, Arilje	www.bmd.co.rs	Mushrooms
Donimpex, Velika Plana		Frozen fruit
Foodland, Belgrade	www.foodland.rs	Fruit jams, marmalades
Marni, Krusevac	www.marni.co.rs	Mushrooms
ML fruit, Valjevo		Frozen fruit
Radoslovi, Nis		Fruit jams
Sirogojno company, Sirogojno	www.sirogojno-company.rs	Frozen fruit
Suncokret, Hajdukovo	www.suncokret.rs	Essential oils, butters, oil & oil plant products
Zdravo ORGANIC d.o.o., Selenca	www.zdravo.rs	Fruit jams, juices
Nectar, Novi Sad	www.nectar.rs	Fruit juices
Midi Organic, Blace		Frozen fruits
Zadrugar, Ljubovija	www.fruit.rs	Frozen berrylike fruits
ITN, Belgrade	www.itn.rs	Frozen fruits
Mondi Food Company, Kraljevo	www.mondiserbia.rs	Frozen fruits
Royal Eco Food, Belgrade	www.royalecofood.com	Spreads, ajvar
BelisTop, Kursumlija		Frozen fruits
Lion Foods Co.	www.lionfoods.co.rs	Frozen and dried fruits and vegetables
Zitohem, Zrenjanin		Fresh and dried fruits and vegetables
Igda, Belgrade	www.igda.rs	Wild mushrooms, fresh and frozen fruits
Frikos, Zemun		Frozen fruit
Ekorporacija, Backa Topola	www.ekorporacija.com	Cereals, soy, sunflower seeds
Agropartner, Lucani	www.agropartnerfruit.com	Frozen raspberries

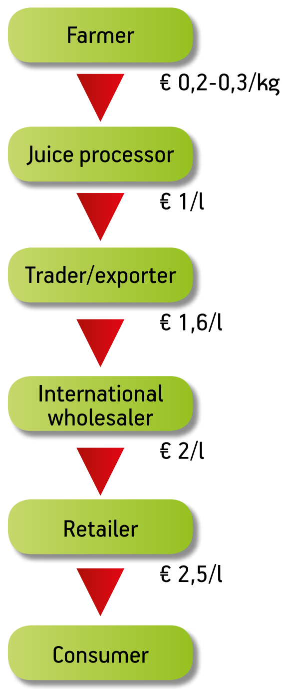
2.4 VALUE CHAINS AND VALUE GENERATION[3]

Generating value with agricultural products within the framework of small scale agriculture, and particularly with products destined for food consumption, is as difficult in Serbia as elsewhere in the world:

- Small farming finds it hard to take advantage of the economy of scale effects and thus its per rata production costs are usually high.
- Farmers are typically not well integrated into markets, do not have sufficient marketing power, and even if value is generated it occurs at higher levels of the value chain, but not on the primary level.
- Famers usually produce commodities, for most of which prices are formed on an international basis, with little allowance for local peculiarities.
- Processors are also squeezed between having to operate on a scale which causes high per unit costs and the demands of international marketing. For most products, margins thus generated at processor level are small, albeit higher than at the farmer level.
- The highest margins are typically achieved during various commercial transactions involved in agricultural processing. This is a result of traders' higher flexibility in handling raw materials, dealing with intermediates, and their better access to end users.
- Due to the high competitiveness of food markets, the structure of retailing, and the sensitivity of consumers, the margin and value generation in food production even at the distributor level is, in general, only modest.

In consequence the value addition of an agricultural raw material in the value chain rarely exceeds a factor of 5-10.

Table 12: Value chain in Serbia's organic agriculture – the case of apple juice



[3] Prepared according to information from personal conversation with Doehler GmbH, Germany, Rauch GmbH Austria, Solid Organic Link (wholesale trader for organic products), The Netherlands, EDEKA Verrtriebsgesellschaft Hamburg and by using data from the HS product data base of WTO

On the farm and small scale processing level, per rata value additions are hard to achieve, and a higher income and profit rate can be reached mostly by exploiting the economy of scale effects, which means expansion, cooperation, or combining forces in cooperative-like associations.

2.5 AGRICULTURAL R&D, EXTENSION AND STATUS OF KNOW-HOW IN THE INDUSTRY[4]

Currently more than 250 official advisors are employed in 34 Government-run agricultural extension centres and their tasks are defined by the MAFWM and the Provincial Secretariat of Agriculture, Water Management and Forestry. Parallel to these Government employed advisors, private companies also provide extension services to farmers who cultivate crops on their behalf on contract basis. Governmental extension services are provided free of charge, but the long-term financing of such a public service is unclear, since the magnitude of budget allocated to it fluctuates. It is influenced by a number of different factors, e.g. by the current regime of the IMF. The Extension Service Law and Rule Book for conduction of agricultural extension work, which was one of the results of the organisational change of the services in 2009, stipulates the extension's main tasks and objectives as:

- assisting farmers in improving farm income,
- training farmers to manage their farms better,
- helping farmers to respond to problems related to production, economics and organisation,
- integrating farming with the needs of rural and communal development, while conserving natural resources and protecting the environment,
- focusing and adapting production to market demands and the development of agribusinesses, and
- encouraging the formation of cooperatives and associations.

Elementary agricultural education begins at 25 public secondary agricultural schools. It continues at accredited higher agriculture-related education institutions, five of which top the list: the Faculty of Agriculture and Forestry of the Belgrade University, the Faculty of Agriculture at the University of Novi Sad, the Agronomic Faculty in Cacak, the Faculty for Bio-farming in Backa Topola and the Belgrade University Faculty of Veterinary Medicine. Agroeconomic-related curricula are taught at Belgrade, Subotica, Novi Sad and Nis universities.

[4] Compiled from: Cvijanovic 2009: Education, Scientific-Research and Consulting Work in Agriculture of Serbia. Applied Studies in Agribusiness and Commerce, Ministry of Science and Technological Development of RS; The World Bank 2006: Financial Support for Commercial Innovation in Serbia and Hornischer U. 2010/AFC/FIBL: Extension and Research Organic Agriculture in Serbia – Status Report

In order to improve the formal education system on organic agriculture in Serbia, the GGZ initiated an expert exchange program with University of Kassel with the objec-tive of training academic staff in Germany, specifically in organic farming, with the ultimate aim of facilitating the implementation of a bachelor program at the University of Novi Sad. Professors and other academic staff, representing different faculties and disciplines, were trained in practical and applied organic farming techniques at the University of Kassel during June/ July 2010, and in October 2010 the first bachelor program in organic agriculture was introduced at the University of Novi Sad. Such study options will eventually improve the skills and the know-how of extension and others staff involved in practical organic agriculture.

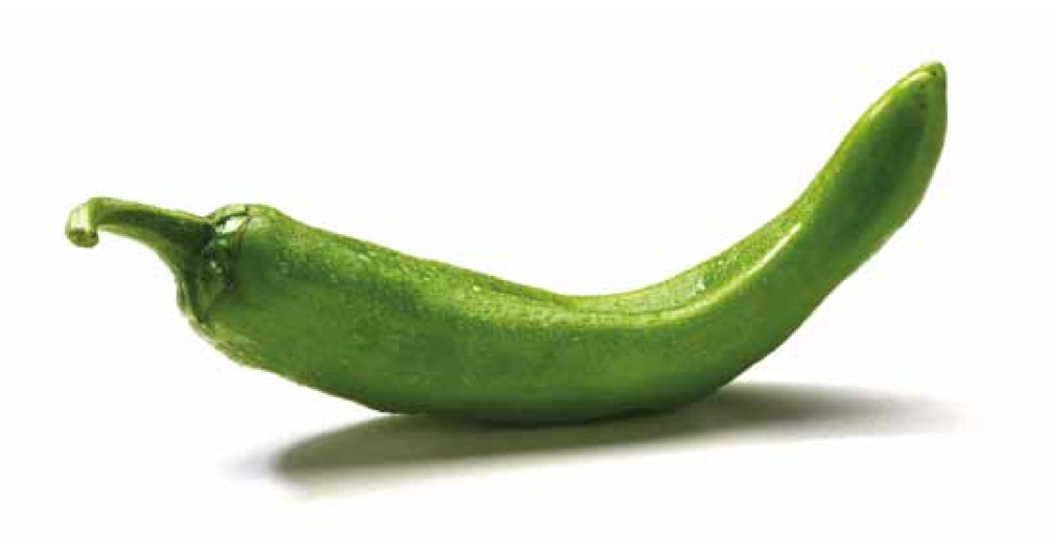


Table13: Prominent agriculture-related institutes and their main research focus

Institution	web-page
Institute of Field and Vegetable Crops, Novi Sad	www.nsseme.com
Institute Tamis	www.institut-tamis.co.rs
Institute for Food Technology FINS, Novi Sad	www.fins.uns.ac.rs
Maize Research Institute Zemun polje, Belgrade	www.mrizp.co.rs
Institute for Animal Husbandry, Zemun	www.istocar.bg.ac.yu
Fruit Research Institute, Cacak	www.institut-cacak.org
Institute for Vegetables and Crops, Smederevska Palanka	www.institut-palanka.co.rs
Institute of Agricultural Economics, Belgrade	www.iep.bg.ac.rs
Institute for Scientific Application in Agriculture, Belgrade	www.psss.rs
Institute for Plant Protection and Environment, Belgrade	http://www.izbis.com/
Institute of Pesticide and Environment Protection, Belgrade	http://www.pesting.org.rs/
Institute for Research of Medical Plants "Josif Pancic"	www.iplb.rs
Faculty of Agriculture, University of Belgrade	www.agrif.bg.ac.rs
Faculty of Agriculture, University of Novi Sad	www.polj.ns.ac.rs
Agronomic Faculty Cacak, University of Kragujevac	www.afc.kg.ac.rs
Faculty of Biofarming, Megatrend University	www.megatrend.edu.rs/fbio
Educational Faculty for Ecological Agriculture, Svilajnac	http://www.educons.edu.rs/studijskiprogramep.htm
Agricultural Extension Service of (for) Central Serbia	www.psss.rs
Agricultural Extension Service of Vojvodina	www.polj.savetodavstvo.vojvodina.gov.rs

3 GOVERNMENT POLICY FOR THE SECTOR

3.1 THE NATIONAL RURAL DEVELOPMENT PROGRAM

In 2010, in accord with its responsibility for rural and agricultural development, the Ministry of Agriculture, Forestry and Water Management (MAFWM) drafted The National Rural Development Program 2011 – 2013[5] , setting forth the objectives and visions of future agricultural and rural development, particularly within the envisaged WTO accession, and EU integration.

The program focuses on improving the competitiveness of farms and integrating primary production with processing and marketing, so that value accrues along the entire chain and increases competiveness, since with joining the WTO and the EU the pressure on small farms to compete internationally is expected to rise. The sectors of greatest concern, and thus the primary targets for competitiveness improvement measures, are milk and meat as well as fruits and vegetables. Acknowledging that there are many factors involved in improving agriculture and product sales, the forming of farmer cooperatives shall be encouraged and capacity for product acceptance, storage, packaging and sales on various agricultural markets improved. Parallel, a better connection to the processing industry shall offer producers the opportunity to channel produce to consumers according to demand in both domestic and foreign markets. Realizing that Serbian processing industry still has substantially to improve its efficiency in processing raw materials, manufacturing consumer products, and meeting global standards, a modernization of technology and management, an introduction and the respect of quality standards, and compliance with international rules and procedures of doing business are considered key aims to achieve.

Table 14: Goals and Objectives of the National Rural Development Program 2011 – 2013

- Development of dynamic and competitive agricultural farms, operating according to modern and environment-friendly standards.
- Development of a profitable processing industry, capable of manufacturing products of high demand for domestic and international markets.
- Development of rural areas attractive for rural populations to live and work in, and evolve their own identity.

5 MAFWM 2010: Draft National Rural Development Program 2011 - 2013

Table 15: National Institutions and Ministries relevant for agricultural policies and rural development

Institution / Ministry	Web-page
Ministry of Agriculture, Forestry and Water Management	www.minpolj.gov.rs
Ministry of Economy and Regional Development	www.merr.gov.rs
Ministry of Finance	www.mfin.gov.rs
Ministry of Environment and Spatial Planning	www.ekoplan.gov.rs
Ministry of Science and Technological Development	www.nauka.gov.rs
Ministry for National Investment Plan	www.mnip.gov.rs
Agency for Development of Small and Medium-sized Companies and Businesses	www.sme.gov.rs
Serbia Investment and Export Promotion Agency	www.siepa.gov.rs
Vojvodina Investment Promotion	www.vip.org.rs

3.2 THE NATIONAL ACTION PLAN FOR ORGANIC FARMING

In May 2010, a new Law on Organic Agriculture was passed by the Parliament. In compliance with EU regulations on organic production (EC 834/07 and 889/08), this law provides for a competent, government-affiliated authority in the field, as well as for an accreditation of certification bodies by the Accreditation Board of Serbia. The formation of this body is scheduled to start in January 2011, when the law becomes effective[6] . It fulfils one of the objectives defined by the National Action Plan for Organic Farming , drafted in 2009. This document can be described as the Serbian version of the EC's Action Plan for Organic Food and Farming[7] as its overall objective envisages an increase of the total area of land in the process of conversion or cultivated as certified organic at 50.000 ha until 2014. To achieve such an objective, 12 steps have been formulated as interim goals.

Table 16: Objectives of the National Action Plan for Organic Farming, 2009

1. Support for organic farming is an integral part of the national agricultural and rural development policy.
2. Serbia has established a law on organic farming in accordance with EU requirements.
3. Serbia has established an operational and effective conformity assessment and control system on organic farming in accordance with EU requirements.
4. National association for organic farming is largely operational.
5. Accessible and demand-oriented extension services provide qualified up-to-date support to organic farmers.
6. Specific applied research activities for organic agriculture have been established.
7. Organic agriculture will be included as a subject in formal education.
8. An organic farming department in the rural development section within the MAFWM will serve as a cluster for producers, processors, traders and cooperatives.
9. The domestic market shall be further developed.
10. Export promotion will be improved – Serbian traders already being well established in export markets.
11. Subsidised credit lines for farmers of organic agriculture will be set up.
12. The implementation of the National Action Plan and its continuous adjustment shall be monitored.

[6] MAFWM at www.minpolj.gov.rs and Stefanovic E. /GIZ Serbia: 2010: personal communication
[7] MAFWM 2009: National Action Plan for the Development of Organic Farming in Serbia

While the overall objective is ambitious, Serbia will make use of the opportunities arising from the availability of the forthcoming IPARD funds, to aid participants in the organic food chain and to integrate the Serbian production and processing system into global settings, so that a profitable and significant agricultural subsector evolves within the next years.

3.3 FINANCIAL SUPPORT FOR THE ORGANIC SECTOR

For some time now, state budget expenses are increasing, the allocation to the agricultural sector in general also growing until 2007. In 2000, €95 million were earmarked for this sector, in 2005 €230 million, but in the years following the economic crisis, less than €200 million were budgeted.

Financial support to the organic sector started in 2005/06. In that year, the MAFWM for the first time planned incentives for organic production in the form of reimbursements for certification costs. A separate law concerning subsidies for organic production and organic products earmarked an amount of €19,000. In 2007 and 2008 funds were planned to cover the costs of the period of conversion into organic. In 2008 incentives for organic agriculture and organic cattle production in the conversion period were set aside, and €11,000 disbursed. In 2009 the MAFWM authorized 27 operators' subsidies totalling €46,000. Until August 2010 the MAFWM received 82 applications for subsidies, its total budget being €100,000.

4 MARKET AND TRADE

4.1 THE LOCAL MARKET FOR ORGANIC FOOD

In the past period, Serbia's GDP increased steadily, its per capita income rising from €2,300 in 1999 to approx. €5,000 in 2009[8]

In the same period, however, food prices increased even more dramatically. While GDP per capita doubled within ten years, food prices rose by a factor of nine.[9]

Thus, despite the growth of disposable income, Serbian consumers have to spend an increasing part of their budget to purchase alimentary products. This development is reflected in retail spending for food. Overall, the food market in 2008 was valued at €6.3 billion, translating into per capita spending of some €630. In 2004, only €370 per capita was spent for purchasing food. Citizens of Belgrade have to spend even more than this, and people living in the countryside, e.g. in Southern Serbia, not quite as much.[10]

Table 17: Development of Serbian GDP per Capita (1999 – 2009)

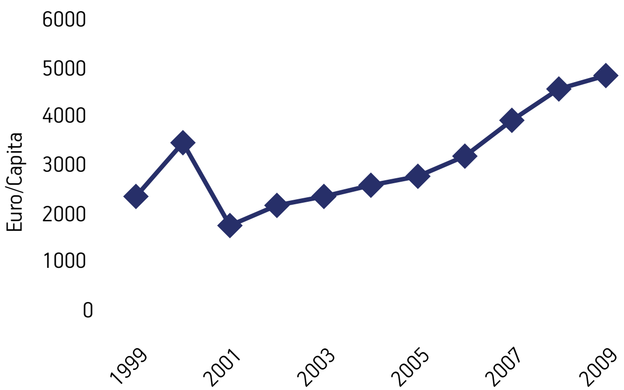
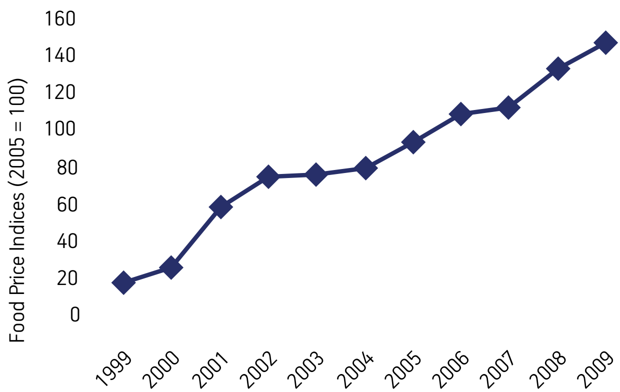


Table 18: Development of food price indices in Serbia (1999 – 2009)



[8] The Economist Intelligence Unit 2010: Data Tables for Serbia
[9] Ministry of Finance of the Republic of Serbia 2010: Statistical Data at www.webrzs.stat.gov.rs

In contrast to other countries of South-Western Balkans, the concentration of retail outlets has not yet been completed and more than 70% of all food products are still sold through small grocery shops, estimated to number some 30,000 scattered throughout the country. Tempo, a cash and carry market, was the first to open a retail chain in 2004: Intermarché/Interex, Mercator, Delta, Metro and Super Vero followed. The appearance of such supermarkets triggered a rise in consumer food prices, at the same time lowering producer prices .[11]

Changing eating habits even if prices of basic products increase, is difficult, usually making price and income elasticity values for staple foods only moderately flexible.

This, however, is different for organic produce. As eating organic is not essential, consumers all around the world, especially in countries with a constrained budget, react unpredictably to price increases and decreasing purchasing power. With increasing income, the consumption of virtually all products rises, but when product prices increase, food consumption adjusts by substitution: dairy, cereals, and meat are substituted by vegetables and root crops, and organic products by conventional ones. Although the disposable income of the typical Serbian consumer increased over the past ten years, that was overcompensated by an even stronger rise in food

Table 19: Typical price and income elasticity values for conventional and organic food products

Product	Price elasticity		Income elasticity	
	Conventional	Organic	Conventional	Organic
Potatoes	1,8	-1,1	1,7	2,2
Tomatoes	0,8	-0,1	0,6	0,6
Onions	0,5	0,1	1,0	1,5
Lettuce	0,4	0	0,4	0,4
Beans	-0,6	-2,2	1,1	1,1
Corn	-0,1	-1,6	1,2	0,8
Milk	-1,1	-1,4	1,0	0,5
Dairy	-1,1	-2,2	n.a.	n.a.
Cereals	-1,1	-1,9	0,7	0,2
Meat	-1,0	-2,3	n.a.	n.a.

[10] Irish Food Board 2008: Serbia Market Overview. PowerPoint at the Bord Bia Conference, Frankfurt November 27, 2008

[11] Irish Food Board 2008: Serbia Market Overview. PowerPoint at the Bord Bia Conference, Frankfurt November 27, 2008

prices, limiting the growth of consumption of organic produce.
There is the impression that many certified organic products are imported, only the fruit, vegetables and cereals being of Serbian origin. There are no organically certified animal products on the market. The market is dominated by imported baby food products. Serbian baby food is still not certified. Beside food, there is constant growth of certified cosmetic products, whereas organic textile is difficult to find.

The retail sector for organic food in Serbia is still underdeveloped. There are only a few outlets in Belgrade and Novi Sad. Organic food can be found on not too many green markets, specialized health food stores, and in a few super-market chains. Although organic products have found their way to supermarket chains, not much has been done to promote them and indicate their availability. It seems that consumers are left to discover organic products on their own, and to compare their advantages in regard to the conventional ones. In Serbian supermarkets, there is a growing number of health counters wherein products claiming health advantages are intermixed with organic products, without any explanation, however, what organic really means.

GGZ field research and interviews with different stakeholders from this sector, as well as with consumers, indicates that the average Serbian consumer relates the term organic to health. Therefore, promotion and public awareness campaigns should focus on this aspect. Value can be added to organic products by insisting on their naturalness and environmental protection. For further development of the local organic market, strong and intensive campaign with clear communication strategy, directed towards defined target consumer groups, are definitely needed.

Because of all this, and considering the limited volume and value of organic products, and the moderate prospects for domestic growth in the future, their placement on the international market assumes an even higher priority.

Table 20: Selection of Serbian traders, importers, distributers and supermarket chains engaged in organic food (2010)

Type of Outlet	Company	Web – page
Traders/ distributors/ green markets		
	Biospajz	www.biospajz.rs
	Beyond	www.beyondhealthfood.com
	Hema-Kheya-Neye	www.hemakheyaneye.com
	Lucar	www.lucardoo.co.rs
	Natura	www.natura.rs
	Moj Salas, Novi Sad	www.zelenamreza.org
	Bio & Organic	www.biorganic.rs
	Fund Organic Serbia	www.organskasrbija.org.rs
	Albox	www.albox.rs
	Pretti-organica	www.pretti-organica.rs
Green Market Places	Kalenic Green Market, Belgrade, Fish Market Novi Sad, Liman Market Novi Sad	
Supermarket chains	Univerexport	www.univerexport.rs
	Mercator	www.mercator.rs
	Tempo	www.tempocentar.com
	Metro	www.metro.rs
	Maxi	www.maxi.rs
	Idea	www.idea.rs
	DM Drogerie Market	www.dm-drogeriemarkt.rs

4.2 THE INTERNATIONAL MARKET RELEVANT FOR ORGANIC PRODUCE FROM SERBIA

4.2.1 TRENDS AND FRAMEWORK CONDITIONS

Globally, organic production has been developing for many years and in 2008, 35 million ha of arable land were organically certified compared to 29 million ha in 2005. In EU farmland under organic cultivation increased in the same period from 6 million ha to over 8 million ha, equivalent to a growth of 8-10% per year[12]. Such expanding acreage is a response to the growing demand for organically produced food products with current retail sales value of €18 billion, as opposed to €11 billion in 2003. As consumption of organic food products in the EU grew faster than production, imports from third countries have increased unproportionally. Definite figures on imports from non-EU countries do not exist, since the EU's Harmonised System Codes of traded products does not distinguish between the conventional and organic. However, increasing imports over the past ten years may be gauged by the number of registered importers of organic produce into the EU, which in 2009[13] increased from less than 500 to well above 3,000.

Within Europe, the largest consumers of organic food are Germany, France, Italy and the UK. Country reviews such as those regularly published by FiBL consistently confirm the following trends :

- In Germany, the retail value of organic products has been fluctuating for years, with an annual growth of some 10%, reaching the value of over €4 billion in 2009. Commodities with the highest rate of growth in the past years were milk and dairy products, vegetables and fruits. Market growth in Germany in the last five years was led by supermarket chains. Specialised organic food supermarkets also exist, but in terms of overall turnover they have fallen behind general outlets.
- In Italy, retail sales of organic foods are exceeding €3 billion. Organic food sections in supermarkets were introduced just three years ago, to surpass the sales in grocery shops by 2009.
- In UK and France each, retail sales of organic foods are exceeding €3 billion, with multiple retailers and chains driving market development forward once again.
- Austria, the Netherlands, Belgium, Spain and Denmark, all show retail values of around €0,5 billion. It seems that these countries have reached a plateau, or at least a temporary maturation, of the sales of organic products. In the

[12] Compiled from EC 2005: Organic farming in the European Union – Facts and figures; Richter T. and Padel S. 2008: The European market for organic food, FIBL Publication and FIBL statistical data base at www.fibl.org

[13] Organic Food Link, Azra Secerbegovic 2010: Personal communication

[14] Richter T. and Padel S. 2008: The European market for organic food, FIBL Publication; Hamm U. 2008: The German organic market – an overview; lecture at the University of Kassel; Danish Ministry of Food, Agriculture and Fisheries 2008: Organic consumption and production in Denmark; Hinteregger E. 2006: Organic food in Austria; background paper of the Sustainable Europe Research Institute; New Zealand Trade and Enterprise 2008: Market Profile for Organic Foods in the German Market

past years, growth fluctuated between -3 and +5%.
- Despite Switzerland's limited population, turnover of organic food is approaching €1 billion. On a per capita basis, this figure is the highest in all Europe.
- Organic food markets in Central and Eastern European EU countries are still in the emerging stage. Sales values in Poland are about €50 million, in the Czech Republic some €20 million, and in Romania and Bulgaria they oscillate between €10-15 million.

These trends suggest that target markets for organic products from Serbia are primarily those EU countries that do not yet show signs of saturation, and are also large enough to absorb additional produce. These are Italy, France, UK, and Germany in particular.

4.2.2 PRODUCT OPPORTUNITIES IN GERMANY AND IN OTHER EU COUNTRIES

After spending many years in the "green" ecological niche, organic food and beverages entered mainstream markets and became part of the global megatrend in lifestyle, health, and sustainability. For this growing consumer group, organic food is a way to provide healthy food for themselves and their families, to support smaller food manufacturers and farmers, and to protect the environment. Increasingly the aspect of regionality is added to the concept, with the result that the ideal product is not only organic but also seasonal and produced locally or at least regionally. However, people adhering to the prevalent lifestyle are not likely to sacrifice their pleasure and enjoyment, so organic products must be available to the same extent, and in similar convenient packages and outlets, as conventional food. While the trend to organic food is strong, the level of its market penetration in all European countries is still relatively low. It grew in the past not only as a factor of increasing demand, but also of its availability. Market penetration for eggs, baby foods, potatoes, fresh milk and cereals is high not only because of exceptional demand, but also because the industry was able to provide adequate organic supplies at tolerable prices.

Considering the expectations of consumers of organic food and current market penetration, it is evident that major supply gaps exist. These refer to organic meat, organic fish, fruits, to some extent to vegetables and even to milk and cereals.[15]

Generally, direct imports of meat to the EU are difficult since the market is strictly regulated, and even under the relaxed trade regimes foreseen by the SAA, meat will not be freed from import restrictions. Producing organic meat and dairy products is usually a question of organic feeding, which depends on organically produced feed cereals and oil cakes. Within the vegetable sector, supply of organic carrots and zucchini has already reached a penetration rate exceeding 20%, but that of onions and of

Table 21: Market penetration of organic food products in some European countries (% of products value sold, 2008)

Product Segment	Germany	Austria	Denmark
Baby food	64	n.a.	70
Eggs	10	25	7
Fish	0.1	<< 1	n.a
Fresh milk	11	11-12	38
Fruits	3-8	3-5	20
Meat	0.5-3	1,5-3	9
Muesli	15	20	13
Potatoes	7	11-15	n.a.
Tropical fruits	14-24	n.a.	n.a.
Vegetable drinks	25-30	20-30	n.a.
Vegetables	5-20	4-5	20

paprika is still below 10%. In the fruits sector, organic table grapes already occupy substantially more than 10% of the market, while apples and berries have yet to reach 5%.

By signing the SAA, Serbia entered the process of rapidly converging to the EU. One of the elements of adjustment is the harmonisation of Serbia's agricultural policy with the CAP. CAP regulates the markets for strategically important agricultural products in the EU such as sugar, oil seeds, cereals, meat, milk, wine, food oils, and to some extent fruits and vegetables. All these products are not covered by specific EU import restrictions, and promotion of them would be in full compliance with CAP.

Increasing price pressure, resulting from Serbia's full integration into EU markets, might impact its small-scale agriculture, since it appears unready to produce fruits, vegetables or soybeans with efficiency typical of Northern Germany, Austria, Italy, or other EU countries. In order to buffer possible negative effects, the EU promotes investments for raising farming efficiency, particularly for forming farmer associations and other types of groupings able to exploit the economy of scale effects.

At the processing level, further reduction of production costs and improved efficiency might be necessary in the organic segment as well. Apple juice, jams, marmalades, mueslis, cereal products of-

[15] Hamm U. 2008: The German organic market – an overview; lecture at the University of Kassel

fered in European supermarkets, are only marginally more expensive than their conventional counterparts. Improving effi-ciency throughout the entire value chain of organic food production requires, in the case of Serbia, major investment and better education and training which, in addition to technical subjects, have to include farm and production economics, management, marketing and presentation. It goes without saying that full respect of European food safety and hygiene requirements, as well as all the EU's packaging and transport regulation is obligatory, any disrespect of which will severely damage the marketing image of Serbian produce.

Table 22: Organic products from Serbia with considerable market potential in the EU

Category	Product	Application	Comment
Oil Seeds	Soybeans*	Oil for foods; cake for feeding	Soybeans offer many options for processing, e.g. hydrolysates, milk, emulsifiers, intermediates for the cosmetic industry, etc.
Cereals	Wheat/ corn/ barley	Feeding	Can be offered as whole grain or as flour. Organic starch, a strategic intermediate for many foods, practically does not exist in the EU
Root crops	Potatoes*	Food	There is no organic potato starch, and hardly any processed organic potatoes (e.g. French fries)
Vegetables	Onions, beans, garlic, paprika, etc.	Fresh market	Detailing of markets and market dynamics required
Fruits	Raspberries, apples, etc	Fresh and processing market	Detailing of markets and market dynamics required; fruits such as apples might be processed. Apple pectin from organic sources or organic anthocyan (food colour) from strawberries does not exist at all!

*as listed, both products have great market and competition potential. However, rapidly-spreading transgenic soy (herbicide-tolerant RR soy), though officially banned, and phyto-sanitary problems which may occur in potato export, plague Serbian farmers as they do other farmers elsewhere in the world.

5 LEVEL OF ATTAINMENT OF RELEVANT EU STANDARDS

5.1 THE EUROPEAN FRAMEWORK

Following the 2007 decision of the European Council of Ministers, Serbia was offered the perspective of joining the EU. The EC also offered to assist Serbia in the preparation process by installing the Instrument for Pre-Accession (IPA) as well as IPA I and IPA II programs under which all pre-candidate countries are operating. Within that framework, Serbia receives funds for creating suitable organizational structures within its regions and ministries, so that measures fore seen under the IPA components III-V can be absorbed and implemented efficiently.

In June 2010, the EC announced the ratification of the Stabilization and Association Agree ment with Serbia. With the signing of the SAA, Serbia will be come eligible for a number of privileges related to economic and trade relations, and will pass one of the hurdles for entering WTO. The economic core element of the SAA is the gradual reduction of tariff and non-tariff trade barriers with the EU, ulti mately leading to mutual opening of the markets for produce. The successful imple mentation of the SAA is also one of the preconditions for passing from precandidate to candidate status which will grant Serbia access to IPA III-V, and particularly to IPARD funds. IPARD funds will be released to support a candidate country in modernizing its agricultural system, so that it can better integrate into the EU's CAP, as well as to efficiently develop its rural areas so they can attract people to live and to work there.[16]

The EC assigns an important role to organic agriculture in furthering the development of rural areas.

According to the FAO/WHO Codex Alimentarius guidelines for organic food which are the fundament for the EU's organic farming strategy, organic agriculture is a holistic production management system which promotes and enhances agro-ecosystem health, including biodiversity, biological cycles and soil biological activity. It emphasizes the use of management practices in preference to the use of off-farm inputs, taking into account that regional conditions require locally adapted systems. This is accomplished by using where possible agronomic, biologi cal and mechanical methods as opposed to using synthetic materials to fulfil any specific function within the system.[17]

By adopting Council Regulation No 2092/91 and 1804/1999, the EU was one of the first global institutions to formulate a policy on organic farming. With this regulation the Council created a community framework detailing the requirements for agricultural products and foodstuffs, referring to production methods used in organic farming and the food industry. The Council Regulations recognize organic farming in their

[16] EC 2010: Serbia – EU-Serbia relationship at http://ec.europe.eu/enlargement/potential-candiates/serbia/relation

strategy on environmental integration and sustainable development within the Common Agricultural Policy. The integral principle is that farmers providing services to the environ ment beyond the reference level of Good Agricultural Practices should be ade quately remunerated. Certain methods of agricultural production e.g. organic farming, integrated production, traditional low-input farming, and typical local production provide a combination of positive environmental, social and economic effects.

In 2001, the EC presented the European Union Strategy for Sustain able Development which made CAP change its stress upon quantity to promoting quality, with subsidy and supporting schemes being adjusted accordingly.[18]

Organic farmers are currently entitled to financial support from the first and the second pillar of the CAP through direct payments and price support measures. More importantly, organic farming is fully integrated into the rural development policy framework, a part of the second pillar of CAP.

Since Serbia is not yet a member of the EU, it is not eligible for payment and sub-sidy schemes that form the pillars of CAP. However, Serbia is in the process of EU convergence, with the IPA process already in motion. IPARD[19] can be considered as the pre cursor to the implementation of the second pillar of CAP, aiming as it does to improve working and living con ditions in rural areas of a candidate country, and to bring them to the level of the EU. Shaping the IPARD process so that it not only complies with CAP in general, but to the chapters relevant for pro moting organic agriculture in particular, will thus support not only the development of the organic sector in Serbia, but also further the political objectives of the EU.




[17] EC 2004: European Action Plan for Organic Food and Farming; Commission Staff Working Document
[18] EC 2003: CAP reform – a long term perspective for sustainable agriculture. In: www.ec.europa.eu/agriculture/capreform; EC 2009: Health check of the CAP. In: www.ec.europa.eu/agriculture/healthcheck; EC 2010: Financial programming and budget. In: www.ec.europa.eu/budget/budget_detail.
19 GGZ-IS 2010: Project Implementation and Technical Assistance Facility to Reinforce Administrative Capacity in Serbia at www.ipa2007ppf.org

5.2 THE LEGAL FRAMEWORK FOR ORGANIC FARMING IN SERBIA

Organic production in the Republic of Serbia is regulated by the MAFWM. The first Law on Organic Agriculture on Serbian territory, during the times of the former Yugoslavia dates back to 2001. In the Republic of Serbia, organic production is regulated by the Law on Organic Production and Organic Products ("Official Gazette of RS", No. 62/2006), enacted in July 2006. Laws and subsequent legal acts were prepared according to Council Regulation (EEC) No. 2092/91 of June 1991, on organic production of agricultural products, referring to agricultural products and foodstuffs (OJ L 198, 22.7.1991). By the end of 2006, a national logo was adopted to mark certified products.

In May 2010, a new Law on Organic Agriculture passed Parliament. This law is in compliance with EU regulations on organic production (EC 834/07 and 889/08). Currently, two rulebooks for this law are in preparation: one for production and the other for international trade of organic products. The law is to become effective on 1st of January 2011.

Table 23: Certification bodies, authorised at the MAFWM, 2010

Certification Body's Name	Web-page
SGS-Beograd	www.sgs.com
Evrocert	www.evrocert.rs
Organic Control System	www.organica.rs
Ecocert Balkan Beograd	www.ecocert.com
Bioagricert	www.bioagricert.org
Suolo e salute Balkan	www.new.suoloesalute.it
Jugoinspekt Beograd	www.jugoinspekt.com
Pancert	www.pancertns.com

6 PAST TRENDS AND FUTURE DEVELOPMENTS IN TERMS OF INVESTMENT[20]

6.1 MARKET POTENTIAL FOR SERBIAN MANUFACTURERS

On May 5, 2010 the Serbian Parliament passed a set of new laws and amendments related to agriculture. The main objective of this move was to amend the overall environment for investments into the sector. The new laws include inter alia the laws on organic agriculture, on forests, waters, beer, registering crop varieties, veterinary services, and agricultural extension and expert services. These laws actually responded to various studies revealing that investments in the food and agribusiness industry have one of the highest multiplication effects, similar to investments in tourism, and far ahead of investments in, for example, the chemical or furniture industry.

Potential domestic investors from the sector comprise farmers, farming cooperatives, operators of refrigeration facilities, processing companies, and traders.

- Although the average farm in Serbia is small, does not have high capital reserves, and is not operating according to modern standards, investments in organic agriculture may help it along in its efforts to modernize, in accord with the general requirements deemed necessary for Serbia's alignment with the EU's CAP.
- Farming cooperatives are large-scale operations with some capital reserves and the possibility for even larger investments. Such cooperatives can be considered as joint-venture partners for foreign investments in cereal, oil seed, or large-scale fruit and berry markets.
- There are currently 180 major registered refrigeration companies in the business of preserving fruits and vegetables in Serbia. Their total installed capacity is in the range of 600,000 tons. Additionally, there are up to 30 smaller such firms, with an aggregate capacity of 200 tons.
- 80 companies have facilities for drying and warm processing of fruits and vegetables, with a capacity of 500 – 600,000 tons, and
- 30-40 companies can process fruits and vegetables into preserves and juices according to international standards, while the total number of fruit and vegetable processors is estimated to be in the range of 150 – 200.

The Business Registry Agency and the National Bank of Serbia record that the EBIT of registered agribusiness firms operating in the fruit and vegetable

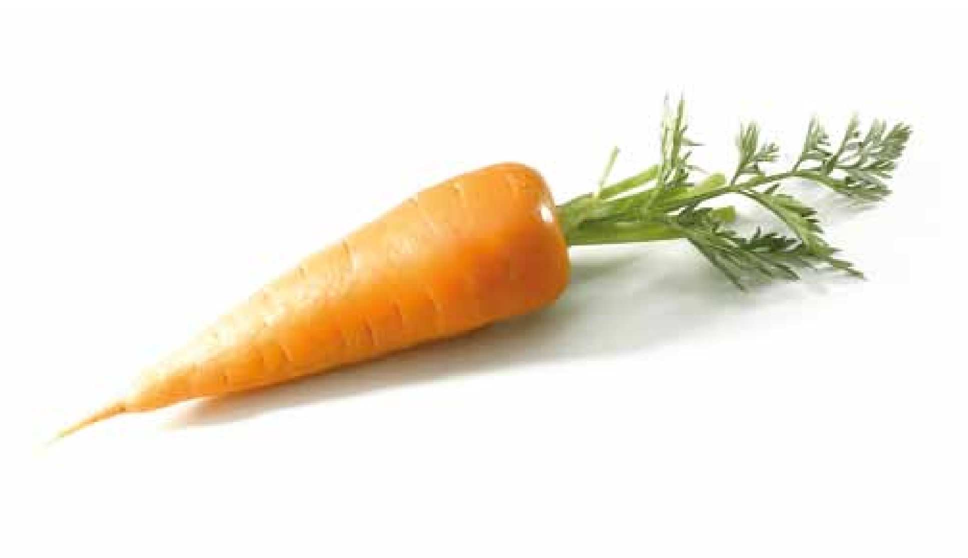
[20] Compiled from Republic of Serbia – the Prime Minister's Office 2010: Invest in Serbia; Vasijevic D. and Govoruic S. 2009: Local Investment Multipliers in Serbia; Quarterly Monitor 19; IFC 2009: Serbia Country Profile; US Embassy to Serbia 2010: Serbia Investment Climate; COFACE Austria 2009: Country Report for Investors and Exporters – Serbia; Privatisation Agency of the Republic of Serbia 2005: Impact assessment of privatisation in Serbia; Maslac T. 2010: Serbia adopts new set of agriculture laws. USDA Gain report RB1005; Agri-Livestock Consultant Ltd 2010: Fruit and Vegetable Sector Study for the IPARD programme, Republic of Serbia

sector (7,100) in 2008 was around €430 million. Considering taxation and the servicing of possible loans and credits, net profits which could potentially be used for investment might have amounted to a maximum of €10-20,000 per firm. While in some cases net revenues might have been considerably higher, it appears obvious that the investment power of the industry is limited.

Nevertheless, the potential for domestic investors exists, and in contrast to other segments of the agrifood industry, one of major advantages of investing in organic agriculture is that even with a small investment sizeable returns can be expected. This applies particularly to fresh vegetables and berries.

Attracting domestic capital to the organic sector requires a compelling definition of sales opportunities. As the domestic market for organic products is small, linking of potential investors to international markets should be a major goal in creating the appropriate confidence of investors. Doing business in EU with European clients requires more than just offering products; abiding by contracts and accepted business practices is a conditio sine qua non, which translates into the following sugges tions for stimulating domestic investments:

- Improvement of the political and economic framework in the country;
- Intensification of efforts to join the EU, EU membership being a major stabilisation fac tor,
- Facilitation of access to finances, and/or operation of special credit lines,
- Familiarization of potential investors with European business conventions,
- Formation of an information and service centre authorized to facilitate business and to liaise be tween Serbian and European business partners.



6.2 MARKET POTENTIAL FOR EUROPEAN INVESTORS

Owing to the limited capacity of domestic investors, the Serbian Government has been fostering and promoting foreign investment for years. The Prime Minister's Office highlights a number of elements that should attract FDIs:

- The fact that Serbia's political priorities are EU integration, the provision of energy, the expansion of automotive, electronics and IT industries, and a proactive trade policy;
- The signing of the SAA with the EU, liberalization of the visa system, the WTO membership expected in 2011;
- Increasing exports, revamped GDP growth, and a secured national budget;
- Serbia's confirmed potential as export pivot to the EU, CEFTA countries, Russia, Belarus and Turkey;
- Increasing number of economic free zones granting exemption for various taxes, providing efficient administration, local subsidies for investments, and a set of other services;
- Low tax regimes with 12% on salaries and 10% on corporate income.

The key requirements for doing business in Serbia have consistently been rated positive. Some areas of concern, however, remain (e.g. contract enforcement, intellectual property rights) and should be ameliorated.

Nevertheless, investment opportunities for foreign companies exist and are increasingly being taken advantage of, but the whole sector is still in its early development stage. This provides great opportunities for European, and particularly German companies, with which Serbian economy has traditionally maintained workable business relations. Market potential for European investors in the agricultural, and particularly the organic agricultural sector, as far as demand in Europe and especially in Germany is concerned, is mostly in sourcing products, raw materials, and processed goods. Berries, selected vegetables, soy and cereal products might therefore prove to be of highest interest.

As in the case of local investors, European investors also decide which country to invest in on the following two criteria: quick payback and high economic return. Efficiency of operation is the decisive factor for meeting investment criteria. Consequently, stable conditions for foreign (Ger man) investments in the agro-industry should meet the following requirements:

- Reliable provision of larger quantities of products of defined quality by, for example, combination of individual small-scale operations with larger outlets, or sales/marketing coopera tives;
- Upgrading of technical skills and know-how at all levels of value chains;
- Upgrading of economic and management skills at all levels of the value chain;
- Integration of agriculture and the agro-processing industry with political investment priorities;
- Full exploitation of financial opportunities provided by the IPA pro cess, and particularly by IPARD funds;

- The familiarization of potential European investors with the Serbian agro-industrial sector, and facilitated contacting through specialized service and information outlets;
- Constant demonstration by living example that joint ventures with Serbian partners are highly reliable and profitable.

6.3 IDENTIFICATION OF THE SECTOR'S POTENTIALS AND NEEDS

The SWOT analysis of the organic sector presented in this brochure leads to the conclusion that a number of options, possibilities and strengths of this sector in Serbia stand in contrast with many challenges that have to be overcome, so that its identified potentials might fully be utilized.

Table 24: SWOT of the organic sector in Serbia

Strengths	Weaknesses
• National Action Plan exists • Legal framework improving • Formation of an accreditation body earmarked • Awareness of need for quality high in many industries • Large areas of agricultural land not polluted and not intensively culti vated, making conversion faster and easier • Positive opinion on organic farming among academia, many far mers, and consumers • National association exists • Substantial interest of international donors • Road to EU accession • Systematic education and training starting with BSc and MSc study in Novi Sad • International cooperation of local academia with University of Kassel started • Close relations already existing with organic markets in Germany, Austria, Switzerland, and The Netherlands	• Sector and domestic market small • International (EU) markets insufficiently exploited • Insufficient cooperation of actors in value chain • Education in both general and organic agriculture insufficient • Makeup of farms (many small farms, not cooperating) inappropriate • Attention/interest on institutional level limited • Sector at all levels severely underfinanced, only marginal subsidies ear marked • Financial engagement of international donors marginal • Financial scheme and technical support for creating and running an accreditation body not yet clarified • Certification systems still non-transparent • Data base on organic agriculture processing and marketing weak and not transparent
Potentials	**Threats**
• Evolution into Europe's prime supplier of organic berries and some other fruits and products • Evolution into Europe's prime supplier of organic soybean pro ducts • Evolution into Europe's prime supplier of organic food/feed ingredi ents such as starches, brans, flakes, protein cakes, gluten, hydro lysates, pectin, colours, etc. • Modernization of agricultural system by organic segment as the driving force • Easier integration into EU's CAP through organic farming • Perspective of becoming major element in IPARD project approval process, and thus in restructuring Serbia's agriculture and rural areas in general • Possibility of developing into a major pillar of Serbia's agricultural GDP	• Farms cannot develop to the level of international competiveness • Sector fails to be acknowledged at the political level as the driving force in agricultural development • Politics does not sufficiently recognize organic farming in restructuring the agricultural sector in the process of EU accession • Sector cannot build up international relations and cannot penetrate suit able markets • Sector is marginalized by developments in other countries, offering similar range of products • Actors do not respect accepted EU business systems and are excluded from major international trading • Domestic and international investments cannot be mobilized

7 CHALLENGES AND WAY FORWARD

This review of the organic agricultural sector in Serbia identifies some emerging trends and shows that many actors in the industry are trying hard to advance on the road defined in the National Action Plan for the Development of Organic Farming in Serbia. While fundamental ecoclimatic factors indicate a vast potential for the development of organic farming, a number of major hurdles and problems still lay ahead and need to be overcome. One major impediment is capital constraint at all levels of the value chain, another poor organization of actors along this chain, and third low efficiency of production, processing, and marketing.

On the other hand, Serbia is on its way to the EU and to implementing IPA. IPA V (IPARD) will offer investors the opportunity to have more than 60% of their investment financed through IPARD funds. Such co-financing scheme renders investments into the Serbian agriculture highly attractive. Foreign companies with a locally registered firm can also profit from such a scheme.

Investments into Serbia are also attractive because of low wages and low taxes. While low corporate taxes might continue in the future, it is unlikely that low wages can be maintained for long. It is hardly tolerable that minimum wages in Serbia are lower than in China, while costs of living are several times higher. Costs of production in Serbia will presumably quickly align with those in neighbouring countries.

Because of this, opportunities have to be sought in specific product sectors. Wine, sugar, milk and meat sectors are expected to remain areas of debate with EU. But no major problems are seen for fruits and vegetables, oil seeds, cereals, and tubers. Apart from fresh and processed fruits and vegetables in many forms, a huge potential for large-scale investments is to be found in soybeans. There is not a sin-gle country in Europe or the Mediterranean that produces and processes soybeans to such a large extent. And GMO-free soybeans cannot even be found. However, it is exactly these GMO-free soybeans that present highest market potential. Building up a complete GMO-free soybean product line would comprise the manufacture of soybeans, of soy oil, soy cake, lecithin, soy milk, soy protein isolates and hydrolysates, and even of sterols and tocopherols. But, it should also be noted that the pressure to cultivate GM soybeans is high, posing a constant challenge to the organic farmers growing GMO-free soybeans, in their efforts to keep their fields uncontaminated by GM beans.

Serbia has undertaken a major step in drawing up a National Rural Development Program. This document outlines in great detail the current status of the agricultural sector, concluding that substantial efforts throughout entire value chains and across all subsectors are needed to improve efficiency and prepare farmers and processors for EU markets. The NRDP recommends channelling most future investments to the meat, dairy and, to an extent, the wine sector.

These, at the same time, are sectors with the most stringent market regulations in the EU. The NRDP also acknowledges the need for investments in the fruit and vegetable sectors, but does not sufficiently recognize the potential for development in the cereal and the oil seed sectors.

Both oilseeds and cereals, however, are increasingly in short supply, their prices are climbing continuously, both have a much more favourable CO2 balance than meat or dairy products, allowing the buildup of a diversified agro-processing industry.

In the past years, Germany and a number of other donors invested sizeable funds in the Serbian agriculture and food sector. In the context of EU accession, the agricultural sector is allocated priority because of its extremely important role in Serbian economy, and because agriculture is the largest regulated segment of the European economy which absorbs most of the EU's budget. A harmonic integration of Serbia's agricultural sector into CAP is crucial for the success of Serbia's accession, and of highest importance to the European Commission. Germany as a bilateral partner of Serbia and, in the context of its international obligations, intends to continue supporting Serbia in its efforts to modernize its agriculture, particularly its organic sector. Such assistance might be implemented on the following levels:

- The institutional level, by intensifying policy advisory work and upgrading absorption and steering capacity for agro-political concepts and financing instruments, especially within the frame of IPA;
- The education level, by strengthening university partnerships, increasing the exchange of academia, and by facilitating the integration of Serbian R&D initiatives into international settings;
- The processor level, by stronger promotion of modern technologies, processing and marketing systems. This might be an area of engagement for KfW as well, that is, through the opening of a specific credit line;
- The farm and production level, by upgrading the extension service and promoting all measures that allow the exploitation of the economy of scale effects. This might be achieved primarily through the propagation and support of associations and cooperatives.

With such engagement, Serbia may hope to speedily and efficiently become a major actor on the European Union's organic produce markets.

ACCESS - PROGRAMME FOR PRIVATE SECTOR DEVELOPMENT IN SERBIA

The ACCESS is a programme implemented by the German Technical Cooperation (GTZ) on behalf of the German Ministry for Economic Cooperation and Development (BMZ). It aims to further Serbia's economic development and facilitate the country's future membership in the European Union (EU) by supporting the implementation of the Serbian National Strategy for the Development of Small and Medium-sized Enterprises and Entrepreneurship, as well as the National Strategy for EU Accession.

The Programme is realized by the GTZ in collaboration with the Ministry of Agriculture, Forestry and Water Management and the Ministry of the Economy and Regional Development, as well as Serbian business organisations. Through ACCESS's assistance to Serbian support intermediaries, small and medium-sized companies of select sectors and regions are being empowered to make better use of their production, employment, and growth potentials, and to find new markets both in the region of South East Europe and the EU.

Specifically, ACCESS works with private sector market players, governments, universities, organic agri-business value chains, civil society, as well as farmer groups in the organic agricultural sector, in order to accomplish the following:

- support the development of sound policy environments that enable open markets, private sector investment, and gender-equitable access to factors of production, products, and income;
- promote effective institutions and services such as agricultural extension, to enable both female and male producers to acquire, protect, and use the assets they need to take advantage of emerging market and trade opportunities;
- strengthen producer and other rural organizations in order to help them participate effectively in markets, reduce transaction costs, acquire productivity-enhancing technologies, and make use of pertinent information on domestic, regional, and international markets;
- support the development of product standards and quality control to meet EU market demands for food safety, purity and quality, and thereby reach higher-value markets;
- assist in appropriate marketing measures that will enable agricultural producers to reach national, regional and global markets;
- assist in the development of the public sector's role as monitor, regulator and referee, as well as the provider of market-facilitating goods and services.

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