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# GAIN Report

Global Agricultural Information Network

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## Serbia

### Grain and Feed Annual

#### Annual Report on Wheat, Corn and Barley for Serbia

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**Report Highlights:**

Persistent drought in July and August 2017 has affected most of the spring crops in Serbia, mainly corn, soya, sunflower and sugar beets. Crop yields were forecasted to decline by 30-60 percent with total losses potentially reaching USD 1.5 billion. Serbia's marketing year (MY) 2017/18 wheat crop was good at an estimated 2.3 million metric tons (MMT), but 23 percent lower compared to 3.0 MMT in the previous record year. Good wheat quality and high ending stock left over 1 MMT of wheat available for export. The MY 2018/19 wheat planted area is reported to be 17.3 percent higher than last year or approximately 675,000 hectares (HA). Post estimates for MY 2017/18 corn production reached 4 MMT, or a drop of 50 percent compared to 2016 when corn production was a record high 7.6 MMT. Corn and wheat exports from Serbia reached record low levels in MY2017/18 due to limited quantities

and high prices. For MY 2018/19, planted area for corn is projected to be 900,000 HA or 10 percent lower than last year.

## **Executive Summary:**

Last summer Serbia was hit by an extreme drought with record dry weather and high temperature conditions nearly exceeding the previous drought years of 2000 and 2012. Experts estimate that total losses in agriculture production were around USD 1.5 billion. Estimated losses by major crops were: corn (USD 420 million); sugar beet (USD 130 million); soybeans (USD 120 million); fruits and vegetables (USD 110 million); sunflowers (USD 100 million); and other agriculture crops (USD 600 million). Agriculture in Serbia is the economic and development engine for rural areas. It is also the only sector in the economy with a positive foreign trade balance, making up 23 percent of total Serbian exports and contributing nearly 10 percent to the country's GDP.

Serbia's total planted area for all crops is estimated at 3.2 million HA, with a drop of 180,000 HA in spring crops planted, compared to last year. Approximately 700,000 HA were planted last fall (i.e. wheat, rye, oats and barley) and spring crops (i.e. corn, sunflower, soya, sugar beet, tobacco, vegetables, forage crops, etc.) will be planted on approximately 2.5 million HA. This year's crop yields and agricultural production will again depend on weather conditions during the vegetation period of the crops, as Serbia only irrigates about 7-9 percent of its arable land. Planting of spring crops starts in the beginning or mid of April. Total planting costs have increased 10 percent compared to the previous year, mostly due to the increased costs of diesel fuel and seeds. Despite the mild winter and cold beginning of spring with late snow, the condition of the fall crops is good and the moisture level of arable land is sufficient for farmers to begin spring planting.

Despite warm weather and dry soil conditions during the spring and lack of precipitation in the spring and summer, wheat yields for MY 2017/18 wheat were not damaged as much as other crops in Serbia. Weather conditions, however, were good for wheat development during most of the winter. Even with record temperatures as low as -20 C and no significant snow cover, most of the wheat crop was thriving at the beginning of harvest in mid-June 2017. The final for the marketing year (MY) 2017/18 wheat crop was 2.3 million metric tons (MMT), 23 percent lower when compared to 3.0 MMT in the previous record year. This is sufficient wheat crop for domestic consumption with over 1 MMT of wheat left for exports.

The MY 2018/19 wheat planted area is reported to be 17.3 percent higher than last year or approximately 675,000 hectares (HA). Of this total wheat area, 400,000 HA were planted in the Vojvodina region and 275,000 HA in the Central Serbia region. With average wheat yield of 4.6 MT/HA, total wheat production in MY 2018/19 could reach 3.1 MMT.

From July 2017 to February 2018, Serbia exported, in total wheat and wheat flour, 492,467 MT (346,052 MT of wheat and 146,415 MT of flour) or approximately 50 percent less than in the same period last year when Serbia exported 940,000 MT. This is mostly due to the non-competitive prices and low demand for Serbian wheat due to record crops in the Black Sea region (Russia and Ukraine) in MY 2017/18. As of March 2017, Serbia has nearly 1.0 MMT of wheat available. Exports were mainly destined for the EU and neighboring countries (i.e. Bosnia and Herzegovina, Montenegro, Croatia, Kosovo, Italy, Switzerland, Macedonia and Albania). The current Serbian, FOB Danube, wheat price is between USD 174-176/MT, depending on quality.

In MY2017/18, corn was one of the crops that was hit hardest by the extreme summer temperatures and lack of precipitation. Corn was planted on 1 million HA, and production was expected to reach 7 MMT (based on an average yield of 5.4 MT/HA). However, a lack of precipitation in July and August, taken together with very high temperatures of over 104 degrees Fahrenheit in an extended period, stressed corn plants. The dry period has coincided with the critical corn pollination period thus increasing the risk for poor kernel development. With average yields 50 percent lower than in MY2016/17, corn production in FY2017/18 reached 4 MMT, or a drop of 50 percent compared to MY2016/17 when corn production was a record high 7.6 MMT. In MY2016/17, it is estimated that Serbia earned USD 420 million from exporting 2.5 MMT of which the majority was shipped by river barges on the Danube River to the Romanian port in Constanza.

For MY 2018/19, planted area for corn is projected to be 900,000 HA or 10 percent lower than last year due to the increased wheat crop and farmers' experience with huge corn damage due to the drought. Total corn production is forecast at 5.8 MMT, which equates to an average yield of 6.4 MT/HA.

Planting of corn will begin with some delays in mid-April due to the winter conditions at the beginning of spring. Costs associated with the new corn-planting season will be 10 percent higher due to the increased price of diesel fuel and unsubsidized seed costs. For MY 2018/19, based on forecasts for total corn production of 5.8 MMT, Serbia could export approximately 1.2 MMT.

Effective January 1, 2018, the Serbian government reduced customs tariffs for corn, live cattle, live swine and soybean meal from EU countries to zero percent until August 31, 2018.. According to the government, these measures were put into place due to the high domestic price of corn and soya, limited quantities of those commodities, and low quality due to significant drought that reduced corn and soya yields last summer.

Even sunflower, which can resist very high temperatures, was affected by adverse weather conditions in July and August 2017. Last spring Serbian farmers planted approximately 220,000 HA of sunflower, the same as the previous year. Post estimates that about 15 percent of soybeans were damaged by the drought. With an average yield of 2.4 MT/HA, total production in MY2017/18 is estimated at 540,000 MT, a drop of 80,000 MT compared to MY2016/17. It is estimated that farmers will plant the same area with sunflower this spring, 220,000 HA. With sunflower average yields of 2.5 MT/HA, production of 550,000 MT is possible. In MY2017/18, Serbia exported 20,000 MT of sunflower but imported over 130,000 MT. High imports are the result of smaller domestic supply and higher prices. The current price for sunflower seeds is 40 din/kg (USD 417/MT).

Soybeans were one of the most damaged crops due to last year's extreme drought. In MY 2017/18, production of soybeans was reduced by 30 percent compared to last year. Last spring soybeans were planted on 200,000 HA, and due to drought, yields were a record low of 2.3 MT/HA. Total production reached 460,000 MT. This is 190,000 MT or 30 percent lower than last year. It is estimated that Serbia will export around 90,000 MT of soybeans, while imports could reach a ten-year record level of 130,000 MT. Soybean crushing facilities imported more products this year due to limited domestic supply and high domestic prices. Imports of non-GE soybeans came mostly from neighboring countries, but over 50,000 MT was imported from India. The current price of soybeans is 45 din/kg (USD 468/MT). There is also high demand for Serbian soybeans in the EU due to its GMO-free status. But low production inhibited Serbia's ability to meet this demand in MY2017/18. This spring, farmers will increase areas with soya to approximately 220,000 HA. With an average yield of 2.5 MT/HA, total production could

reach 550,000 MT.

In MY 2018/19, barley area is projected to be over 100,000 HA, about 5 percent higher than last year.

Of the total areas planted with barley, 90,000 HA was planted last fall as winter barley and an additional 10,500 HA will be planted as spring barley. It is projected that average yields will be approximately 4 MT/HA, leading total barley production to reach over 400,000 MT.

**Table 1: Final spring sowing area in 2017 and expectations for spring 2018**

Crop	Sowing areas in HA	
	2017	2018 projected
Small grains	170,000	170,000
Corn	1,100,000	900,000
Sugar beet	50,000	50,000
Sunflower	220,000	220,000
Soya	200,000	220,000
Tobacco	15,000	15,000
Vegetables	450,000	450,000
Forage crop	350,000	350,000
Other crops	165,000	165,000
<b>Total:</b>	<b>2,720,000</b>	<b>2,540,000</b>

Source: Serbian Chamber of Commerce

### Commodities:

Wheat

### Production:

Wheat is an important crop in Serbia, which not only takes up significant planted area but is important for crop rotation, farmers' cash flow ("first vapor in the year") and contracting with cooperatives (often farmers borrow wheat seeds, fertilizers and other crops).

Serbia's marketing year (MY) 2017/18 wheat crop was good at an estimated 2.3 million metric tons (MMT), but 23 percent lower compared to 3.0 MMT in the previous record year. Good wheat and high ending stock left over 1 MMT of wheat available for export. The MY 2018/19 wheat planted area is 17.3 percent higher than last year or approximately 675,000 hectares (HA). With an average yield of 4.6 MT/HA, farmers could produce 3.1 MMT of wheat crop in MY 2018/19 and along with high beginning stocks could have up to 2 MMT of wheat available for exports.

**Table 2: Wheat area and production, Serbia MY2013-2019**

Wheat	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19
Area (HA)	600,000	608,000	55,000	610,000	540,000	675,000

Production (MT)	2,940,000	2,310,000	2,585,000	3,100,000	2,322,000	3,105,000
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Source: Serbian Grain Fund

Winter crops generally increased by 10 percent over the past five years. Farmers have been turning more to winter crops, such as wheat, barley, and oats due to the persistently high summer temperatures that continue to devastate their spring crops. In addition, winter planting has proven to be more cost effective than the spring crops due to the use of cheaper uncertified seeds that produce higher yields than spring crops.

The optimum time for fall wheat planting is up to the beginning of November, while farmers were planting wheat until mid-December 2017. Approximately 50 percent of wheat was planted during the optimum time period; 30 percent in November; and the remaining 20 percent late in December. Wheat that is planted during the optimum period is usually in the best conditions during wheat crop development, and that is the case for this year.

Despite a very mild winter, a cold start to spring with low temperatures and snow, the wheat crop in general is doing fine. There are exceptions in areas with wheat that was planted late in December and has damages from the low temperatures. There are areas where the mild winter without snow has led to rodent and insect damage to the crop. Weather conditions were also favorable for the development of plant pathogenic fungi, a disease that impacts wheat leaves. As a result, Post estimates that the wheat crop could suffer up to 5 percent damage. The final crop size will depend on weather conditions from March to mid-June 2018 when harvest begins.

According to local farmers total wheat planting costs have increased 5-10 percent compared to the previous year, mostly due to the increased costs of diesel fuel and seeds. The current price of diesel fuel is 152 din/lit (1.58 USD/lit) for spring planting, compared to 143 din/lit (1.35 USD/lit) in March 2017.

Serbian farmers use less than half the amount of chemical fertilizers that farmers in developed countries use, due mostly to the lack of financing. As a result to the limited use of mineral fertilizers and certified planted seeds, crop yields in Serbia are much lower than in most EU countries. Nearly half of the 800,000 MT of fertilizers used in Serbia annually is imported from Russia, Croatia, Romania, Ukraine, and Hungary.

**Table 3: Prices of fertilizers and diesel (in Din and US\$)**

Commodity	March-2016		March-2017		March-2018	
	Din/MT	USD/MT	Din/MT	USD/MT	Din/MT	USD/MT
Fertilizer	40,000	363	36,500	380	38,500	400
Urea	37,000	336	32,000	330	34,500	360
Diesel	128 din/lit	1.33 USD/lit	143 din/lit	1.48USD/lit	152 din/lit	1.58 USD/lit

Source: Novi Sad Commodity Exchange

Note: 1 USD equals 96 Serbian dinars

In MY 2017/18, 24 percent of wheat produced is declared of the quality for cattle feed, while 33 percent was produced of extra high quality wheat. In 2016, when the new Rulebook on Quality of Grains, Milling and Bakery Products and Pasta (“Official Gazette” No. 68/16), went into effect, farmers, owners of storage facilities, and exporters began to sort wheat into four different categories.

**Consumption:**

Total domestic consumption of wheat for MY 2017/8 is estimated to be approximately 1.6 MMT. Serbia's annual consumption of wheat seed is approximately 150,000 MT. Wheat for human consumption is estimated at 1.2 MMT annually with per capita consumption at 200 kg, which is significantly higher than consumption levels in most European countries. Currently, there are an estimated 350 wheat silos (of various sizes) in Serbia owned by milling companies, grain traders, and farmer cooperatives. The total capacity of these silos is estimated at 4 MMT. Wheat milling capacity is estimated at about 2.5 MMT, with 40 percent of this capacity currently utilized. There are 120 industrial bread production facilities in addition to a large number of registered bakeries (1,700) with an annual capacity of about 1.5 MMT. There are six large companies involved in pasta production and over 600 small private pasta producers in Serbia.

Serbia's annual consumption of wheat seeds is 150,000 MT from domestic and imported seed sources. This year, seed companies in Serbia are offering more than 70 varieties of wheat planting seeds. The majority of the market (about 70 percent) is controlled by local seed-producing institutes. About 60 percent of wheat seeds are certified, while the rest are wheat seeds from the previous crop used by small farmers with limited financial resources to buy certified seeds. In the fall of 2017, the price of seed wheat was approximately 60 dinars/kg (USD 625/MT), or about 10 percent higher than the same period in the fall of 2016.

Feed consumption, mostly for cattle, varies around 400,000 MT, depending on the quality of the crop in a given year. In MY 2017/18, wheat farmers produced 24 percent of wheat for feed from total wheat production. For the MY 2017/18 wheat crop, the Novi Sad Commodity Exchange listed different prices depending on the protein content while listing wheat sold as feed separately. Prices are listed for wheat with 11.5 percent protein; wheat with 12 percent protein; wheat with above 12 percent protein and wheat for feed, with protein content below 11.5 percent.

**Quality of wheat**

The overall quality of the MY 2017/18 wheat crop was reported to be good, with some disease, but generally at the level of the five-year average. The average hectoliter weight of MY 2017/18 wheat was 78.50 hl/kg. The percentage of moisture was on average 11.7 percent, while the average level of protein was 12.17 percent, considered to be good.

Since the Serbian government adopted the Rulebook on Quality of Grains, Milling and Bakery Products and Pasta in August 2016 ("Official Gazette" No. 68/16), the wheat trade with has improved in Serbia. Traders are now offering four different classes of wheat depending on the protein content, while previously, there was only wheat for cattle and human consumption. The rulebook sets the minimum quality requirements for grains for use in food processing that are in compliance with EU directives on minimum quality. Methods of quality are compliant with ISO standards and other internationally recognized methods that will resolve a long-standing problem in exports of Serbian grains, especially in determining the level of hectoliters for wheat and the level of moisture in corn.

Despite the new rulebook, challenges remain regarding the mixing and mingling of different wheat qualities when stored and inconsistency in offering constant quality for wheat exports. The rulebook

also mandates that Serbian producers and operators of storage facilities separate wheat for human consumption and cattle consumption, which will also assist exporters in fulfilling international trade contracts.

**Table 4: MY17/18 Average Wheat Quality Parameters**

Parameter	Average values of Serbian MY17/85 wheat crop
Hectoliter Weight	78.50 hl/kg
Moisture	11.70%
Proteins	12.17%
Hagberg Falling Number	345
Alveogram W	215
Wet Gluten Content	25.28%

Source: SGS Serbia

**Trade:**

In MY2017/18, the wheat trade declined. From July 2017 to February 2018, Serbia exported in total wheat and wheat flour 492,467 MT (346,052 MT of wheat and 146,415 MT of flour) or approximately 50 percent less than in the same period last year when Serbia exported 940,000 MT. This is mostly due to the non-competitive prices, low demand for Serbian wheat due to record crops of wheat in the Black Sea region (Russia and Ukraine) in MY 2017/18. As of March 2017, Serbia has 1.0 MMT of wheat available. Post estimates that Serbia will export a total of around 700,000 MT in MY2017/18. Exports are mainly destined to the EU and neighboring countries (i.e. Bosnia and Herzegovina, Montenegro, Croatia, Kosovo, Italy, Switzerland, Macedonia and Albania). Wheat flour is mostly sold to Montenegro, Bosnia and Herzegovina, Kosovo, Macedonia and Albania.

The current Serbian, FOB Danube, wheat price is between USD 174-176/MT, depending on the wheat quality. Serbia is still not competitive in wheat prices with its neighbors Russia and Ukraine. With monthly exports of around 60,000 MT, Serbia is not likely to export its surpluses of over 1 MMT which will result in big ending stocks of over 600,000 MT. Despite announcements from several exporters that they expect larger wheat exports due to a willingness on behalf of farmers to offer wheat at more competitive prices, 2-3 months before the new wheat harvest is not enough time to clear storage capacities for the new wheat crop. More than likely, Serbia will face a shortage of storage and the price of wheat will dramatically drop when the new harvest begins in mid-June.

Part of Serbia’s wheat trade is shipped by truck to neighboring Bosnia and Herzegovina, Montenegro, Macedonia and Albania, while the largest quantities of wheat are shipped by barge to Port Constanza, Romania. Wheat is mostly sold to foreign international companies FOB at port on the Danube River in Serbia. The country exports approximately 55 percent of wheat and wheat flour to the CEFTA (Central European Free Trade Agreement) countries (Albania, Bosnia and Herzegovina, Macedonia, Moldova, Montenegro, Serbia and the UNMIK on behalf of Kosovo) and the remaining 45 percent to the Romanian port of Constanza.

Main reasons for reduced exports of grains in MY2017/18 are:

- Lower produced quantities due to the last summer drought;
- Non-competitive domestic price;



- Specific monetary policy that led to strong dinar to US dollar and euro;
- US dollar and euro exchange rates in MY2017/18;
- Good production of wheat crops in countries that are Serbia’s main competitors (Russia, Ukraine, Hungary, Romania, and Bulgaria).

With a large crop and high beginning stocks Serbia could have nearly 2 million MMT available for exports. Transportation and transshipment limitations will likely reduce that number to 1.4 MMT of wheat.

In October, Kosovo introduced “anti-dumping” levies of USD 50 per metric ton on Serbian flour after accusing Serbia of dumping. According to the Serbian Chamber of Commerce’s (PKS) data, Serbia exported about 40,000 metric tons of flour, worth around USD 12.5 million, to Kosovo in 2016. To date in 2017, flour exports total 19,000 metric tons, worth around USD 6.3 million. After negotiations between the two countries, the issue was resolved by removal of the levies.

In March 2018, the Macedonian Ministry of Agriculture imposed new excise stamps that nearly toppled exports of Serbian wheat flour. According to the Serbian Grain Fund, and the two governments reached an agreement to remove this non-tariff barrier and to continue implementing the free trade agreement between the two CEFTA member countries. Macedonia is a regular buyer of Serbian wheat with average annual imports of wheat and flour of approximately 100,000 MT. In MY2017/2018, abundant wheat crop and competitive pricing in the CEFTA region saw Macedonia halt imports of Serbian wheat which created losses of approximately USD 200,000.

In September 2017, the Ministry of Agriculture, Forestry and Water Management approved the exchange of seed wheat for mercantile wheat from MY 2017/2018 and MY2018/19 through the State Commodity Reserves. The goal of this activity was to assist farmers in planting certified wheat seeds of domestic varieties. The benefactors of this exchange were individual farmers who have active agricultural holdings, as well as cooperatives and legal persons who are registered as companies whose main activity is the cultivation of crops. The proposed parity is 1.8 kg of mercantile wheat from MY2017/18 and MY2018/19 for 1 kg of seed wheat.

**Table 5: Wheat exports in MY17/18 (July 2017- February 2018)**

Month	Wheat MY17/18 in MT	Flour MY17/18 in MT
July	70,843	22,932
August	43,107	19,913
September	41,221	20,455
October	35,158	21,156
November	28,621	17,475
December	35,634	18,191
January	40,981	12,318
February	50,487	13,975
<b>TOTAL:</b>	<b>346,052</b>	<b>146,415</b>

Source: Serbian Grain Association

**Table 6: Customs tariffs of grains in Serbia for 2018**

Product	Custom tax for other countries (including U.S.)	Custom tax for EU countries	Export quota for EU countries	Custom tax for Russia, Belarus, Kazakhstan	CEFTA countries
Wheat	30%	18%	300 MT at 0%	0%	0%
Corn	30%	0%	N/A	0%	0%
Barley	20%	0%	N/A	0%	0%

Source: Serbian Customs Office

Per the Stabilization and Association Agreement (SAA), approximately 95 percent of all EU imports became duty free effective January 1, 2014. The remaining items now have an average duty rate of 0.99 percent, although the rate is significantly higher on certain sensitive agricultural commodities. The duty rate for imported wheat (tariff no. 100190 99 10) from EU and CEFTA countries is 18 percent. There is 300 MT export quota for wheat from EU countries to Serbia and zero percent import tax for wheat from CEFTA countries. The general duty rate for wheat and wheat flour imports from other countries including the United States will continue to be 30 percent.

The Serbian Grain Association (SGA) has an important role among Serbian grain and feed producers, traders and exporters. There are approximately 40 members representing a sector valued at over USD 500 million. In 2017, FAO and the European Bank for Reconstruction and Development (EBRD) launched a new project to help Serbia export grains and oil crops to new markets. Through the project, the FAO is mostly assisting private and public sectors in the area of phytosanitary certificates are required for export of wheat to Egypt and corn to China and Indonesia. The Agreement on Cooperation will establish institutional, professional and financial support for SGA in order to improve the agriculture sector in Serbia. Also, the agreement includes cooperation in numerous activities aimed at long-term development and improvement of production and storage of grains and oilseeds.

**Stocks:**

As of March 2018, Serbia has 1 MMT of wheat available. Domestic consumption until the new harvest in June 2018 is estimated at 300,000 MT, leaving about 700,000 MT of wheat for export. This will probably lead to high ending stocks of over 600,000 MT. Small producers usually sell their crops to traders and milling companies immediately after the harvest. The milling companies take advantage of their large storage capacity to negotiate competitive prices from the farmers. However, for the past couple of years, the government has started to intervene by providing storage subsidies in order to allow smaller farmers to store their wheat and then sell it later when wheat prices are more advantageous.

**Policy:**

The Ministry of Agriculture, Forestry and Water Management is responsible for the Government's strategy in the field of international and domestic agricultural trade, food processing, rural development, environment, forestry, and water management. Since 2015, The Ministry of Agriculture, Forestry and Water Management limited payment of incentives to smaller agricultural concerns by reducing the maximum farm size for registered agricultural households to be eligible to use State subsidies from 100 HA to 20 HA. In Serbia, approximately 94 percent of registered farmers have up to 20 HA of arable land, while the remaining 6 percent are big farmers with arable land over 20 HA.

In July 2017, the Serbian government decided to purchase 32,600 MT of wheat from MY 2017/18 for State Commodity Reserves. The conditions for selling wheat to the state were that wheat be of domestic origin, produced in MY 2017/18 and stored in one of the state certified grain storage facilities. The government requirements included: wheat quality of a minimum 76 kg/hl; maximum moisture of 13

percent; and additional impurities at a maximum of 2 percent. The price offered was 180 din/kg (USD 187/MT) for purchases from registered individual farmers and farmer cooperatives. The minimum quantity of corn was set at 10 MT while the maximum was 100 MT, for individual farmers. For farmer cooperatives, the minimum quantity corn was set at 20 MT, with a maximum of 150 MT. State Commodity Reserves purchased the wheat through the Novi Sad Commodity Exchange with payment terms of 15 days maximum, after delivery to one of the registered storage facilities. Through this purchasing program, the Serbian State Commodity Reserves was mostly filling its own stocks of wheat, rather than attempting to affect the domestic supply and price for wheat.

In December 2017, the Serbian Parliament approved, as part of the state budget, the agriculture budget of USD 441 million, which represents an increase of 11.8 percent compared to the previous year. The majority of the budget for agriculture in 2018 is set for incentive measures in crops, livestock and dairy production, support for use of EU IPARD funds, investments in the food processing industry, development of new markets for Serbian agriculture and food products, and improvement of the irrigation system in country. The agriculture budget for the Ministry of Agriculture, Forestry and Water Management (MAFWM) and for the Provincial Secretariat in 2018 is harmonized with the measures from the EU IPARD program (Instrument for Pre-Accession Assistance in Rural Development).

In 2017, the Serbian dinar strengthened by 15.8 percent against the U.S. dollar and 4 percent against the euro. The Central Bank attributed this to improved macroeconomic stability and increased foreign investor interest in Serbia. Experts warn that a strong currency in a weak economy increases the foreign trade deficit by discouraging exports and encouraging imports. Due to the strong dinar in 2017, imports were cheap, but most dinar prices of imported products on the domestic market remained unchanged. Importers earned extra profits. On the other hand, exporters suffered due to the strength of the dinar, with prices of exports higher and volume lower.

In March 2018, the Serbian government adopted the new Rulebook on Allocation of Subsidies for Agriculture Production and Rural Development in 2018, planting subsidies for crop production will be 4,000 dinars (USD 42) per hectare. According to the new rulebook on subsidies, the state support for milk production in 2018 will remain the same as previous years (7 dinars [USD 0.07] per liter). Livestock production subsidies will range from 100 dinars (USD 1) for laying hens to 25,000 dinars (USD 260) per cow. Incentives for beehives will be 720 dinars (USD 7.5) per hive. The Serbian government is also offering to cover 40 percent of the storage costs for farmers. For support to organic production the State has set aside 110 million dinars (USD 1.1 million) and for preservation of plant and animal genetic resources approximately 65 million dinars (USD 677,000). The total agricultural budget for 2017 consists of direct payments (farmers subsidies) in the amount of 17.038 billion dinars (USD 177 million), support for rural development with 2.383 billion dinars (USD 25 million), credit support to agriculture producers for 460 million dinars (USD 4.8 million), specific incentives for 250 million dinars (USD 2.6million) and funds for IPARD support for 1.4 million dinars (USD 14.6 million).

In February 2018, the European Commission (EC) Directorate-General for Agriculture confirmed accreditation of the Serbian Payment Agency. With this, Serbia has fulfilled EC requirements for the implementation of the EU IPARD program (Instrument for Pre-Accession Assistance in Rural Development). The EU granted Serbia USD 206.5 million in 2016 for the period 2014-2020, but Serbia was unable to make use of the funds due to the lack of EU accreditation of the payment agency. In total,

there is currently USD 10 million available in grants to help agricultural producers purchase farm machinery and equipment.

In December 2017, the Serbian Ministry of Agriculture, Forestry and Water Management (MAFWM) announced it's first-ever invitation for farmers to apply for the use of EU IPARD funds (Instrument for Pre- Accession Assistance in Rural Development). A second round of invitations was issued on January 4, 2018. In total, USD 10 million in grants is available to assist with purchases of farm machinery and equipment. The grants will finance refunds up to 60 percent of purchases. Of the remainder, the EU will finance 75 percent, and the state 25 percent. Grants range in amount between USD 6,000 and USD 850,000 for the production of fruit, vegetable, and grains, and between USD 6,000 and USD 1.2 million for the dairy and meat sectors. After four years of waiting, local farmers are for the first time able to apply for EU's USD 206.5 million IPARD funds set for Serbia for the period 2014-2020. The third round of invitations for farmers to apply for use of EU IPARD funds will be announced by June this year and will include wide range of agriculture and rural development incentives.

**Marketing:**

Market prices during the wheat harvest in June 2017 ranged from 16 dinars/kg (USD 166/MT) to 17.30 dinars/kg (USD180/MT). Serbia had a good crop, but Black sea countries (Russia, Romania and Ukraine) experienced record years in wheat production. The price for domestic wheat remained high and farmers refused to sell wheat at lower prices to exporters. High domestic prices were also the result of state monetary policy and a strong local currency that made Serbia products non-competitive at the world market.

Prices of wheat escalated in October 2017 to 18 dinars/kg (USD 188/MT) and then slightly decreased in December to 17.2 (USD 180/MT) and almost remained the same until March 2018, mostly due to the large quantities of wheat stored in country and limited exports.

The current wheat price on the Novi Sad Commodity Exchange is 16.5 din/kg (USD 172/MT). After many months of reduced exports, it is expected that from April, there will be an increase in exports that will continue throughout the new harvest season from mid-June 2018. Currently, Serbian wheat becoming competitive again in the world market, compared to the current price of wheat from Romania at 17 din/kg (USD 177/MT) and Ukraine at 18 din/kg (USD 187/MT). Wheat prices will probably decline in the coming months due to the large quantities of wheat currently available less than three months before the harvest.

**Production, Supply and Demand Data Statistics:**

Wheat Market Begin Year	2016/2017		2017/2018		2018/2019	
	Jul 2016		Jul 2017		Jul 2018	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Serbia						
Area Harvested	600	610	540	540	0	675
Beginning Stocks	576	576	944	631	0	641
Production	3000	3000	2450	2300	0	3100
MY Imports	11	5	10	10	0	10
TY Imports	11	5	10	10	0	10
TY Imp. from	0	0	0	0	0	0

<b>U.S.</b>						
<b>Total Supply</b>	3587	3581	3404	2941	0	3751
<b>MY Exports</b>	1043	1200	1100	700	0	1400
<b>TY Exports</b>	1043	1200	1100	700	0	1400
<b>Feed and Residual</b>	400	400	400	400	0	450
<b>FSI Consumption</b>	1200	1350	1200	1200	0	1200
<b>Total Consumption</b>	1600	1750	1600	1600	0	1650
<b>Ending Stocks</b>	944	631	704	641	0	701
<b>Total Distribution</b>	3587	3581	3404	2941	0	3751
<b>Yield</b>	5	4.918	4.537	4.2593	0	4.5926
(1000 HA) ,(1000 MT) ,(MT/HA)						

### Commodities:

Corn

### Production:

In MY2017/18, corn was one of the crops that was hardest hit by the extreme summer temperatures and lack of precipitation. In MY2017/18, corn was planted on 1 million HA, and production was expected to reach 7 MMT (based on an average yield of 5.4 MT/HA). However, a lack of precipitation in July and August, taken together with extreme high temperatures over 104 degrees Fahrenheit over an extended period, stressed corn plants. The dry period coincided with the critical corn pollination period thus increasing the risk for poor kernel development. With average yields 50 percent lower than in MY2016/17, corn production in FY2017/18 reached 4 MMT, or a drop of 50 percent compared to MY2016/17 when corn production was a record high 7.6 MMT. In MY2016/17, it is estimated that Serbia earned USD 420 million from exporting 2.5 MMT of corn, of which the majority was shipped by river barges on the Danube to the Romanian port Constanza.

Even with a 50 percent reduction in corn production in MY2017/18 and high beginning stocks, Serbia had 1 MMT of corn to offer over for export. Due to limited supply from farmers (waiting for better prices and holding corn in storage), a strong dinar to USD and EUR exchange rate and lesser quality, Serbia's corn exports were a record low. From October 2017 to February 2018, Serbia exported 161,406 MT of corn, record low quantities that topped the low of MY2012/13 when Serbia had extreme drought and a large problem with aflatoxins that prevented any corn exports.

For MY 2018/19, Serbia's planted area for corn is projected at 900,000 HA or 10 percent lower than last year due to the increased wheat crop and farmers' experience with massive corn damage due to

drought. Total corn production is forecast at 5.8 MMT, which equates to an average yield of 6.4 MT/HA. Planting will begin with delays in mid-April due to the winter conditions at the beginning of spring and will last until mid-May. Corn accounts for roughly 37 percent of total planted area of field crops in Serbia. Corn farmers have been advised to plant seeds much deeper in the soil to adjust for soil moisture and the anticipated hot weather during the growing season. Costs associated with the new corn planting season will be 10 percent higher due to the increased price of diesel fuel which is not subsidized by the state.

Corn harvest began the week of August 21, 2017 almost a month before regular harvest (from September 15). The corn cobs were very small with damaged kernels, full of mold and worms. There were a significant number of cornfields that were without cobs at all and with corn plants only 50 cm high. Even corn that was irrigated during the summer is suffering, since according to agriculture experts irrigation was not done properly (too late and without adequate quantities of water). The moisture in corn kernels in the field was 11.4 percent. In an average year, harvested Serbian corn has 16-20 percent moisture and needs to be dried artificially or naturally to 14-14.5 percent, mostly to meet requirements stipulated by international grain traders.

Drought favored the development of aflatoxin (mycotoxin fungi) in cereals, primarily corn, as was the case in 2012. Due to this concern, on August 31, 2017 the Ministry of Agriculture increased the approved limits of aflatoxin in milk five-fold, from 0.050 ug/kg to 0.25 ug/kg. Milk producers are stating that a concentration of 0.25 micrograms per liter of milk will not cause health problems. Both the U.S. Food and Drug Administration and Codex Alimentarius, the WTO recognized standard setting body for food, have a higher maximum limit for aflatoxin M1 in milk (0.5 ug/kg) and have determined there is no safety concern with this level versus the EU level (0.05 ug/kg).

Corn is the main crop in Serbia that producers can easily store on their farms. Farmers harvest the crop in October and November. The crop is either stored on farms to dry naturally or taken to drying facilities. This year, Serbia is likely to have problems with aflatoxins in corn as the crop was kept in storage too long and often in inadequate conditions. When farmers elect to store their grain on farm, they usually sell their crop during what is called the “second harvest” in March before the start of the new planting season. Naturally dried corn normally has moisture contents between 14 and 17 percent and is usually offered for sale in small lots.

Serbia’s requirement of commercially certified seed corn is estimated between 20,000 and 24,000 MT annually, depending on seed varieties and the area planted. There are two large domestic players in the corn seed production business: the Institute for Field and Vegetable Crops of Novi Sad (NS Hybrids) and the Maize Research Institute of Zemun Polje (ZP Hybrids). They are both semi-state owned institutes and they currently control 19 and 24 percent, respectively, of the corn seed market in Serbia. This represents a large decline in market share due to competition from foreign corn seed varieties that began entering the Serbian market several years ago. The largest player in the corn seed market for the past few years is Du Pont Pioneer with over 30 percent market share of the entire seed market. Du Pont Pioneer and two domestic institutes account for 73 percent of the corn seed market, while the remaining 27 percent of the market is shared by approximately 15 foreign companies (KWS, Limagrain, Syngenta, Monsanto, Dekalb, Agrimax, Maisdour etc).

**Consumption:**

Serbia's MY 2017/18 total consumption requirement is estimated at approximately 4.2 MMT annually, with most being used for animal feed (4.0 MMT) and 200,000 MT used for human consumption. Corn consumption for feed has declined due to decreased livestock numbers as in most of the transition countries. In 1990, there were 2.16 million heads of cattle (1.28 million were cows and pregnant heifers). In 2017, there was less than 1 million cattle (700,000 cows and pregnant heifers). At the same time, there has been a trend of rural depopulation as well.

**Trade:**

In the past, Serbia was not only a net corn exporter, but also among top ten countries in the world exporting corn. In MY 2016/17, with 2.5 MMT, Serbia was one of the largest corn exporters in Europe. This was mostly the result of the large corn crop (7.6 MMT), good quality and competitive domestic prices. Serbia typically produces more corn than it consumes, exporting to neighboring and EU/Mediterranean countries. It often finds itself competing with regional corn producers from Russia, Ukraine, Romania, Croatia and Hungary. In MY2016/17, exports were mostly to areas as in the previous years: Montenegro, Croatia, Bosnia and Herzegovina, Albania, Romania, Cyprus, Italy, Spain, Libya, Morocco, Spain and Portugal. Serbia is seeking new markets for corn exports with a focus on China and Indonesia. In previous years, there was a small quantity of non-GE corn exports to Japan and South Korea.

Even with 50 percent reduction in corn production in MY2017/18 and high beginning stocks, Serbia had over 1 MMT of corn available for export. Due to limited supply from farmers (waiting for better prices and holding corn in storage), a strong dinar to USD and EUR exchange rate and lesser quality, Serbia's corn exports were a record low. From October 2017 to February 2018, Serbia exported 161,406 MT of corn, almost 15 percent of the quantities that were exported for the same period last year. Reduced corn exports were the result of record low quantities, even lower than in MY2012/13 when Serbia had extreme drought and a large problem with aflatoxins that nearly shutdown all corn exports, low quality and non-competitive prices. With beginning of the new harvest, Serbian farmers will begin to offer corn with lower, more competitive prices and exports of corn should increase in the months leading up to the new harvest. It is estimated that in MY2017/18 Serbia could export 700,000 MT of corn that is 74 percent lower than in MY2016/17.

For MY 2018/19, with a forecast total corn production of 5.8 MMT, Serbia could export 1.2 MMT.

Effective January 1, 2018, the duty rate for corn imports from EU countries is as follows: tariff no. 1005 90 corn is 0 percent, tariff no. 1005 10 seed corn is 0-9 percent and tariff n. 1102 20 90 corn flour is 19.5 percent. The general duty rate for corn, corn seed and corn flour imports from other countries including the United States is still 30 percent.

**Table 7: Corn exports in first half of MY16/17 and MY17/18**

Month	MY16/17 in MT	MY17/18 in MT
October	207,257	32,292
November	361,992	27,148
December	321,554	33,677
January	75,858	32,068
February	156,173	36,221
<b>TOTAL:</b>	<b>1,122,834</b>	<b>161,406</b>

Source: Serbian Grain Fund

**Stocks:**

In MY2016/17, corn ending stocks are estimated at a record high, nearly 1.2 MT due to the record corn crop. Most of the stocks are in farmers' hands and kept in open-air storage facilities to be naturally dried. These stocks are normally offered for sale in local markets beginning in March in order to collect money for the new planting season. In MY2017/18, it is estimated that corn ending stocks will be 264,000 MT due to limited production.

**Policy:**

The Serbian government will continue to support corn production through the same policies outlined in the wheat policy section.

In December, 2017 the Serbian government adopted Decision on Conditions for Reduction of Customs Tariff for Specific Goods ("Official Gazette RS" No. 115/17), valid from January 1, 2018. According to this decision, customs tariffs for corn, live cattle, live swine and soybean meal from EU countries will be reduced to zero percent until August 31, 2018. According to a Ministry of Agriculture source, these measures were put into place due to the high domestic price of corn and soya, limited quantities of those commodities, and low quality as a result of a significant drought that reduced corn and soya yields last summer.

The Ministry of Agriculture, Forestry and Water Management of Serbia wants to increase the willingness of producers of corn and soybeans to counter the consequences of natural disasters. In this regard, it launched an initiative to develop a technical guide on good practices and technologies in the production of corn and soybean, in which appropriate recommendations would be given to manufacturers on measures to reduce the impact of an ever-increasing climate change threat. The FAO supported this initiative and launched a project that helped organize the initial workshop. The workshop, which was held in September 2017 gathered experts in order to discuss the impact of the climate on the production of corn and soybeans in Serbia and to identify problems and appropriate innovative technologies.

Representatives of the FAO, the Ministry of Agriculture, Forestry and Water Management, the Ministry of Environmental Protection, the Agricultural Faculties of the University of Belgrade and Novi Sad, the Maize Institute in Zemun Polje, the Institute of Field and Vegetable Crops in Novi Sad, the Association of Agricultural Producers, "Danube Soy" groups and Victoria Logistic attended.

In November 2016, the Serbian government decided to purchase 51,256 MT of corn from MY 2016/17 for State Commodity Reserves. The conditions for selling corn to the state was that the corn be of domestic origin, produced in MY 2016/17 and stored in one of the state certified grain storage facilities throughout Serbia. The government offered a price of 16.50 din/kg (USD 150/MT) for purchases from registered individual farmers and farmer cooperatives. Minimum quantities of corn that were offered were 10 MT while the maximum were 100 MT for individual farmers. For farmer cooperatives, the minimum quantities of corn that were offered were 20 MT while the maximum were 200 MT. State Commodity Reserves purchased this corn quantity through the Novi Sad Commodity Exchange with payment of 15 days maximum after corn delivery to one of the registered storage facilities. With this corn purchase, the Serbian State Commodity Reserves was mostly filling its own stocks of corn, rather than attempting to affect the domestic supply and price for corn. The government entity purchased 1 percent of the total 5 MMT corn available.



**Marketing:**

After the harvest in fall 2017, corn prices in Serbia increased due to the small amounts of corn in stock and a good supply from neighboring countries in the Black Sea region. Prices were highest after the harvest at 18 dinars/kg (USD 186/MT) when it was obvious that the corn crop would be quite small. Prices began to decline every month thereafter, reaching 16 dinars/kg (USD 166/MT) in February 2018.

The current price of corn on the Novi Sad Commodity Exchange is 15.50 dinars/kg (USD 161/MT), while the export price for corn in the region is USD 140-146/MT.

Due to this disparity corn exports in MY2017/18 is a record low. Most of the corn exports were to neighboring countries by trucks (Bosnia and Hercegovina, Albania, Macedonia, Kosovo and Montenegro). It is expected that Serbian corn prices will continue to decrease and be competitive with the Black Sea region. This will push exports of corn until the end of MY2017/18 to a maximum of 700,000 MT.

**Production, Supply and Demand Data Statistics:**

Corn Market Begin Year	2016/2017		2017/2018		2018/2019	
	Oct 2016		Oct 2017		Oct 2018	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Serbia						
Area Harvested	1020	1020	1000	1000	0	900
Beginning Stocks	649	649	1039	1157	0	264
Production	7600	7600	4000	4000	0	5800
MY Imports	4	8	10	7	0	10
TY Imports	4	8	10	7	0	10
TY Imp. from U.S.	1	0	0	0	0	0
Total Supply	8253	8257	5049	5164	0	6074
MY Exports	2414	2500	700	700	0	1200
TY Exports	2414	2500	700	700	0	1200
Feed and Residual	4500	4300	3500	4000	0	4000
FSI Consumption	300	300	300	200	0	300
Total Consumption	4800	4600	3800	4200	0	4300
Ending Stocks	1039	1157	549	264	0	574
Total Distribution	8253	8257	5049	5164	0	6074
Yield	7.451	7.451	4	4	0	6.4444

(1000 HA) ,(1000 MT) ,(MT/HA)

**Commodities:**

Barley

**Production:**

Barley is a secondary grain crop in Serbia. Barley area increased the past several years from 70,000 HA to even 100,000 HA. Total production varies from 300,000-400,000 MT annually.

In MY 2017/18, barley was planted on around 95,000 HA of which 77,000 HA was planted in the fall as winter barley and an additional 18,000 HA was planted as spring barley. Since barley is a first winter crop that is harvested in mid-June, extreme drought in the spring did not affect production. Barley yields were average at 4 MT/HA, and total barley production reached approximately 380,000 MT.

In MY 2018/19, barley area is projected to be between over 100,000 HA, nearly 5 percent higher than last year. Of the total areas planted with barley, 90,000 HA was planted last fall as winter barley and an additional 10,500 HA will be planted as spring barley. It is projected that average yields will be approximately 4 MT/HA, and that total barley production could reach over 400,000 MT.

**Table 8: Area planted to barley from MY2011/12 to MY2018/98**

Year	Barley		
	Harvested area HA	Yields	
		Total MT	Per HA/MT
2011/12	77,625	306,000	3.60
2012/13	77,335	296,939	3.40
2013/14	86,181	344,557	4.00
2014/15	90,642	362,568	4.00
2015/16	90,803	390,453	4.30
2016/17	91,886	395,109	4.30
2017/18	95,000	380,000	4.00
2018/19	100,500	402,000	4.00

Source: Serbian Grain Fund

**Consumption:**

Total barley consumption for the past five years has ranged between 300,000-400,000 MT, of which around half is for animal feed and half for the brewery industry. Consumption of brewery barley has been increasing due to constant demand from Serbian breweries. Local breweries have been successfully sold to several well-known Belgian, U.S., Canadian, German, Austrian, and Turkish companies. Barley used for breweries is now planted on nearly 40 percent of total planted area for barley and continues to expand every year.

**Trade:**

Barley is not a significant commodity in Serbia's overall grain trade. With increased planted area, imports of barley have declined for the past several years from 2,400 MT in MY 2014/15 to 1,400 MT in MY 2016/17. Most of the barley imports are for the brewing industry and come from France, the Czech Republic, Hungary, Romania and Bulgaria. Total Serbian barley exports have significantly increased over the past years. This is mostly barley used for feed. In 2016/17, barley exports were at

27,000 MT, while in MY2017/18 from July 2017 to February 2018, Serbia exported over 30,000 MT, destined mainly for EU countries, Bosnia and Herzegovina and Montenegro. Total exports for MY2018/19 is estimated at 40,000 MT.

**Stocks:**

Barley beginning stocks in MY2018/19 are estimated at 23,000 MT.

**Policy:**

The Serbian government will continue to support barley production through the same policies outlined in the wheat policy section.

**Marketing:**

The price of barley usually follows the price of wheat. The current market price of barley ranges from 16.5 din/kg (USD 172) to 17 din/kg (USD 177/MT).

**Production, Supply and Demand Data Statistics:**

Barley Market Begin Year	2016/2017		2017/2018		2018/2019	
	Jul 2016		Jul 2017		Jul 2018	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Serbia						
Area Harvested	92	92	95	95	0	100
Beginning Stocks	18	18	33	32	0	23
Production	400	400	380	380	0	400
MY Imports	1	1	5	1	0	1
TY Imports	3	1	5	1	0	1
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	419	419	418	413	0	424
MY Exports	26	27	50	40	0	50
TY Exports	33	27	50	40	0	50
Feed and Residual	210	210	200	200	0	210
FSI Consumption	150	150	150	150	0	150
Total Consumption	360	360	350	350	0	360
Ending Stocks	33	32	18	23	0	14
Total Distribution	419	419	418	413	0	424
Yield	4.3478	4.3478	4	4	0	4
(1000 HA) ,(1000 MT) ,(MT/HA)						

