

# Executive Summary

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*"This study, financed by the European Commission, was undertaken by Arcotrass GmbH (Germany), in association with Vakakis International SA (Greece), EuroCare GmbH (Germany) and AKI (Hungary). The conclusions and opinions presented in this report are those of the Consultants and do not necessarily reflect the opinion of the European Commission".*

## **Executive Summary**

The project ToR require the provision of an Executive Summary of no more than 10 pages, including a brief introduction to the approach and a summary of the conclusions arising from each task. Below is presented this summary.

### ***Brief introduction of the Project Approach***

This study was commissioned by the European Commission DG-Agriculture. The study was conducted by the ARCOTRASS led Consortium. The aim of the study was to provide an assessment of the state of agriculture and rural development in the Western Balkans region comprising: Albania, Serbia & Montenegro (including a separate report on Kosovo<sup>1</sup>), Croatia, the Former Yugoslav Republic of Macedonia and Bosnia-Herzegovina. During the course of the study Montenegro became an independent country and a separate report was subsequently prepared for this country.

The study was implemented by an expert team with sound knowledge of the agricultural and rural situation in the Western Balkans region. The team included a network of leading Western Balkan agricultural economists and international experts based in the region, who greatly facilitated the collection of a diverse range of both historical and up-to-date data and information upon which the study results were ultimately based. The data and information were screened by a team of EU experts to ensure the integrity and consistency of the data and information. This information was archived and gradually utilised to develop the many and various study outcomes, as defined in the project ToR.. Overall project coordination and team management was provided by the Arcotrass head-office.

A number of tools were used to assess data quality and reliability (based on the EAA methodology). Furthermore EU, FAO, WB, IMF, and other internationally available data were used to fill certain data gaps and for comparative purposes. Where data were assessed as being unreliable or inconsistent, regional based experts were requested to consult with National Statistical Offices, relevant Ministries and other regional organisations to cross-check and supplement information sources. Thereby the study has been based on original information from the region wherever possible and as such, goes far beyond a pure desk study in its scope and substance. Without the adoption of such an approach the outcomes envisaged within the ToR would not have been possible.

The medium term outlook analysis and the impact assessment are based on the CAPSIM Model which has previously been used to support similar studies commissioned by DG-Agri and Eurostat.

Throughout the Western Balkans region there are significant gaps and discrepancies in official agricultural statistics. A flexible and dynamic approach was therefore required by the expert team throughout the study to overcome many of these constraints and to ensure sufficient information could be obtained to complete the analysis. This inevitably involved a significantly higher commitment of manpower well beyond that which was originally envisaged by the contractor.

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<sup>1</sup> On 10 June 1999, Kosovo came under UN administration and the UN Mission in Kosovo - UNMIK - was set up under UN Security Council Resolution 1244.

**Task I - Collection of historical data**

A major constraint in carrying out this Study has been the lack of reliable, consistent and comparable agricultural statistics (this is true for data collected from sources inside and outside the Western Balkans). Many statistical offices in the region still rely upon estimations rather than empirical statistical methods and most historical data was based on this form of data collection and recording. In many countries there has no agricultural census for a decade or more. There are no uniform classifications of key sector variables including (but certainly not limited to) agricultural holdings, agricultural labour inputs and rural areas. And classifications which do exist often vary from EUROSTAT definitions creating major problems for reliable comparisons. There is also a paucity of coherent analysis and reports on the agricultural and rural situation. Furthermore the region has experienced a range of conflicts and general upheavals over the last fifteen years, resulting in the loss of vast amounts of historical information and the creation of a number of new borders and administrative divisions (e.g. Montenegro became a newly independent country during the life of the study). These changes have inevitably impacted upon the availability and consistency of data.

Significant attempts have been made to overcome these constraints and to compile data from various official and unofficial sources, including where necessary the consultants' own estimates. Considerable efforts have been made to check and verify the data. Inconsistencies and questions concerning the reliability of the data have been resolved where possible and / or highlighted in the individual country reports. Caution is still recommended though in the use and interpretation of the data presented. Efforts are being made to improve the agricultural statistics systems in the Region but considerable progress is needed. Major efforts are needed to improve availability and reliability of data. Experiences from the new central and East European Member States prove that technical assistance from the EU can significantly contribute to these improvements.

**Task II - Descriptive analysis of the current situation**

On the basis of the data and information obtained during the study, an analysis of the agri-food sectors and rural areas throughout the Western Balkans region was undertaken. The main findings are summarised below:

**Economic importance of the sector:**

The Western Balkan Region has a combined GDP of around €60 billion, which represents only 2% of the EU economy.<sup>2</sup> The largest and most developed economy is Croatia with a GDP of €28 billion (equivalent to almost half of the total GDP for the Region) and a GDP per capita of more than €6,000 (which is approximately 25% of the EU average of €22,600). The smallest and poorest economy is Kosovo with an estimated GDP of €2 billion and a per capita GDP of €1,000.

**Agricultural Development:**

Natural conditions for agricultural production in the Western Balkans are generally non-favourable due to the large share (around two thirds) of mountainous, hilly and carst landscape. In spite of this, agriculture plays an important role in the Region, both economically and socially. It contributes, on average, 17% to the countries GDP. In Albania and Kosovo agriculture contributes about one quarter of GDP, in Serbia and Bosnia and Herzegovina one fifth, and in the former

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<sup>2</sup> Based on EU GDP in 2005 of €2697 billion.

Yugoslav Republic of Macedonia and Montenegro 11%. Croatia has the lowest share of agriculture in GDP (8%), which is still significantly higher than the EU average of 1.6%.

Agricultural land in the Region amounts to 13.1 million hectares. This is equivalent to 8.1% of the total agricultural land of the EU and less than the total agricultural land of Italy (approximately 10% of EU agricultural land). Arable land and permanent crops account for 53% of the total agricultural land, ranging from 11.2% in Montenegro to 71% in Serbia. Agricultural land per capita is highest in Serbia (0.68 ha per capita) and lowest in Montenegro (0.8%) (see Table X below). A large proportion of agricultural land is meadows and pastures. A significant share of agricultural land is left fallow: Albania (25%); Bosnia and Herzegovina (20%); Kosovo (10%). The main reasons cited include land fragmentation and absent owners, low economic prospects, lack of funds to invest in land management and in Croatia and Bosnia, the existence of land mines (an estimated 237,000 ha were estimated to be contaminated by mines and unexploded ordinance in B&H at the end of the conflict)..

The agricultural sector provides an important source of employment in all countries of the Region. However, data on agricultural labour is not reliable or comparable. For example, in Montenegro the official figure is 1.2% of the total labour force. This figure includes only contracted workers and omits family workers which dominate the sector. Similar problems are encountered in other countries such as Bosnia and Herzegovina and Serbia. Estimates of the real figure of persons engaged in agriculture range from 18% - 58%, depending on the country and definitions used by the surveys. There is no doubt however that agriculture is either the most important, or one of the most important, employers in the countries of the Region. Moreover agriculture provides a social safety net throughout the Region for a large number of the population, particularly for the elderly, who have no alternative source of income and depend on subsistence agriculture for their livelihood.

The agricultural sector faces a number of constraints that impede its contribution to the economy. These constraints are faced by all countries in the Region to varying degrees, including: The fragmented farm structure (dominated by a large number of very small-scale agricultural holdings, often producing only small quantities of marketable surplus) and the lack of a functioning land market for agricultural land; Lack of physical infrastructure, including underdeveloped irrigation systems; Low levels of productivity due to low levels of mechanisation and limited use of modern technologies; under-employment and limited access to extension or advisory services; Underdeveloped and poorly integrated marketing channels for both inputs and outputs, lack of marketing know how and poor market information; Underdeveloped food processing industry and low levels of food safety and quality standards; Poor access and availability of suitable credit facilities to the sector.

All countries have implemented or are in the process of implementing programmes to privatise agricultural land. Agricultural land which remains socially owned is often leased out to the private sector (Croatia, Kosovo). Over 87% of all agricultural land in the region is now owned by the private sector, varying between 80% (FYROM) and 95 % (Albania) for individual countries.

The farm structure is similar throughout the region, comprising a large number of small holdings, predominantly subsistence or semi-subsistence in nature, and a small number of large formerly owned state farms (at varying stages of privatization). Additionally there are a small number of medium size private farms that are emerging and operating on a commercial basis. This sector is growing gradually, albeit from a very low level.

The definition of an agricultural holding used in each of the countries affects the farm structure presented. In most cases the figures include a large number of agricultural households which would not qualify as an agricultural holding in the EU. However these holdings (or agricultural households) represent a large proportion of the agricultural production and thus cannot be excluded from the statistics within this study.

### **Agricultural Production:**

In general the region is experiencing a trend for reduced planted area and gradual (but slowly) increasing yields. However, there are many exceptions to this trend. Cereal production accounts for by far the largest area of agricultural land in the Western Balkans. The main cereal crops are wheat and maize. Total cereal production in the Region is equivalent to 6.6% of the area under cereal production in the EU and 5.7% of production. Due to the significant livestock sector, a significant area of agricultural land is dedicated to forage and fodder production (110,000 ha in B&H). Fruit and vegetable production is important throughout the Region. A large range of fruit and vegetables are produced. They are mainly produced on small-holdings for domestic consumption or for local sale, rather than large-scale for food processing.

Yields are low, below the EU average in all countries. The average yield of cereals in the Western Balkans was 3.7 compared to 5.8 in the EU. The reasons for low yields are common to all countries in the Region: low input use and low quality of seeds; poor technical and technological farm equipment; outmoded cultivation and seeding practices and absence of effective extension advice; lack of irrigation; small holdings constraining the use of modern equipment and techniques; subsistence nature of agriculture (where optimizing yield is not necessarily the main objective), and use of marginal land for crop production. Yields have improved though in recent years (albeit from a low level).

Livestock production is important in the overall agricultural production of the Region. It accounts for approximately half the GAO of the region: 57% in Montenegro; 46% in Albania etc. It is relatively less important in Serbia (35% of GAO). Livestock production is characterized by a large number of very small, mainly subsistence oriented agricultural households with very small herd sizes (1-2 cows). Large and specialized livestock production carried out by former socially owned enterprises is being replaced by commercially oriented small – medium family businesses. There are signs that this sector is growing. Total number of cattle in the Western Balkans is just over 3 million. This amounts to less than 4% of the EU herd size. Sheep and goats (3.3 million) account for a larger share of the current EU flock size and production, 7.2 and 7.7% respectively. The region has a total of 5.8 million pigs and 32.6 million chickens. In spite of being relatively less important domestically, Serbia dominates regional livestock production for cattle, pigs and chickens. Whilst sheep and goat meat production in Albania is double that recorded in all other countries of the region.

### **Trade and Food Industry:**

Despite the importance of agriculture in the region, all countries, with the notable exception of Serbia in 2005, are net importers of food and have large agro-food trade deficits. This largely reflects the lack of competitiveness of their agricultural sectors.

There is only little reliable information available on the situation, performance and perspectives of the food industry in the whole region. Similar to agriculture, the region's food industry suffered from the problems and instabilities of the early 1990's. In some regions (especially Kosovo and B&H) the industry also was affected by physical damages. Output levels shrank drastically and still

are below previous levels. This resulted in a significant under-utilisation of capacities, which in turn worsened the economic performance of the industry. Major problems the industry faces are the small size of most processors; low productivity and low efficiency (in terms of value added per employee); limited export orientation; low utilisation of capacities (mainly due to domestic supply problems); low quality of available raw materials, resulting in significant quality problems in the final products; outdated technologies, making quality improvements difficult and costly and delay the process of introducing EU standards; low hygiene standards, hindering certification for export to the EU or other 3<sup>rd</sup> countries; deficiencies in marketing and management, making it difficult to access new markets (or retain existing markets) for Western Balkan produce; lack of state support to either set or improve standards, promote production or provide access to training and information to guide the industry.

### **Rural Situation**

In the Western Balkans the rural population amounts to more than 10 million people. The largest rural population is in Croatia (2.1 million), while the countries with the largest share of the persons living in rural areas are Kosovo (estimated 60%) and Albania (55%). A high proportion of the rural population (estimated to be approximately 80%) are dependent on agriculture. The food industry also provides an important source of employment in rural areas, particularly in the production of dairy products for local consumption.

Historically in all countries there was never an expectation that people would want or need to travel any distance on a regular basis. Under the centralized planning systems that prevailed in all countries, homes in rural areas were provided near the work place, and daily travel was minimal. With the breakdown of this system and collapse of economically unviable industries the infrastructure in the majority of the region is inappropriate to support modern, market economy needs. Rural areas are currently characterized by a lack of basic services (water supply, sewage systems, health services and education facilities) and suffer from poor physical infrastructure, particularly roads and water supply systems. In Kosovo only 28% of homes are connected to a sewage system; in former Yugoslav Republic of Macedonia 9% of the rural population are without water supply installation and only 18% are connected to the public sewage system. . Education levels among the rural / agricultural population are low, especially for women. In Albania 80% of the agricultural labour force have only lower elementary education; in former Yugoslav Republic of Macedonia illiteracy rates are found to be higher in rural areas, and in Kosovo only 60% of the male population and 25% of the female population have completed secondary school. Outward migration prevails to varying degrees throughout the region; particularly among the young. Thus whilst in some countries (e.g. Albania and Kosovo) the population is relatively young, most rural areas in the Region are experiencing an ageing of the population structure.

### **Task III - Policy analysis**

Well defined long-term policy-strategies (regarding agricultural, rural, environmental and other policies) and their implementation are still rare within the region. Agricultural Policy objectives and instruments change frequently from year to year, or from government to government, normally based on annual budgeting. Policy analysis remains limited and reliable data to guide policy formulation scarce. In no country is there any effective system established for monitoring the impact of agricultural policy on the sector.

In almost every country of the region, sector strategies and master plans were formulated or are currently under development. Several attempts were undertaken to develop agricultural policy reform strategies in the past, in most countries of the region. These were predominantly supported and guided by international donors. These strategies were often too sophisticated, lacking pragmatism or operational plans and only small parts were actually implemented. Often the involvement of stakeholders from both within and outside the agricultural community was inadequate, resulting in limited ownership or acceptance of the need for policy changes amongst decision-makers. However, an improved consistency of agricultural policies can now be observed in many countries of the region in the last three years, primarily in response to changing market conditions domestically, regionally and internationally, often linked to commitments related to European and wider international integration.

**Institutional and administrative framework:**

The institutional and administrative framework for the development and implementation of agricultural and rural development policies remains weak in all countries of the region. Reform has been slow and the political will to introduce change inconsistent. Human resources are inadequate at all levels, mostly lacking sufficient numbers, capacity, knowledge and relevant expertise to meet the challenges of a modern, competitive agri-food system or the diversity of problems facing under-developed rural areas.

These weaknesses are compounded by a lack of reliable information on the economic situation of agriculture and rural areas. Census data is mostly outdated. Adequate farm registries and animal identification systems do not yet exist in all countries. Information systems such as FADN and EAA, as applied in the EU Member States either do not exist or are at a very early stage of development. This lack of data and human resources means that only limited policy analysis is undertaken. Rarely are local institutes or research institutions involved in the policy development process. One of the reasons for this is the severe lack of agricultural economics professionals in the region. In consequence, policy formulation and decision-making is often made based on very limited information, devoid of detailed analysis. Furthermore, in no country of the region is there any effective assessment of the impact of current or past policies on the sector.

Intra-institutional and inter-institutional coordination mechanisms rarely exist, leading to policy inconsistencies and limited strategic harmonization of objectives, policies and measures. This is a particular challenge in areas such as Food safety, where competencies between various institutions responsible for health and food control overlap and in rural development, where employment, transport, health, education and agriculture development programmes rarely coincide.

Public services to the sector remain limited. No country in the region has adequate extension or advisory services and linkages between these services and research networks is weak or non-existent. Veterinary services have seen some improvement in the last five years and this is gradually beginning to reflect in the quality and level of livestock production in some countries. More investment in these and other services is required to raise standards and improve productivity. Market information and general marketing services remain rudimentary and government support for the development of such services inadequate or non-existent. Overall the weakness of sector management structures, systems and services remains one of the main obstacles to development of agriculture and rural development throughout the region.

**Policy Concepts and Budgets:**

Policy concepts are markedly different between the countries/entities of the region, reflecting in large part their various stages in the transition process. They range from the introduction of CAP-type mechanisms in Croatia to the very limited direct intervention approach adopted in Albania. The approaches are of course highly dependent upon the importance given to and the budgetary resources made available for the sector in each country. In general in all countries, resources allocated to support the sector have been increasing in recent years..

However, in general direct support for agriculture is low. This is especially true for Albania, B&H, the former Yugoslav Republic of Macedonia, Montenegro and Kosovo. In these countries the budgets of donor supported projects often exceed domestic resources. Serbia is a notable exception in the region, having increased their agricultural budget substantially in the last three years. Public expenditure for agriculture is also relatively high in Croatia and currently matches (and even partly exceeds) levels of government support in new Member States before accession. But budgetary resources are still low when compared to the EU-CAP budget flows to member states. One of the major short term constraints to expansion of support to the sector (excluding actual government budget capacity) is the lack of a suitable framework of measures, systems for their preparation, processing, payment and auditing. Investments are being made currently in Croatia and Serbia to upgrade systems to administer and control funds. Other countries of the region will require increased assistance in this area in the coming years to address this constraint, particularly as European integration activities accelerate.

**Trade Policy:**

Trade agreements have contributed significantly to trade and price liberalisation in the region over the last six years. Trading patterns have altered dramatically in all countries, as traditional markets have adjusted to the new liberalised market conditions both within the region and externally.

Being the major trading partner of all Western Balkan countries, bilateral trade agreements with the EU are of special importance and are now crucial for the overall trade performance of all countries of the region. All countries appear to have benefited from significant trade preferences with the EU, all of which were asymmetrical. Since the end of 2000, the vast majority of traded commodities from the region may flow into the EU on a duty-free and unlimited access basis. In addition, referential trade agreements have been concluded between all the Western Balkan countries, most of which allow for greater market access than to the EU

Autonomous trade preferences have liberalised over 95 % of trade between the EU and the Western Balkan region. However, the trade data from the last five years suggests that despite certain on-going trade restrictions imposed on EU agri-food products entering the Western Balkans countries, the EU benefited far more from the preferential trade agreements established than the region itself. The main reasons for the limited increase of food exports from the Western Balkans to the EU are various and include the significant reduction of marketed agricultural production in the Western Balkan region; the non-compliance of the countries/entities' food control and food safety systems with EU requirements and the limited number of food processors accredited for exports to the EU; the limited existence of stable trade links between exporters from the region and importers in the EU; the problem of gathering critical masses of produce of homogeneous quality for exports; limited number of internationally recognised trade marks for food products from the region; the increased level of domestic competition has forced the governments in the region to focus primarily upon import substitution.



**Rural Development Policies:**

No country in the Western Balkans region has yet fully developed or implemented a National (or Regional) Rural Development Plan or Programme . However, in all countries of the region these plans are now being developed and institutional structures to support their implementation are being introduced. This is primarily driven by the process of European integration and preparations of the institutions and legal framework in order to become eligible and able to benefit from EU pre-accession structural support (IPARD) or related Technical Assistance (Instrument of Pre Accession).

The region is significantly rural in nature and there is an urgent need for the reconstruction of farm and food industry infrastructure, rehabilitation of rural infrastructure and the upgrading of social support services for poor rural people. However budget allocations to support this process remain stubbornly low in all countries. Rural development measures which do exist are inadequate and often highly restricted in their access and scope. Often the understanding of the problems and of the availability of the potential instruments is not sufficient. Transparent instruments for planning, implementation and control of measures are absent at all levels.

**Task IV - Medium-term outlook**

The study results reveal that the Western Balkan region is not likely to see major increases in agricultural production over the medium term. The current tendency of losing shares on domestic and international agricultural markets is likely to continue in many parts of the region (particularly for B&H, Albania and the former Yugoslav Republic of Macedonia).

The weakness of the animal sectors in many Western Balkan countries, most importantly Serbia, is expected to impact on the crop sector due to decreasing demand for feed which is anticipated to translate into less agricultural land being used for arable fodder and grassland. On cereal markets the drop in feed demand is also projected to be one of the main factors provoking an increase in export of cereals from the region. Other than cereals there are only a handful of sectors where production growth is anticipated to be stronger than demand growth. This applies to potatoes in the former Yugoslav Republic of Macedonia and Kosovo, and to vegetables in Serbia, Montenegro and Kosovo.

For prices of tradable commodities it can be assumed that the countries will basically follow international price trends in all Western Balkan countries (small country case). Domestic prices and quantity changes are anticipated to result in certain negative changes in cash income for small-scale producers in the region and more positive gains for larger-scale commercial producers, the dynamics of which are elaborated within the overall accession analysis.

Agricultural employment is expected to significantly decline in the region up to 2020. By 2020 agricultural employment is expected to have fallen between 15 % (the former Yugoslav Republic of Macedonia) and 30% (Croatia) below current levels. The development of agricultural employment is likely to depend on a variety of factors including the pace and degree of structural adjustments introduced, the effects of the remaining privatisation process, the integration of the agriculture and food industry with other rural economic activities (tourism, recreation, retail, etc.). The anticipated significant decrease in agricultural employment is partly caused by the current high share of hidden unemployment and the over-estimation of formal agricultural employment in certain countries, based on outdated statistical collection systems. The pace of restructuring depends also on the extent to which the share of subsistence agriculture will decrease which is expected to be faster in some countries of the region than in others.

Average farm sizes are expected to see modest increases up to 2020, in relative terms (by 18 to 33%). However, the countries will remain predominantly characterised by a small-scale, semi-subsistence and subsistence farming sector. Rural areas (particularly remote, predominantly rural areas) will remain an important social safety net and an economic buffer for the older (increasingly ageing) and less well-educated rural population. This will result in rather limited per capita increases in agricultural income. Dependent upon the pace of economic development in other sectors of the economy, increased numbers of the current agricultural workforce will gradually leave the sector. Young and active people will increasingly leave remote rural areas, in parallel with the expected growth of the service (mainly) and industrial sectors in larger urban centres. This, in turn, will lead to a further downturn in sector performance, unless future policy measures can provide sufficient incentives to retain or attract younger farmers to remain in the sector and/or diversify their businesses to develop other rural employment and income generating activities.

This will need to be complemented by investments in improved rural infrastructure and services to promote development of value-added activities, including on-farm processing, agro-tourism and local cottage industries and handicrafts, particularly in remote rural areas. It is expected that the countries that successfully adjust their policy and institutional frameworks, with the support of IPARD, will gradually introduce 'EU-like' rural development programmes that are likely to assist in combating or at least slowing some of these trends.

#### **Task V - Impact assessment of accession**

It is anticipated that accession will bring increased competitive pressure to most Western Balkan countries, in particular for cereals, pork and poultry markets. For fruits and vegetables, as well as for beef, sheep and goat meat current prices in the region are mostly below those in the EU-25. Improved productivity and marketing could provide an important export market opportunity for some Western Balkan countries for these commodities.

Full utilisation of these opportunities will require improvements in quality of production and market infrastructure. Certain downward price pressures on commodities will be countered by corresponding increases in yields linked to improved access and use of modern production methods and technology transfer. These yield increases are anticipated to counteract the negative effects of lower prices for the beef sector but it is expected that higher milk yields will result in an overall reduction in the Western Balkans dairy herd and ultimately also beef production, when compared to a non-accession scenario.

On balance, the total income effects will be generally positive due to CAP direct single area payments. These payments would tend to support an increase of agricultural gross value added which exceeds 25% on average but which will vary considerably by country (from +3% in Montenegro to +51% in B&H in the scenario which assumes accession of all Western Balkan countries by 2015). However, even though these gains in agricultural income will clearly support the rural economy in the Western Balkan region, their economic importance will only be significant in remote rural regions. With average GDP shares for agriculture of less than 7% in all Western Balkan economies (see Table 2.2-17) most regions, even beyond urban centres, will overwhelmingly depend on non-agricultural activity.

Agricultural employment is expected to significantly decline in the region up to 2020. EU accession will further aggravate this trend, as it is expected to lead to additional economic growth. Farm sizes are expected to show a faster increase under accession conditions. However, this increase will most likely not be sufficient to effectively compete on the EU market for many farmers. The

average small farm sizes typical throughout the Western Balkans region would require substantial structural changes in order to approximate EU average farm sizes.

It is expected that accession will result in an increase of the share of organic agriculture in total farming. The development inside the EU indicates that significant increases in the relative importance of organic farming can be expected (e.g. In the EU15 a doubling of the share of organic farming can be observed within the last 10 years, although at a low absolute level). In any case, the development of organic farming within the Western Balkans will mainly depend on the development of overall purchasing power of the regions.

Accession is anticipated to improve access and opportunities for additional non-agricultural activities and income. This will be mainly due to the upgrading of rural infrastructure and development support to rural food processing and manufacturing. This will result in a reduced out-migration from rural areas.