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Bosnia and Herzegovina: Agricultural Policy Brief

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1. Economic development in the country

Complex political and economic system and state structure defined by the General Peace Agreement from 1995, significantly limits economic development and transformation of Bosnia and Herzegovina into a modern and functional European state (S a d i k o v i ć, 2015, P e j a n o v i ć, 2013, T e r r y, 2013). Analysis of economic development of Bosnia and Herzegovina in the period 2005-2014 shows that socio-political and economic crisis has been deepened since 2008, not only due to the influence of negative regional and global developments, but also due to the lack of political will to proceed with the necessary, radical reforms. In 2014, as in previous years, Bosnia and Herzegovina continued to show the least progress among countries in the region in European integration processes, especially with regard to adoption of legislation. The lack of efficient coordination mechanism for EU integration issues continues to affect the interaction of BH with EU, including the level of financial support. Sectoral strategies in areas such as transport, energy, environment and rural development, which would be related to the whole country, as prerequisite for support in these areas have not been agreed yet.

Table 1. Bosnia and Herzegovina: Economic context, 2005 and 2014

	2005	2014
GDP (million EUR)	8,655	13,827
Population (million)	3.84	3.83*
Land area (thousand km^2)	51,197	51,197
Population density (inhabitants/km^2)	75.08	74.75
GDP/capita, PPP (EUR)	2,252	3,606
Trade as a share of GDP (%)	88.40	92.02

* Estimation by Bosnia and Herzegovina Directorate for Economic Planning
Source: Agency for Statitsics of BH

Despite the above mentioned facts, economic indicators for 2005 and 2014 show that BH made significant progress. GDP increased by nearly 60%, from EUR 8,655 million in 2005 to EUR 13,827 million in 2014. Progress was registered in GDP per capita too, so in 2014 it was EUR 3,606, which is much higher than in 2005, but still far from the one achieved in the EU countries and in most of the countries in the region too.

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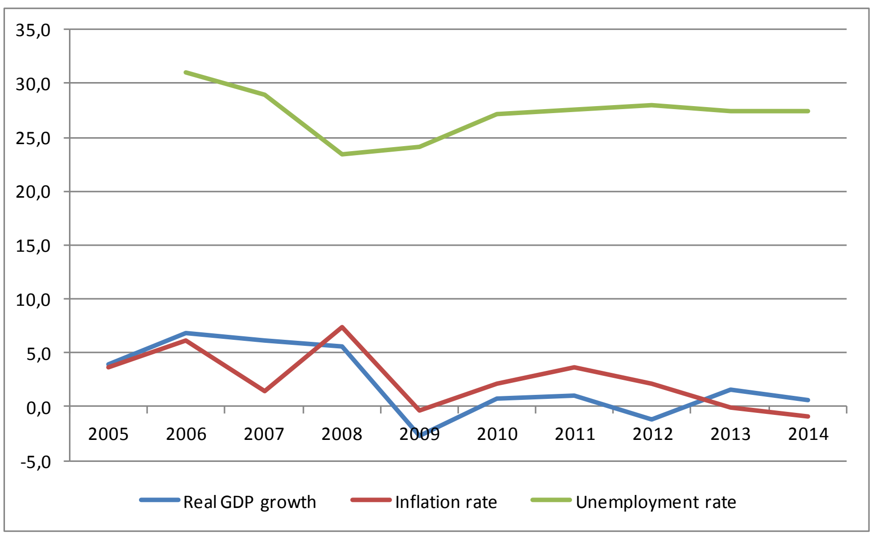
The recovery and strengthening of the economy in EU countries was normally accompanied by the intensification of foreign direct investments (FDI). In BH, despite the difficult economic situation and political uncertainty caused by the elections and the establishment of a new government in 2014, there were significant investments that amounted to EUR 422 million (mining and energy sectors).

Total foreign trade oh BH in 2005 amounted to EUR 7,651 million and accounted for 88.40% of total GDP. It significantly increased (by 66%) and 10 years later it amounted EUR 12,723 million or 92.02% of GDP. The trend of growth is evident in both import and export.

The global economic crisis in EU and in the world had a significant impact on the economic development of BH from 2009 until 2013, since when real GDP growth has reached positive value, amounting to 1.6%. Exiting Euro zone of recession after two years of negative growth, the reduction of world prices, deflation, floods in the second quarter, and unfavourable hydrological situation in hydro power plants were among the most important factors that influenced economic growth in Bosnia and Herzegovina in 2014. Despite all mentioned, BH has achieved very modest, yet positive real GDP growth, amounting to 0.6%.

Figure 1. Bosnia and Herzegovina: Main macroeconomic indicators, 2005-2014
(real GDP growth, inflation rate, unemployment rate)



Source: Agency for Statistics of BH; Central Bank of BH; Labour Forces Survey

BH is characterized by stability of the national currency (convertible mark). In 2013 (-0.1%) and 2014 (-0.9%) deflation was recorded, determined mainly by external factors such as international oil and food prices.

High unemployment rate, which is the highest among all countries in the Region, is still the biggest economic problem in Bosnia and Herzegovina[4].This problem was constantly present throughout the observed period, and some progress has achieved regarding it. The unemployment rate decreased from 31.1% in 2005 to 27.5% in 2014. The lowest value of these rates were observed before the start of the global economic crisis and amounted to 23.4% (2008) and 24.1% (2009).

[4] **Source:** Directorate for Economic Planning (2015)

2. Agricultural Development in the country

Agriculture is important sector in BH economy, both in terms of participation in the creation of GVA and in total employment, share in foreign trade and in the trade deficit (Table 2). Although contraction of economic activity took place in the analysed 2005-2014 period, as a result of a numerous socio-political and economic factors, the share of agriculture in the GVA creation is still high (7.6%), but significantly lower than in 2005 (10.6%). The sector is particularly important for the biggest economic problem of the country, unemployment. Agricultural sector participated with 17.1% in total BH employment in 2014, which shows that, as far as this indicator is concerned, importance of the sector has been reduced when compared with 2005 (20.6%).

Table 2. Bosnia and Herzegovina: Agriculture in the economy; 2005 and 2014

	2005	2014
Agriculture share in GVA (%)	10.6	7.6
Agriculture share in employment (%)	20.6	17.1
Agro-food exports (% of total exports)	6.1	7.6
Agro-food imports (% of total imports)	17.6	16.8

Source: Agency for Statistics of BH, Data base of Chamber of Commerce of Bosnia and Herzegovina

Table 2 shows increased importance of agro-food products for the overall trade balance of the country. The share of sector exports in total export increased from 6.1% to 7.6%, while the share of sector import in total import decreased from 17.6% (2005) to 16.8% (2014). These figures are even more pronounced in absolute terms, since the total export from Bosnia and Herzegovina in 2014 (EUR 4.44 billion) compared to 2005 increased by 2.3 times, while the import (EUR 8.28 billion) increased by only 1.4 times.

Table 3. Bosnia and Herzegovina: Characteristics of the agricultural sector; 2005 and 2014

	2005	2014
Agricultural area (AA)(thousand ha)	2,164	2,163
Share of arable land in AA (%)	47.5	46.7
Share of crop in total agricultural production (%)	63.9	63.2*
Average wheat yield (t/ha)	3.1	2.9
Average milk yield (t/dairy cow)	2,174	2,781
Factor income per Annual Work Unit (EUR)	n/a	n/a
Agro-food export to import cover ratio (%)	11.7	24.2

* Data refers to 2010 (last official data)

Source: Agency for Statistics of BH, Data base of Chamber of Commerce of Bosnia and Herzegovina

Bosnia and Herzegovina is characterized by relatively favourable climate conditions for agricultural production, by modest availability of agricultural land (0.56 ha) and ploughed-field land (0.26 hectares) per capita. Out of total 2.16 million hectares of agricultural land, less than half (46.7%) is intensive arable land. Available land resources are insufficiently used. Statistics show that the half of arable land of the highest quality (50.2%, 2014) are not cultivated at all, while, on the other hand, BH has significant trade deficit in agro-food products. Crop production dominate in total agricultural production, with the share that amounted to 63.2% until 2010.

One of the major problems of agricultural production in BH is low productivity expressed in yields per production unit. Inefficient, limited and extensive production on small holdings, poor farm equipment and insufficient technical and technological knowledge of farmers are some of the factors that places BH at the bottom of European scale when it comes to average yields of most agricultural productions.

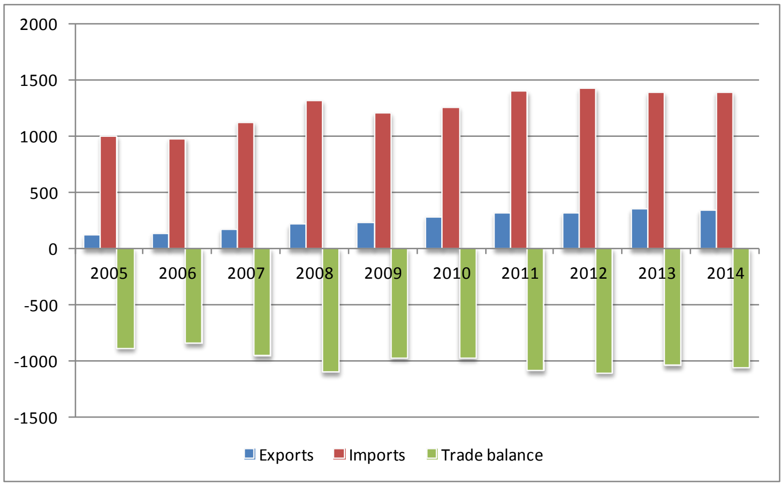
There are no significant shifts in production and yields for most arable and vegetable crops (e.g. wheat yield of 3.1 t / ha in 2005 and 2.9 t / ha in 2014). The differences in yields are rather result of climatic conditions in a given year, than of development of the related subsectors. As for plant production, a berry-fruit subsector should be emphasized as it experienced strong expansion and good production results measured by total production and average yields in recent years. Except in poultry, and to some extent in milk production, animal production in BH stagnates and shows no serious signs of progress. The current situation in agriculture has been further exacerbated by severe floods in May 2014, thus, production results in some livestock production as well as in number of field and vegetable crops, in that year were significantly lower than those in previous years.

Agro-food sector is very important part of BH foreign trade. Total export of agricultural sector in 2014 accounted for EUR 338.4 million or 7.6% of total BH export. Total import of this sector is significantly higher ad in 2014 it amounted to EUR 1.395 billion, or 16.8% of total BH import. The above figures show that BH still has an unfavourable trade balance of agricultural and food commodities and there is still high dependence on imports. However, if period 2005-2014 is observed, significant progress in reducing mentioned deficit (and dependence) is obvious. Figure 3 shows that export of sector has been increasing steadily throughout the observed period and in 2014 it was 2.87 times higher than in 2005. The greatest contribution to such trends and values[5] is given by products from tariff groups 04 (Dairy products, eggs, honey), 19 (Preparations of cereals, flour or starch), 08 (Edible fruit and nuts, peel of citrus fruit or melons) and 16 (Meat preparations).

When sector import is concerned, trend of growth has been recorded from 2005 to 2011, when it remained stable in coming years, so in 2014 it accounted to around EUR 1.4 billion. The highest share in import had following groups of commodities: group 22 (beverages, spirits and vinegar), group 10 (cereals), group 21 (Miscellaneous edible preparations), group 17 (Sugars and sugar confectionary) and group 23 (Residues and waste from the food industries). Finally, the coverage of import by export of agro-food commodities has been recording significant progress. In 2005 it was only 11.7%, and by 2014 it more than doubled and reached 24.2%.

Figure 2. Bosnia and Herzegovina: Agro-food trade, 2005-2014
(exports, imports, trade balance)

[5] High values and the share of tariff group 17 (Sugars and sugar confectionary) and 15 (Animal or vegetable fats and oils) were ignored, as these products are re-exported, not produced (sugar beet) or modestly produced (oilseeds) in BH.



Source: Data base of Chamber of Commerce of Bosnia and Herzegovina

Majority of imported food commodities originate from EU (65.0% in 2014), followed by the Western Balkan countries (29.6% in 2014), and the rest of the world contributes with only 5.4%. The most important foreign trade partners of BH in food among EU countries are Croatia, Slovenia, Hungary, Germany, Italy and Austria. Among Western Balkans countries, Serbia and Macedonia are certainly the most important trade partners, and Republic of Turkey among other countries. As for exports in 2014, the largest share refers to the Western Balkan countries (41.05%) with predominant Serbia and Macedonia, then the EU (37.76%), and other countries (21.16%) among which Republic of Turkey is the most pronounced.

Table 4 presents the main features of development of main agricultural markets in Bosnia and Herzegovina in the period 2005-2014.

Table 4. Bosnia and Herzegovina: Main developments on agricultural markets between 2005 and 2014

	Traditionally, the country is	**Since 2005, the production has**	**Significant changes** (e.g. surplus, drop in production, price increase etc.)
Cereals	Net exporter	Increased	BH is pronounced net importer of cereals, especially of wheat. Average wheat production is 225,000 tons (according to experts opinion even significantly less) It hardly meets only 1/3 of domestic needs. Total production of cereals tends to slightly decrease and it is highly dependent on climate conditions. Significant drops of production took place in 2007 (one million tons) and in 2012 (825,000 tons). As far as cereals' import value is concerned, modest unstable growth has been recorded, while import volume has been modestly decreasing. This is explained by changes in prices, that were the highest in 2011 and 2012, when the import was the highest, as well as in 2014.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Sugar	Net exporter	Increased	There is no sugar beet production in BH, so it is net importer of sugar. The import on the average amounts EURO 85.6 million, 198,000 tons respectively. The highest import value was recorded in 2011 (EUR 133.8 mil) and it has been decreasing since then. Yet, according to data from Chamber of commerce, BH is significant sugar exporter (average EUR 27.7 mil). This, refers to re-export,
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		

			which is proven by data from Chamber of Foreign trade that show that changes in sugar import were almost equally reflected in the changes in sugar export over the whole 2005-2014 period.
Oilseeds, oils and fats	Net exporter	Increased	BH realizes very modest production of oilseeds, on the average 11,000 tons of mainly soya bean. Regardless existing budgetary support, production of crops for oil production has declining trend. In 2006, production was 16.7 thousand tons, in 2011 8.3 thousand tons, and a year later only 7. 300 tons. Average BH' import of oils and fats in observed period was 65.5 thousands. Import was particularly high over the period 2012-2014 when it was as much as 90 thousands of tons (2014), respectively EUR 77 million. Despite low domestic production, BH realizes significant export in oils and fats that on the average amounts to EUR 28 million. During the last years of the observed period, significant increase of export was recorded, so in 2014 it amounted to EUR 47.7 million. As in the case of sugar, oils and fats exports is, in fact, re-export, as data from Chamber of Foreign trade show that over the whole 2005-2014 period changes in oils and fats import was almost equally reflected in the changes in export.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Fruit and vegetables	Net exporter	Increased	During the observed period, fruit production in BH had trend of modest growth, while vegetable production had no remarkable trend. Yields in both fruit and vegetable production varied significantly as reflection of climate conditions (the lowest production in 2012 and 2014, the highest in 2013). BH is still net importer of fruit and vegetable, but positive trends are evident in both productions. Unlike vegetable, where almost identical growth was recorded for both import and export, decrease of fruit trade deficit is evident. If import of bananas and citruses, for which there are no conditions for production in BH, and which makes on the average 55% of total fruit import would be excluded, it can be said that during the period 2010-2014 (except in 2012) BH was net exporter of fruit.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Wine	Net exporter	Increased	Although there are no official statistic data on wine production in BH, experts estimate that it takes place on approximately 3.200 ha of vineyards, with total average grape production of 22 million kg, respectively 15 million litres of wine. There is no trend in wine production, as it varies due to unstable yields that are significantly dependant on climate conditions, which was particularly the case in 2011, when remarkable decrease in production was recorded. Autochthonous varieties Zilavka (60%) Blatina (25%) and Vranac (15%) dominate in the wine production structure. BH is net wine importer, mainly from neighbouring and countries from the Region (Croatia, Macedonia, Serbia and Slovenia). BH wine' import amounts, on the average, EUR 14 million, respectively 8.85 million litres, while the export is much lower, and it amounts app. EUR 2.8 million. Average trade deficit of BH in wine is EUR 11 million.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Potatoes	Net exporter	Increased	Potato is one of the few commodities in which BH is self-sufficient. Yet, total potatoes production has been declining, thus from 458.6 thousand tons in 2005 it decreased by 35%, to only 300 thousand tons in 2014. Production is highly dependent on weather conditions since production is based on poor level of agro-technical measures, no irrigation and traditional varieties. Import mainly refers to
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		

			seeding material and it has increasing tendency (the highest import was in 2013, EUR 7.5 million, respectively 23.5 thousand tons).
Tobacco	Net exporter	Increased	BH is tobacco net importer. It yearly imports on the average 2.2 thousand tons which amounts EUR 6.1 million. Total production has trend of continuous decline, so it decreased by 2.6 times from 4.4 thousands of tons in 2005, to only 1.7 thousand tons, which was the average production for the 2010-2014 period. Besides, significant decrease of tobacco import have been recorded, and in 2012 and 2013 BH had foreign trade suffices in tobacco. General trend of decreased need for tobacco is explained by decreased market demand, due to continuous raise of prices as the constant efforts to harmonize BH excise tax policy regarding cigarettes with EU excise policy. On the other side, the increasing consumption of chipped tobacco, purchased mainly on black market with no statistical record cannot be ignored.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Beef and veal	Net exporter	Increased	BH is pronounced beef and veal net importer despite favourable natural conditions for cattle raising. Domestic production has been decreasing, so it was halved from 23.6 thousand tons in 2005 to 11.4 thousand tons in 2014. It is mainly sold as fresh meat on domestic market, which leaves meat processors almost completely dependent on import. Beef and meal import significantly increased from 10.2 thousand tons in 2006 to 32.5 thousand tons u 2014. Domestic production still cannot compete with imported meat price, which is on average EUR 2.5-3.0.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Pig meat	Net exporter	Increased	BH pork production had a pronounced upward trend until 2011, and since then it has been significantly decreasing. On the other hand, the import of pork has been constantly increasing over observed period. The highest import was registered in 2014 and amounted to 12.6 thousand tons or EUR 29.5 million. Import growth is associated with the development of meat processing, despite the tendency of a slight increase in prices.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Sheep and goat meat	Net exporter	Increased	Despite very favourable natural conditions for sheep and goat meat production, it is still insufficient, so BH is pronounced net importer of the sheep and goat meat. Domestic production has no expressed tendency, at amounts 1,800 tonnes of registered production (in slaughterhouses). BH on average imports 1.1 thousand tons with remarkable trend of growth.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Poultry meat	Net exporter	Increased	Production of poultry meat in BH was permanently growing by 2012, but slight decrease was registered in both 2013 and 2014. This is one of few animal production in which BH has almost achieved self-sufficiency. The rapid growth of this production is explained by decrease in purchasing power of BH' consumers and their orientation to the cheaper meat. It can also be explained by development of the meat-processing industry and its orientation to international markets, primarily to regional market including Croatia. Import is still significantly higher than exports, and shows marked fluctuations from year to year. The average annual value of imports amounts to EUR 13.3 million, and the value of exports to EUR 4.8 million. Exports, unlike import, had a constant growth until 2012, and a slight decline was registered in 2013 and 2014. Similar to milk and dairy products, this happened due to decreased export to Croatia since its accession to the EU.
	Net importer	Decreased	
	Self sufficient	No significant trend	
	No significant prod.		
Milk and milk	Net exporter	Increased	BH has almost reached self-sufficiency in fresh milk and fresh dairy products, but it is still a significant net importer of butter, dairy
	Net importer	Decreased	

products	Self sufficient	No significant trend	spreads, cheese and processed cheeses. Total milk production had a pronounced upward trend until 2008, when it achieved the largest production (759 million kg), and since then a significant decline of production took place until 2012, when minimum production of 672 million kg was registered. This decrease is a result of the declining trend in the number of dairy cows, despite the increase in the average milk/cow yield. BH export of milk and dairy products had been increasing until 2012 (EUR 47.8 million in 2012), and since then it decreased as a result of losing the Croatian market due to its accession to EU. A similar upward trend had the import of dairy products until 2012, when maximum import (EUR 87 million) was registered. There is an interesting and significant difference when trade in these products is observed in terms of quantity and in value. There is significant difference between values of exports and imports of these products throughout the study period in favour of imports, while in terms of volume this difference was almost entirely diminished in 2009, and since 2012 exports exceeded import. This shows that BH dairy industry is characterized by unfavourable structure of milk processing with low participation of long shelf-life products (cheese, butter, milk powder) or value added products.
	No significant prod.		

Source: Chamber of Foreign Trade of BH – foreign trade, database, BH Agency of Statistics, Ministry of Foreign Trade and Economic Relations of Bosnia and Herzegovina (2010): Recommendation of measures for improvement of conditions for business in agriculture and food industry of BH, production, consumption and foreign trade balances for 2009.

3. Agricultural policy development in the country

Agricultural policy in BH is carried out at several distinct levels due to complex political system. There are two separate ministries of agriculture, water management and forestry in FBH and RS and they are, along with the Division for Agriculture within the Government of Brcko District, the most important institutions in charge for creation and implementation of agricultural policy in BH. In addition to the entity level, FBH has cantonal level too (10 cantonal ministries) so overall position of agricultural producers is unequal even on the territory of FBH itself, depending on cantonal agricultural policy measures. In both BH entities there are some forms of support to sector from the municipal level too, but these transfers generally are not important, except from the local point of view (B a j r a m o v i c et al., 2014).

The state level in Bosnia and Herzegovina has limited authority in agricultural policy. Competency of the state is reduced to the foreign trade policy as a very important segment of the agricultural policy, but this level of government does not have jurisdiction over other measures aimed to support the sector, especially over those reflected in budgetary support for agriculture and rural development. Therefore, there are no strategic and programming documents directly related to the programming/design of agricultural policies at the state level. Instead, the documents created at the state level mainly deal with harmonization of the entity program documents. Following documents should be mentioned for the period 2005-2014:

1. Strategic Plan for Harmonization of Agriculture, Food and Rural Development
2. Operational Program of BH for Agriculture, Food and Rural Development
3. Plan of BH priorities for gradual harmonization of BH with EU legislation in the fields of agriculture, rural development, veterinary, phyto-sanitary and food safety
4. Proposal for the gradual harmonization of supportive measures to agriculture and rural development in BH

5. Sectoral analysis for BH IPARD program (milk, meat, fruit and vegetables, cereals, wine, fisheries, forestry and diversification of the rural economy).

Most of these documents (1-4) were created in 2008 (SESMARD project[6]), and sectoral analysis were created in 2012 and 2014. It can be said that, due to lack of political will, practically there have been no serious activities on the development of strategic and programming documents (R o k v i c, 2012).

In **Federation of BH**, the main strategic document that was used for the creation of agricultural policy in the analysed period was a Medium-term strategy of the agricultural sector' development in Federation of Bosnia and Herzegovina (2006-2010). The main strategic orientation in this document was the development and structural transformation of agriculture which required achievement of following general objectives: (i) sustainable agricultural sector, efficient production of larger quantity of food, competitive on domestic and foreign markets, (ii) improved food trade balance and together with food industry achieved higher contribution to the growth of GDP and GVA, (iii) creation of job for as many unemployed people as possible, (iv) prepared sector for WTO and EU integration. Unfortunately, the goals were achieved only partly. Agricultural sector is still uncompetitive, especially at the international market, the trade deficit is still high despite the steady growth of exports, the importance of the sector to the economy is still high, but has been decreasing year after year. With regard to WTO and particularly to European integration, formal and substantive implementation of the accession process and the adjustment of agricultural policy with CAP in FBH is still low and unsatisfactory (B a j r a m o v i c et al., 2014). The proposed annual agricultural budget of EUR 158 million is not achieved, not even close, (average of EUR 72.5 million including funds from cantonal level).

In mid-2015 FBH Parliament adopted the Medium Term Development Strategy of the agricultural sector in Federation of Bosnia and Herzegovina for the period 2015-2019 that established a new approach to FBH agricultural and rural development policy. Strategic objectives of the Strategy are: (1) The development of agriculture and related sectors, together with raising technical and technological level, more efficient use of available resources and orientation to meet demands of modern market. (2) Providing conditions for stronger generation of stable income within agricultural sector and improvement of life quality for rural population. (3) Sustainable management of natural resources and adaptation of agriculture to climate changes. (4) Adjustment of the institutional and legal framework and agricultural policy with CAP EU taking into account level of sector development in FBH. The funds needed to implement the strategy are estimated on EUR 373.82 million, which indicates sector's development orientation. The source of funds should be federal and cantonal budgets, IPARD funds and WB and EIB loan. Globalization and liberalization of agricultural trade, climate changes and integration processes, particularly those within WTO and EU are identified as main external challenges in front of the sectors. Internal challenges identified in this document are: underutilization of available resources (land and capital), low production scope, poor productivity and technological transfer, inadequate access to market of agricultural and food products, low competitiveness of the sector, environmental issues, rural development and incomplete institutional and regulatory framework[7].

Future agricultural policy in FBH will continue to be based of three pillars contained in the measures of market-price policy, direct payments (Pillar I), structural measures and measures of rural development (Pillar II) and measures related to general services to agriculture (Pillar III). Definition and elaboration of the measures/pillars was done on the principle of multi-year budget planning, which was introduced in

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[6] SESMARD: Support for implementation of the Functional Review Recommendations

[7] Source: Federal Ministry of Agriculture, Water Management and Forestry (2014)

Bosnia and Herzegovina (FBH)' practice for the first time. The basic principles of budget structure are: stability - financial fairness, consistency, transparency, traceability, long-term, modernization of public administration (institutions) and evidence based policy. Future FBH agricultural policy, as far as pillar I is concerned, will be based on gradual introduction of measures similar to CAP EU, without new measures that are not in the line with CAP EU. Changes in direct payments will go towards further reduction of direct payments based on output, strengthening payments per hectare/head of livestock and equalization amount per unit as the first step toward production-decoupled payments currently actual in EU. Regarding market interventions, the unclear role of the BH state imposes the need of certain reactions of the entity and will include the intervention in case of emergencies. Strengthening the complete chain of knowledge, particularly relation science-farmer, support to marketing and promotional activities, risk management, ensuring food safety, regular and high-quality sanitary and phytosanitary services, development studies and programs are only part of the necessary actions to strengthen pillar III of agricultural policy. Harmonization of agricultural policy with the EU CAP is one of the main orientations of the new Strategy. In this context, implementation will be oriented towards the adoption of new, lacking laws in line with EU legislation and Acquis communitarie, gradual institutional strengthening and the convergence of high standards of modern public policies such as CAP EU which understands the establishment of a modern system of informative-administrative control and the construction of other institutions, which will require significant administrative, financial and personnel changes. Finally, the Strategy provides a clear concept of monitoring and evaluation as mechanism to implement and monitore public policy as well as indicators, organizational structure of monitoring and evaluation, time and procedures of reporting on the implementation' progress.

Program of Rural Development of FBH for the period 2015-2020 have also been created. The Document is in the process of adoption and should soon become official document for this part of FB' agricultural policy. Objectives are divided into groups according to the measures, namely: (1) To improve technological, strategic and human resources, which will result in improved value chains, productivity and quality of commodities attractive to existing and future markets, thus achieving permanent increasing of the market share which will contribute to the sustainable development of rural areas. (2) To improve the condition and value of environmental resources and natural advantages of FBH through ensuring their protection and sustainable use. (3) Diversification of the rural economy, improving the environment for local economic growth and development of economic capacity, through better use of advantages of rural areas and improving the sustainability of rural communities. (4) To encourage the establishment of inclusive and competent LAGs and preparation of LDS (local development strategies), which improves the prospects for balanced local development, well-being and better sustainability of rural communities. The financial envelope for the implementation of the Program is estimated to EUR 150 million for the seven-year period for which the Program is designed. Budgets of the FBH and cantons, IPARD funds and WB and EIB loan are planned as sources of funds required to implement the Program.

Main strategic documents used to create agricultural policy during 2005-2014 in the **Republika Srpska (RS)** were Agricultural Development of RS until 2015 and Strategic Plan for Rural Development in RS for the period 2009 - 2015. The first document sets the following strategic objectives: (1) increased volume and adjusted structure of agro-industrial production for the purpose of food security, (2) optimal use of agricultural resources in order to increase productivity and competitiveness (3) a balanced integrated development, agrarian, rural and regional, productivity boosting and economic protection of market-oriented producers (4) ensuring a stable market for agricultural and food products, (5) increase in exports and achieved higher level of coverage in foreign trade exchange of agricultural and food products, and (6) increased institutional, financial, personnel, technical and technological capabilities of the sector for regional, European and World integration processes. As in the case of FBH, the objectives were achieved only partially.

The volume of production is slightly higher, but still very variable depending on the climate conditions, natural resources are still significantly underutilized, and trade deficit in agro-food products remains high, institutional strengthening is insufficient despite the establishment of new agencies and departments. Level of harmonization with EU CAP and with general trends of European integration processes is at low, unsatisfactory level. As for the second strategic document, related to rural development in RS, some progress was made in the sphere of improving competitiveness of the agricultural sector and the general support of the village, especially in the field of building infrastructure. However, investments was not even close to planned (annual plan was EUR 125 million, realization was EUR 8.5 million).

Important strategic document - the Strategic Plan development of agriculture and rural areas of the RS in 2015 - 2020 is adopted. The strategic objectives of the Plan are: (1) increased volume and productivity of agricultural production and ensured stability of agricultural producers' income (2) improved competitiveness of the agricultural sector through increased investments, (3) Increased marketability and finalization of agricultural production, (4) sustainable management of natural resources and mitigation of climate change consequences, (5) balanced integrated rural development, and (6) systematic support to development of the sector and rural areas. Defined development goals of agriculture and rural areas in RS will be implemented through three policies: (i) policy of support to production, (ii) policy of agriculture' restructuring and (iii) rural development policy. Direct support to production, in contrast to the previous period will be based on payment per unit, of land in case of crop production and on head of livestock in animal production (ruminants). For purpose of adaptation to new conditions of support, payments per output in milk and wheat will be maintained by 2018. Measures that encourage transfer of knowledge, stabilize income through various compensations for damages and diseases and measures of costs' subvention for services (insurance, storage) should be mentioned among those intended to support production. Policy of restructuring agriculture envisages increase of investment in farms and of the level of marketability and finalization of agricultural products. Finally, rural development policy understands measures aimed to assure sustainable management of natural resources, adaptation to climate change, and those that will enable balanced rural development (support for physical and service infrastructure, support to development of entrepreneurship, protection and preservation of natural and cultural heritage and support to local initiatives). This strategic document, like the one in FBH emphasizes the need for convergence and gradual harmonization of agricultural policy with the EU CAP, gradual introduction of measures applied in EU countries, with no new divergent measures. The strategy also envisages upgrading the system of legislation and institutions necessary to carry out the process of European integration in the agricultural sector successfully. The definition and elaboration of the measures has been done by the principles of multi-annual budgetary planning (like in FBH) following principles of stability, consistency, transparency and traceability. The estimated budget required to implement the Strategy amounts to EUR 920 million for the whole period 2015- 2020 respectively, EUR 153 million per year, which shows development orientation of RS agricultural policy.

RS agricultural budget makes only one source for financing and it participates with 34%, while other sources of funding are expected from EU IPA funds (1%), public companies (9%), other related ministries (8%), international organizations (8%), financial institutions (17%) and agricultural holdings themselves (17%). Agricultural budget is distributed as follows: on average 60% is allocated for production support, 34.5% for rural development including sector structural changes, and 5.5% for systemic measures.

New strategic documents for agricultural sector in both BH entities, with defined objectives, measures and mechanisms of action, made significant step forward and they can almost be described as strategy shift. The documents are made in a modern manner, thoroughly weighing all the elements of the policy cycle - planning, implementation, monitoring and evaluation. Highlighted approach of convergence and harmonization of Entity agricultural policies with CAP EU and clear commitment to reform policy, to establish and strengthen legislative and institutional framework to modernize agricultural administration are particularly encouraging.

There was no strategic document targeting exclusively agriculture and rural development[8] in **Brcko District** in the analysed period, but issues related to sector were treated within overall strategic document (Development Strategy of BD).

Budgetary transfers, agricultural policy measures, rural development policy and criteria to support producers are under the exclusive competency of the entity/cantonal ministries of agriculture, i.e., the Division for Agriculture within the Government of Brcko District. In fact, it can be said that agricultural policy of BH does not exist, but only the aggregation of policies on entity and cantonal level with no coordination so far (E r j a v e c et al., 2010, B a j r a m o v i c, et al., 2014).

Since legal and institutional framework clearly defines measures regarding support to agriculture and rural development as the competence of entities and Brcko District, analysis of the agricultural policy' development in this report will focus on agricultural policy analysis of each administrative level.

Table 5. Bosnia and Herzegovina: Main agricultural policy instruments and measures; 2005 and 2014

		Implemented	**Since 2005, the support has**	**Significant changes** (e.g. main measures, omitted, newly introduced, products/sectors covered, payment criteria etc.)
Market support measures	**FBH**	Yes, regularly	Increased	Although certain funds are allocated for measures that can be classified as market support measures, an active and real mechanism of competitive pricing policy in FBH has not been established yet. Intervention ransom was implemented in 2008 and 2011. Continuous support for processors in the period 2005 – 2014 was created and implemented by the cantonal level. Export support was introduced in 2012. Since 2011 implementation system has been revised (regulations introduced).
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	No big importance of these measures in RS with modest budgetary fund allocated for them. Measures continuously present until 2011. No allocation in 2011 and 2012, re-introduced in 2013. The main measures are market intervention, emergency needs (unclear on what they refer) and intervention ransom. Mostly the same sectors were covered during the entire period of observation.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Not implemented		
Variable input subsidies	**FBH**	Yes, regularly	Increased	The measure was implemented from cantonal level. It includes subsidies for: artificial insemination
		Yes, occasionally	Decreased	

[8] In fact, the document "Strategy for Agriculture, Food and Rural Development in Brcko District for the period 2008-2013, was made, however, it was never sent to official adoption procedure.

		Implemented	Since 2005, the support has	Significant changes (e.g. main measures, omitted, newly introduced, products/sectors covered, payment criteria etc.)
		Not implemented	No significant trend	(continuously), breeding animals (only in 2008), fuel (2011 -2014) and short-term loans' interest (2014).
		Not significant		
	RS	Yes, regularly	Increased	The main measures are subsidies for fuel and mineral fertilizers. Implementation of this measure has been variable since 2008, when it was introduced as a permanent and major support measures for plant production. Purchase of seed and planting material was subsidized only in two years (2005 and 2007). There were breaks in implementation in 2008 and 2010, due to debt not to the abolition of the measures.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Not implemented		
Direct payments based on output	**FBH**	Yes, regularly	Increased	The main measure of support, with highest share of milk premium in allocation, during the whole observed period. Premiums for certain products have increased, but milk remained the most supported production (EUR 0.07 to 0.15 / litre). Since 2011, implementation system has been revised (introduction of regulations). Almost entire crop production has been supported per land unit land (ha) instead of support per output unit since 2011.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	The main measure of support to agriculture. Milk premiums are dominant during entire observed period. Since 2010, premium for milk has been linked to the class/quality of milk. Since 2008, most of premiums in plant production were transferred to subsidies. Since 2011 payments per ha for wheat has been re-introduced. Rate for determining the amount per output unit for most products is variable.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Yes, regularly		In 2005 and 2006 this was the exclusive support to producers, while 2007 and 2008 were transitional years with gradual introduction of payments based on area/animal, which in 2009 became the only form of direct support. The main supported products were milk and cereal crops.
		Yes, occasionally		
		Not implemented		
		Not significant		
Direct payments based on area/animal	**FBH**	Yes, regularly	Increased	One of the most important measures in FBH. Since 2011, most of the premium for crops have been replaced with payment per hectare. Besides, system of implementation has been changed, introducing regulations on eligibility for support. Obligation to sell products as precondition to receive support has been introduced in FBH for most of productions, since 2011.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	The second measure by importance. Since 2009, there is no fixed support per unit, but the support is being subsequently calculated on the basis of applications for support and of the amount of approved fund for given production.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Yes, regularly	Increased	The most important and the only direct support to production since 2009. Both number of productions covered with measure and implementation system (criteria) remained almost unchanged.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	

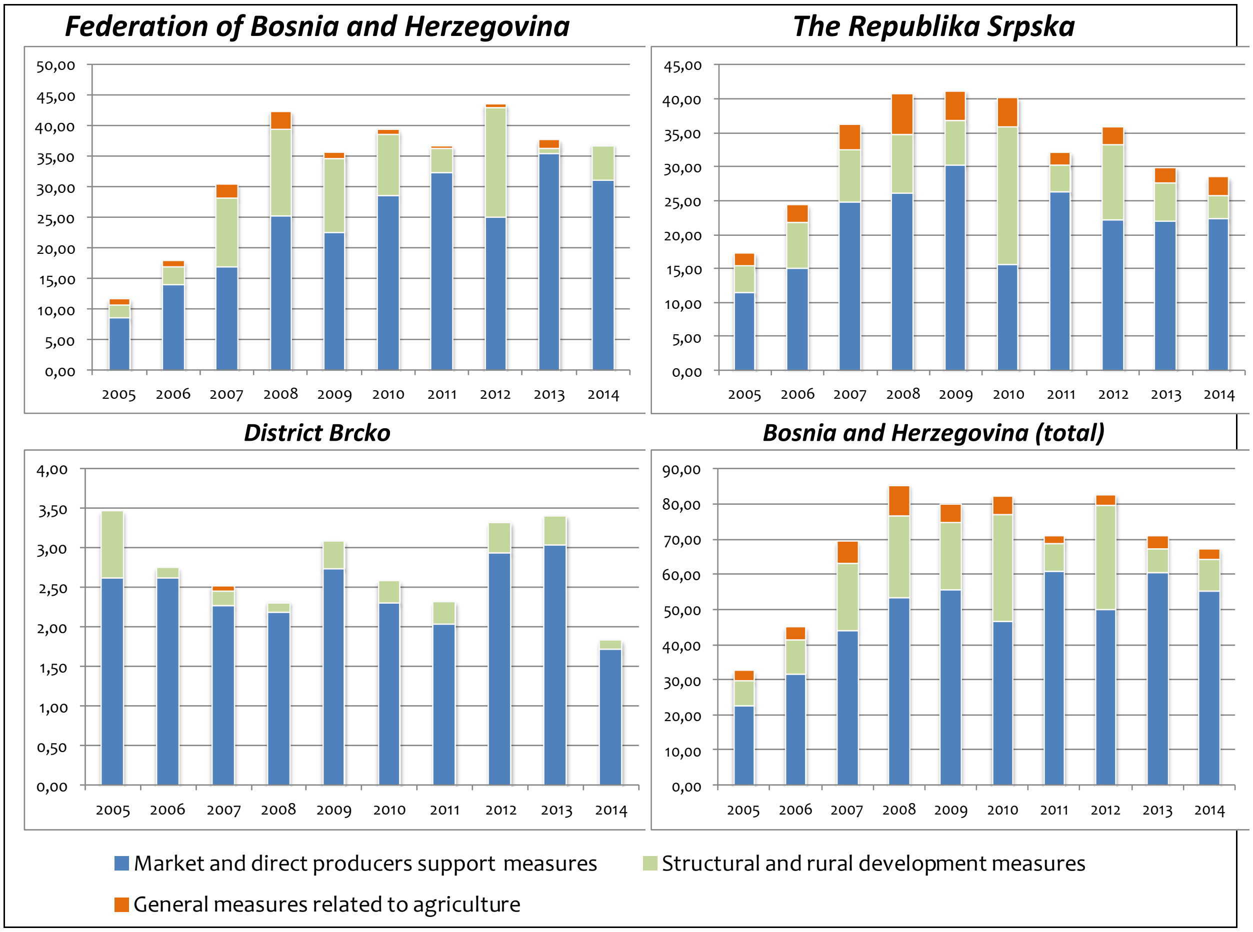
		Implemented	**Since 2005, the support has**	**Significant changes** (e.g. main measures, omitted, newly introduced, products/sectors covered, payment criteria etc.)
		Not significant		
On-farm investment support	**FBH**	Yes, regularly	Increased	The measure in force since 2005. The main measures are investments for the modernization of farms and agricultural holdings. Allocated funds varied considerably from year to year, and were particularly significant in the period from 2006 to 2009. In the period 2011-2014 there was no funding from the federal budget, and funds from cantons were very modest. Since 2011, the system of implementation has been revised (regulation imposed).
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	The measure in force since 2005. The main measures are investments for the modernization of farms and agricultural holdings. Allocated funds are quite modest and vary from year to year.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Yes, regularly	Increased	The measure in force since 2005. Almost the only measure of the second pillar of agricultural policy. The main measures are investments for the modernization of farms and agricultural holdings. Allocations vary from year to year.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
Food industry support	**FBH**	Yes, regularly	Increased	The measures in force since 2005. The main measures are certification (continuous measures since 2009), construction and equipping of the food industry (an important measure until 2009 when it was abolished and re-introduced in 2014).
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	Modest allocation for this measure. The measures was in force during the entire period of observation. The main measures are certification and equipping.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Yes, regularly	Increased	Support was implemented in one year (2007) and it was related to investments in the processing industry.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
Environment related payments	**FBH**	Yes, regularly	Increased	The measure was implemented in 2007 and 2008 (when budgets were the most stable) and refers to payments to farmers in LFA, and since 2009 it has not been applied any more.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Not implemented		
	BD	Not implemented		
Rural area support	**FBH**	Yes, regularly	Increased	The main measures are: diversification of rural economy, support to rural infrastructure, renovation of villages, conservation of autochthonous species and breeds. These measures were actual during the period from 2007 to 2011, since when they practically have not been implemented. The system of implementation was not changed while measures were in force.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	

		Implemented	Since 2005, the support has	**Significant changes** (e.g. main measures, omitted, newly introduced, products/sectors covered, payment criteria etc.)
		Yes, occasionally	Decreased	This group measures is in force in continuity with the variations in the implementation of particular measure. All measures from this group have no continuity, but they are implemented in some year, and after a while being ejected. For example, diversification was introduced in 2009 and since 2012 is no longer implemented. Support for rural infrastructure was implemented in the period 2006-2010, not implemented in 2011, reintroduced in 2012 and 2013, and not implemented in 2014.
		Not implemented	No significant trend	
		Not significant		
	BD	Not implemented		
General support measures	**FBH**	Yes, regularly	Increased	Very modest allocations for this kind of support, particularly in the period 2011-2014. Measure is related to plant control, research, development and inspection services. Budgets for veterinary services and agriculture are separated in FBH. Veterinary control was part of the third pillar (support from the cantonal level) until 2010, when it was withdrawn. Similar situation is with technical assistance that was in force until 2008. Since 2011, implementation system has been revised (special regulations introduced).
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	RS	Yes, regularly	Increased	The main measures are control of animal health, plant protection and food control. Measures intended to support research and development, infrastructure, training and professional work are within measures too. Extension service was supported only in 2009.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	
		Not significant		
	BD	Yes, regularly	Increased	These groups of measures were implemented only in 2007 when funds were allocated to support extension and advisory work.
		Yes, occasionally	Decreased	
		Not implemented	No significant trend	

The total budget allocation in FBH was steadily growing until 2008, since then it was decreasing by 2013, and in 2013 and 2014 remained stable on the average of EUR 37 million. Measures of pillar I dominate in the structure of measures, particularly direct payments, while the general measures to agriculture were very modest in the period 2011-2014, annually accounting to less than EUR 3 million (in 2014 only 0.26 million or 0.7% of the total agricultural budget). With the exception of 2012, direct payments were recording continuous growth from 2005 to 2013, and total allocation for this purpose increased from EUR 8.21 million in 2005, to EUR 31.53 million in 2013. Payments based on output prevailed by 2008 and were mainly related to milk, tobacco and arable crops. From 2009 until 2013, the structure of direct payments changed, so payments based on area/animal (from 2011 almost entire plant production) prevail. In 2014, unreasonably high increase in premiums per liter of milk from EUR 0.09 to EUR 0.15 took place, thus payments based on output again became dominant making up 55% of direct payments. Unlike RS, there is no significant support to variable inputs in FBH, it mainly comes from cantonal level and only in 2013 and 2014 it exceeded EUR 1 million making 3-5% of the total direct payments.

Support for structural and rural development measures in FBH has the most pronounced variations from year to year and it was mainly related to increase competitiveness of the agricultural sector and on-farm investments. Such approach obviously shows that agricultural budgets do not have a development component (this is the only pillar of the policy which contains developmental aspect) and the allocations for rural development depend mostly on the current governments and their understanding of this part of the policy. Last administration obviously did not have such understanding so, allocations for this pillar were cut in the last years of the analysed period, thus accounted for only 2.3% in 2013 and in 2014 15.4% of the total budgetary support.

***Figure 3. Bosnia and Herzegovina: Development of budgetary support to agriculture, 2005-2014* (APM by pillars)**



Source: Own calculation based on publicly available data and internal documents of Federal Ministry of Agriculture, Water Management and Forestry, Ministry of Agriculture, Forestry and Water Management of the Republika Srpska, Department of Agriculture of District Brcko Government and cantonal ministries (departments) for agriculture of Federation of BH (compiled in APM database).

Total agricultural budget in RS was growing steadily until 2009 (EUR 41.22 mill.). Since 2009 it has been declining, so in both 2013 and 2014 it was below EUR 30 million. With the average 2/3 of total budget pillar I, market support measures and direct payments have the highest share in support to agricultural producers in RS. Direct payments, including support for variable inputs had continuous growth until 2009, when amounted EUR 28.35 million, and then, after a sharp decline and modest allocation of EUR 11.9 million in 2010, this type of support stabilized between EUR 21 and 22 million in the period 2011-2014. In the structure of direct payments, payments based on output have the highest share which in the period 2012 -2014 was on average 70% or around EUR 15 million. Most of these payments refers to milk sector. Unlike FBH, important part of direct producers support in RS refers to subsidies for procurement of variable inputs in which reimbursement for oil, fertilizers and seed dominates. In some years, like in 2011, it made up 60% of the total direct support and in the period 2012-2014 this share ranged 13-20% of DP support.

Similar to situation in FBH, structural measures and rural development measures in RS varied the most from year to year, and mainly referred to agriculture' competitiveness improvement and to support for village. During the period 2005-2014, the allocations for this pillar were increasing steadily until 2010 (exception was 2009), when the highest amount (EUR 20.34 million) and share in total agricultural budget (50.6%) was achieved. It was followed with decrease in 2013 and 2014 when accounted for only 15% of the total agricultural budget. As in FBH, it is obvious that agricultural budget in RS does not have development component, considering pronounced variability in both absolute and relative terms of allocations for rural development. General measures concerning the sector had greater support in RS compared with FBH, so during the period 2012-2014 they accounted 7-9% of total agricultural budget. Finally, introduction of regulations for classification of holdings to commercial and non-commercial ones took place in 2013. According to it, those holdings that choose to be classified as commercial ones are obliged to pay retirement and health insurance.

Serious budgetary transfers for agricultural sector in Brcko District began in 2005 and from then until the end of 2013, accounted within the range of EUR 2.3 to 3.5 million. On the average, 90% of the total funds were allocated for the implementation of measures of pillar I, and the rest for rural development measures, while support to pillar III did not exist, except symbolic amount in 2007 and 2008. Direct payments have been prevailing, and since 2009 they are based only on surface (crop production) and on head of cattle (animal production). Agricultural budget has been drastically reduced in 2014 and accounted only EUR 1.8 million.

4. Farm issue

Farm structure and trends

There is still no comprehensive picture of the farms structure in BH[9], because the agricultural census has not been conducted yet, and the last one took place back in 1960. Based on limited data on agricultural holdings and their structure, obtained from the agricultural pilot census in 2010[10], average area of used land is 1.97 ha per holding with average four plots per holding on family farms, which is considerably less than in EU-27 (14.3 ha[11]).

Disregarding the lack of statistic data on the number, size and structure of farms in BH, problems such as farm-size, fragmented land property and dual structure of farms certainly exist. BH agriculture is still dominated by small farms, fragmented into small land plots. Besides, minefields, as the post-war problem, further complicate the situation and lead to partial or complete abandonment of production and housing in certain areas of the country.

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[9] The results of the first post-war population census in BH were announced for June, 2015, including preliminary assessment on farm number. Unfortunately, due to certain (political) reasons it was postponed until further notice, which made impossible to give the first official data on the number and size of farms in BH in this report.

[10] Agricultural pilot census was conducted by the three statistics agencies in BH (national and two entitiy agencies) in October 2010 within IPA 2007 BH AIS

[11] Eurostat, Statistics explained, Agricultural holdings 2000-2010

Most of the countries that joined EU in 2004 and 2006 also had unfavourable structure of agricultural holdings and took steps to improve it. Besides the fact that some of these countries have established a land bank (mostly in the form of state agency) managed by a professional institution for the purpose of consolidating agricultural land, most of them also apply combinations of other measures (support to young farmers, early retirement of farmers, improvement of infrastructure related to the agriculture, consolidation, etc.). According to research within the UNDP report on human development in BH for 2013[12], one-half of rural households are engaged in agriculture a little or not at all, 36% of rural households have "small farms" where they meet a considerable part of their needs for food, and less than 1% of households may be classified as "commercial farms" and be a subject of IPARD measures for the improvement of agricultural production and marketing activities.

Unfavourable size and structure of farms is certainly one of the challenges confronting ministries of agriculture in both entities and imposes itself as one of the most important strategic issues to be addressed in the future. Erjavec et al. (2014) identified a number of key objectives of future agricultural and rural development policy in Western Balkan countries including the land management reforms. This understands achievement of several operational goals (land consolidation, increase of viable farms' size, improvement of land quality, better water management and better access to agricultural land).

One of the ways to solve problems is development of land market. Problems related to non-functioning or poorly functioning of the land market in BH limit and slow down the restructuring of the sector. Inappropriate legislation in terms of property rights and irresolution in the choice of the concept of real estate registration slow down modernization, digitalization and restoration of cadastre and land registry, which is the basis for land trade. In addition, such state of the land market reduces its value, and the possibility of its use for providing the necessary loan guarantees (collateral). Although there is a law on agricultural land, there is no arranged databases or data exchange between the administrative levels on the conversion of agricultural land use. Due to inadequate and uncontrolled administrative procedures of agricultural land' conversion of use leads to significant and permanent loss of this scarce resource usually of the one of the best quality.

The above mentioned problems strongly limit the growth, restructuring and modernization of the sector. Therefore, t is necessary to establish and strengthen regulatory and institutional framework, to initiate joint initiative of all responsible institutions in order to contribute to a more rational use of land, protection and improvement of land quality and land development (agro and hydro ameliorations, land consolidation). Therefore, agricultural policy should support the creation of systems for land management, and in particular, establishment of facilitating mechanisms (digitalized databases of soil, LPIS, systematic data on land supply and demand, coordinating body for agricultural land (all administrative levels), modernization of cadastre land registers etc., as well as the definition of long-term land policy.

5. EU integration process

Stabilization and Association Agreement (SAA) between Bosnia and Herzegovina and the European Union came into force on June 1, 2015, thus creating conditions for discussion about submission of BH application for EU membership and obtaining candidate status [13]. After the new administration was

[12] Report title: Rural Development in Bosnia and Herzegovina: Myth and Reality

[13] According to the statement of BH President of the Council of Ministers, Bosnia and Herzegovina will submit an

created (beginning 2015), BH authorities clearly expressed desire to unblock stalled EU integration process and to make serious steps forward, to work on reforms, particularly on important economic reforms, reforms in the social security system, as well as on those relating the rule of law.

Both formal and essential implementation of accession process and adaptation of agricultural policy to CAP in Bosnia and Herzegovina is still at unsatisfactory level. Agricultural policy in both BH entities considerably differs from it, both in the range and structure of measures, so the applied policy is far from the EU model. In both BH entities, direct payments per output make a larger part of direct payments, whereas they almost do not exist in the EU countries. Modest transfers for rural development measures almost completely pertain to Axis 1 and investments in agricultural holdings, while Axis 2 and environmental preservation measures, as a mandatory part of CAP, practically do not exist in BH.

A special problem for rural development policy in BH is failure to establish necessary institutions of IPARD structures at the state level that would enable withdrawal of IPARD funds. A new approach announced by BH authorities towards EU integration could solve this problem and allow the country and its entities access to significant resources for adaptation and improvement of the agricultural sector, but will create opportunity to establish essential elements of CAP administrative framework as well. In addition to the established differences in the scope and structure of the measures, there are still many other gaps between BH (its entities) agricultural policies in comparison with CAP. Issues related to agro-environment are insufficiently treated and poorly supported. Besides, there is the lack of numerous legislative documents while those existing need to be harmonized with EU standards and regulations. The most important features of the rural areas of the country such as poor social status of small agricultural holdings and pronounced poverty are being solved poorly and slowly. Although there are lots of Less Favoured Areas in the country these areas have been and still are neglected as subjects for support from agricultural policy makers in both BH entities. General services in agriculture are poorly supported and make a very small part of the budget (especially in FBH). This is particularly worrying if as there is a serious lack of innovation in the sector in both BH entities. Besides, knowledge transfer, advisory and extension services are at unsatisfactory low level.

As for all countries of the Region, European integration is the key objective for BH too. Harmonization with the EU CAP is actually the biggest challenge, but also an opportunity for agricultural policy modernization. Joining EU understands radical change and modernization of management manner, and of activities of all stakeholders in the sector. This ultimately means strong investing in development and equipping of new institutions, as well as strengthening the knowledge, skills and abilities of all actors. Therefore it is a challenge for every candidate country, especially for less developed ones, or for those countries that are in economic and political crisis, such as BH. Generally speaking, the process of EU integration in agriculture understands harmonization of legislation, building and strengthening institutions and the reform of agricultural policy as a whole. Therefore, institutional and legal framework needs to be radically restructured, to be the basis for modern, flexible and sector-oriented agricultural administration at all levels. Priority should be given to creation of precise operational plan for taking over the *Acquis* and to the adoption of missing laws and working out a plan to establish missing institutions and mechanisms necessary for the efficient management of the sector that can support its further development. This will help in overcoming delays in process restructuring, and EU accession.

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application for EU membership by the end of 2015 or beginning of 2016 years, and it likely that BH get candidate status in early 2017.

Strengthening of administration and agricultural policy are important, but not the only element of successful preparation for EU accession. The success of this process depends, first of all, on the restructuring and modernization of agriculture and agro-business. Only competitive food production chain can contribute to sustainable development and to the success of the approach. It is not task and responsibility exclusively of states / entities, but of the whole sector. Economic and academic institutions have responsibilities in that process as well.

New strategic documents for development of agricultural sector were adopted in both entities, and for rural development in RS. The adopted documents and their development-oriented concept are based on clearly defined external and internal challenges and identified strengths and weaknesses of the sector. Both documents highlighted a clear commitment to European integration and have defined measures for gradual and rational adjustment to CAP. Judging by the positive evaluations from the side of science and practice, but from EU Delegation to BH too, the only task in front of the sector is to fully implement proposed measures.

6. Strength and weaknesses of agriculture

Bosnia and Herzegovina is characterized by diversity of agro-climatic zones which allow diversified crop production. There are available unused natural resources for the development of agriculture. This primarily refers to the intensive arable land, which is only partially used (50%), and grassland areas that are favourable for the development of animal production.

The quality and availability of human capital is a key pillar of improving any economic sector. Although unemployment is a major problem in BH, the availability of labour force in agriculture is limited by low population growth, pronounced rural-urban migration and underdeveloped transport infrastructure. These problems in some areas even prevent the use of resources and contribute to the chronic problems of agriculture - low productivity and slow restructuring of the sector (N i k o l i c et al., 2014). The quality of human resources is determined by their age and educational structure, which is in rural areas very unfavourable. As for physical capital, existing facilities in both animal and plant production are old, technologically outdated, energy inefficient and not adapted to the requirements in terms of reducing the negative impact on the environment.

Farm equipment is unsatisfactory, machinery and equipment are outdated and old, and the structure and manner of use is not in accordance with the needs of modern farming practices. One of the major problems of the sector are, without doubt, the small size of farms, fragmented land area and expressed duality. Another big problem of almost entire BH agricultural sector is low productivity, both per production unit and per farm. Low productivity is the main cause of low competitiveness, especially on domestic market. Of course, the low productivity of agriculture is a consequence of the lack of a clear specialization, primarily in crop production, but also of poor technical farms equipment and high dependence on weather conditions. Progress in productivity in some production (milk, fruit) are noticeable, but this process is still very slow.

The structure of the food industry is very unfavourable, as micro and small enterprises dominate in it. This industry works with a very low level of capacity utilization and it is much more production than market oriented.

The network of public and private institutions and organizations, based on life-long education and research institutions, which would enable efficient transfer of knowledge, technology and information, and form the basis for innovation and modernization, has not been established yet. Besides, there are neither plans for strengthening and development of existing advisory service, nor cooperation and coordination among the parts of the services. BH continues to keep the status of net importer of agro-food commodities with very prominent trade deficit, which is another indicator of the undeveloped agriculture and food production value chains.

Weak horizontal and vertical integration is also one of the important characteristics of the sector. The low level of market orientation, lack the ability to "deliver quality, quantity and ensure consistency" and underdeveloped value chains endanger access to market and contribute to low competitiveness of the sector. Due to fragmented agricultural production, one of the most important channels for marketing agricultural products, food industry, is not motivated to create strong, long-term links with the agricultural producers. Insufficiently strong food industry is not able to take the role of the main actors of the vertical cooperation into efficient value chain. The development of the sector is also limited by underdeveloped logistics and economic activities that facilitate transport, storage, processing, and allow efficient exchange of information between final consumers and various stakeholders in the sector. Sector also misses "smart services" providers for: improvement of design performances, information on market needs, programs, technological, marketing and management of business improvement, benchmarking and so on. Finally, negative demographic trends in rural areas and the low level of social capital development additionally limit modernization of the sector.

SWOT analysis of Bosnia and Herzegovina Agriculture Sector

S - Strengths	**W - Weaknesses**
- Agro-climatic conditions allow diverse plant production, - Available uncultivated arable land and unused natural grassland allows development of both plant and animal production; - Abundance of forests and uncultivated areas rich in forest, wild, medicinal and aromatic plants; - Available labour force; - Available water resources for irrigation - Preserved autochthonous livestock breeds and varieties of fruits and grapes; - Tradition in on-farm production and processing (jams, juices, brandy, cheese); - Some branches have shown competitiveness (wine, soft fruits, fish, greenhouse production); - Growing awareness about standards in production and the need for their introduction into practice; - Growing awareness of the need for modernization of institutions; - Increasing motivation for cooperation and coordination; - The existence of a successful, export-oriented companies;	- Expressed fragmentation and high share of very small farms; - Low yields and low labour productivity in entire primary; - Poor technical and technological capacities of a large number of farms; - Instable yields and high price fluctuations; - Lack use of agricultural machinery; - Low level of farmers' knowledge of technology, marketing and management; - Use of non-certified seeds in crop production; - Low share of irrigated in total arable land; - Unspecialized, dual production; - Lack of horizontal and vertical cooperation; - Unfavourable age, educational and social structure of the rural population; - Depopulation of rural areas and brain-drain; - High dependence on imported inputs and intermediate goods; - A poor trade balance in most of agricultural and food commodities; - Inadequate agricultural statistics and underdeveloped IT and analytical system; - Inefficient extension and advisory services (particularly in FBH); - Unavailable public services;

- The existence of an internationally recognized certification company (OK). - New, modern development strategic document adopted in both BH entities;	- Uneven territorial distribution of processing capacities; - Food industry technologically outdated, inefficient and uncompetitive; - Low level of adaptation to market requirements; - Underutilized capacities in food industry; - Institutional and legal framework does not comply with EU practices and standards
O - Opportunities	**T - Threats**
- Available EU pre-accession funds for agro-sector and rural development, - Agriculture is defined as a development priority in the country; - Increase in global demand for food, - Growing needs of food industry for raw material; - Access to regional markets through the CEFTA; - The trend of growth in demand for, and products with a mark of quality and origin; - Strengthening of complementary economic sectors (tourism and catering); - EU integration processes move agriculture up on political agenda.	- Global climate change; - Poor management of water resources can lead to floods or droughts; - Unsynchronized development of other sectors with development of agriculture, may influence further depopulation and under-utilization of natural resources; - Political instability and poor business environment threaten FDI; - Corruption, - Grey economy; - Reduced donor funds; - Development policies insufficiently harmonized with the EU Acquis; - Lagging behind in the EU integration; - Lack of credit lines tailor-made for agriculture; - Inadequate border control allows presence of commodities of susceptible origin and quality; - The bad economic situation and reduced purchasing power; - Underdeveloped communication infrastructure, especially in rural areas; - The inability of local authorities to take responsibility - Poor image of BH due to recent war, political instability and economic underdevelopment.

What are the steps necessary for changes? Creators of agricultural policy in BH entities first need to create a clear vision of the agricultural sector development, as well as firm commitment to the European integration processes and adjusting to CAP. After that, it is necessary to define clear objectives of agricultural policy that take into account previously mentioned. They could, in fact, be summarized as follows:

a) The development of agriculture and related sectors by way of more efficient use of available resources, which requires further raise of technological level of production;
b) Increase and stabilization of income in agriculture and improvement of the quality of life in rural areas;
c) Stronger horizontal and vertical integration;
d) Sustainable management of natural resources and adaptation of agriculture to climate changes,

e) Reduction of rural poverty and problems of small farmers;
f) Harmonization of the institutional and legal framework and agricultural policy with CAP EU respecting development level of agricultural sector in Bosnia and Herzegovina.

It is quite certain that improvement in institutional and legislative framework and strengthening the administration at entity state level will be key for the development of the agricultural sector in the coming period. Establishment of the adequate administrative framework and systems necessary for the implementation of CAP are among key requirements that a candidate country must meet before joining EU. In EU countries, establishment of institutions, systems and the necessary procedures is provided by ministry of agriculture. Due to the lack of such ministry on state level in BH, it will have to fulfill numerous administrative and institutional requirements, and to establish necessary information systems, in order to fully implement the pre-accession IPARD measures. Among other shortcomings in administrative and institutional infrastructure in BH, entities and Brcko District, a special problem is weak or non-existent development of IACS system (Integrated Administration and Control System) elements, that will, with the advancement of EU integration, become a requirement for full implementation and enforcement of direct payments to agriculture. Establishment of a database, LPIS (Land Parcel Identification System), a system of identification 11 that will be able to ensure compliance with the standards of product safety and quality, marketing, size and packaging, labelling rules, analyses and controls, monitoring, etc.

The most important suggestion to agricultural policy makers in BH could be resumed as follows (E r j a v e c et al., 2014): the adoption and expansion of the concept of development-oriented agricultural policy in order to effectively define key objectives of policy design. This concept understands efficient use of natural resources and organization, increasing productivity, improving the efficiency of the agro-food value chains, fostering cooperation and support to structural changes such as land reform, all of which contributes to the improvement of living standards of rural population. There are no obvious alternatives to a decisive development orientation. In this regard, European integration and adoption of the EU CAP objectives and instruments may serve as a good motive and catalyst for change. The CAP is a demanding and moving target for the SEE countries, but has the potential to introduce an active and positive attitude towards agriculture and functioning as both a development model and a benchmark. The gradual introduction CAP elements will facilitate the modernization of agriculture and public administration as well as the adoption of EU legislation, and consequently speed up the EU integration process.

Announced changes in agricultural policy in both entities that could be called the policy shift are encouraging. Adopted strategic documents of agricultural sector development in both FBH and RS clearly support the European integration path and harmonization of agricultural policies with CAP EU. This was achieved by mean of planning measures on multi-years basis and in terms of adaptation to the requirements of EU accession, parallel with strengthening domestic agriculture during the pre-accession period. There are numerous similarities between new entity's sector development strategies in objectives, mechanisms of action, proposed measures, which certainly encourages and makes the first necessary steps towards creating equal business conditions for all BH farmers. It remains to be seen to what extent strategic documents are feasible, to what extent planed budget are realistic and whether domestic administration is persistent in their full implementation.

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