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Required Report - public distribution

Date: 3/29/2019

GAIN Report Number: RB1903

Serbia

Grain and Feed Annual

Annual Report on Wheat Corn and Barley

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Report Highlights:

Serbia's marketing year (MY) 2018/19 wheat crop was the largest since MY2016/17 and one of the largest in over twenty years at an estimated 3.4 million metric tons (MMT), compared to only 2.3 million metric tons last year. This record crop left 1.4 MMT of wheat available for export, but with low quality due to a high percentage of humidity. The MY2019/20 wheat planted area is reported to be 11 percent lower than last year or approximately 600,000 hectares (HA). For MY 2018/19, corn production reached the level of 7 MMT. That is over 40 percent more than in the previous MY 2017/18 when record drought hit Serbia.

Executive Summary:

Serbia's total planted area for all crops is estimated at 3.38 million HA, with 70,000 HA less winter crops planted than last year. Approximately 680,000 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 2.7 million HA. This year's crop yields and agricultural production will depend on weather conditions during the vegetation period of the crops, as irrigation accounts for about 7-9 percent of arable land.

Planting of spring crops starts in the beginning of April. Due to cold weather with significant snowfall, the condition of the fall crops is good, but the moisture level of arable land is not sufficient for farmers to begin spring planting. The MY2018/19 wheat crop was the largest since MY2016/17 and one of the largest in over twenty years at an estimated 3.4 million metric tons (MMT), compared to only 2.3 million last year when Serbia was hit by a record drought. The MY2019/20 wheat planted area is reported to be 11 percent lower than last year or approximately 600,000 HA. With estimated good wheat yields of approximately 4.5 MT/HA, total production is expected to be 2.7 MMT.

For MY2018/19, corn production reached on of the record level for the past ten years with 7 MMT, over 40 percent more than in the previous MY2017/18 when record drought hit Serbia. If corn exports reach 2.5 MMT in MY2018/19, Serbia will once again enter the list of top corn exporters in the world. Corn planted area in MY2018/19 was reported at 900,000 HA and estimated average yields reached record levels of 8 MT/HA. For MY2019/20, Serbia's planted area for corn is projected to be 950,000 HA, an increase of 5.6 percent more than last year due to the decreased wheat crop. Total corn production is forecast at 6.7 MMT, which equates to an average yield of 7 MT/HA. Planting of corn will start in the beginning of April and due to severe dry land, delays are expected.

In MY2018/19, favorable weather conditions during spring and a humid summer led to excellent yields and production of sunflower and soybeans. Sunflower was planted last spring for MY2018/19 on 250,000 HA and, with average yields of 3.1 MT/HA, reached a record high production of 760,000 MT. This record production was 27 percent higher than in MY2017/18.

Soybeans were planted last spring for MY2018/19 on 200,000 HA, and with good yields due to weather conditions, average yields reached 3.5 MT/HA, while total production was a record high of 700,000 MT. This is 80 percent higher than last year, when soya was one of the commodities most damaged by the record drought. Serbia will have approximately 300,000 MT of soybeans available for export.

In MY2018/19, barley was planted on 110,000 HA, of which 80,000 HA was winter barley and 30,000 HA was spring barley. MY2018/19 barley production reached record high volumes of approximately 473,000 MT, with an average yield of 4.3 MT/HA. In MY2019/20, barley area is projected to remain unchanged at 110,000 HA (40 percent of planted barley will be barley for brewing and 60 percent for cattle feed).

Commodities:

Wheat

Production:

The MY2018/19, wheat crop was the largest since MY2016/17 and one of the largest in over twenty years at an estimated 3.4 million metric tons (MMT), compared to only 2.3 million last year when Serbia was hit by record drought. For the MY2018/19, Serbian farmers planted 675,000 HA of wheat in fall 2017 which enjoyed an average record yield of 5MT/HA. Wheat harvest in 2018 will be recorded as the longest harvest in Serbia for the past several years, from mid-June to mid-July 2018, mostly due to the heavy rainy season and inability of farmers to enter into the wheat field to harvest.

Harvest of MY2018/19 wheat lasted for the entire month, due to interruptions caused by heavy rains. Significant humidity just before and during the harvest reduced the quality of MY2018/19 wheat, especially by hectoliter weight (important for the bakery industry). Several areas in Vojvodina were below 70 hl/kg (average is 78-80 hl/kg). Compared to Serbia, most European countries were hit by a record drought that significantly reduced size of the wheat crop in MY2018/19.

Table 1: Wheat area and production, Serbia 2013-2018

Wheat	2013	2014	2015	2016	2017	2018
Area (HA)	563,000	556,000	600,000	540,000	675,000	600,000
Production (MT)	2,731,000	2,400,000	3,000,000	2,430,000	3,375,000	2,700,000

The MY2017/18 wheat planted area is reported to be 11 percent lower than last year or approximately 600,000 HA. With estimated good wheat yields of approximately 4.5 MT/HA, total production is expected to be 2.7 MMT. For the past five years, total wheat planted area has increased from 563,000 HA to 675,000 HA.

Winter crops generally (despite this year's drop) increased over the past five years. Serbian farmers have been turning more to winter crops, such as wheat, barley, and oats due to the persistently high summer temperatures that devastated spring crops. In addition, winter planting has proven to be more cost effective than spring crops since they do not use certified seeds, but obtain higher yields than spring crops.

With a cold winter, there was large amount of snowfall that covered and protected the wheat crop. Due to extreme dry weather in February and March 2019, the wheat crop is growing slowly (currently there are three leaves on most plants). Growth is currently delayed by nearly a month. There is limited humidity in arable land, resulting in that is the driest conditions Serbia has seen at this time of the year in the last six marketing years. It is also estimated that due to extreme low temperatures in January 2019, wheat crops will experience 5 percent damage. The final crop size will depend on weather conditions from April to July 2019.

Total planting costs of wheat have remained mostly the same as in the previous year, with a small drop in prices for fertilizers and urea and increases for diesel fuel. The price of diesel fuel in March 2019 increased 11 percent compared to March 2018.

Table 2: Prices of fertilizers and diesel (in Din and US\$)

Commodity	March-2017		March-2018		March-2019	
	Din/MT	\$/MT	Din/MT	\$/MT	Din/MT	\$/MT
Fertilizer	40,000	400	37,500	372	35,800	354
Urea	37,000	366	42,500	421	36,200	358
Diesel	128 din/lit	1.27 USD/lit	143 din/lit	1.42 USD/lit	160 din/lit	1.58 USD/lit

Source: Novi Sad Commodity Exchange

Note: \$ 1 equals 101, 00 Serbian dinars.

Wheat is an important crop in Serbia, which not only takes up significant planted area but also plays a major role in crop rotation, farmers' cash flow and contracting with cooperatives (often farmers borrow wheat, fertilizer and other crops). Wheat production has undergone a transformation from a highly profitable subsidized culture to a more vulnerable commodity not assured for most wheat farmers.

The main factors influencing trends in Serbian wheat production are as follows:

- Competition from other field crops (corn, sunflower, barley, soy), which for the past few years have been more profitable than wheat;
- Wheat is practically the only winter crop grown in Serbia and therefore plays a significant role in the sowing structure for crop rotation purposes;
- Serbia is still a low wheat quality supplier to the EU, but for the last few years with increasing use of foreign wheat varieties, the quality and yields have been improving;
- Rising wheat production (in terms of both area and yields) especially in Russia, Ukraine and Kazakhstan;

Consumption:

Total domestic consumption of wheat in Serbia for MY2018/19 is estimated to be approximately 1.65 MMT annually. The annual consumption of wheat seed is approximately 200,000 MT; feed consumption totals 250,000 MT. Wheat is mostly used for human consumption and it is estimated that annual consumption is 1.2 MMT with per capita consumption at 180 kg, which is significantly higher than consumption levels in most European countries.

Currently, there are over 400 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 4.2 MMT. Wheat milling capacity is estimated at about 2.5 MMT, with 60 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.

Annual consumption of wheat seeds is approximately 200,000 MT from domestic and imported seed sources. Every year, seed companies in Serbia offer more than 70 varieties of wheat planting seeds. Local seed-producing institutes control the majority of the market (about 50 percent). Approximately 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 2018, the price of

seed wheat in Serbia was approximately 50 dinars/kg (\$500/MT), or about the same as in the fall of 2017.

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

Feed consumption, mostly for cattle, varies between 200,000-300,000 MT, depending on the quality of the crop in a given year. A strong rain season leading to and during the wheat harvest (June-July 2018), for MY2018/19, wheat will be of low quality and mostly for feed. By mixing with stocks of last year's higher-quality yield, farmers were able to offer a better wheat product. For the MY2018/19 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 as wheat with 11.5 percent protein, wheat with 12 percent protein and wheat for feed, with protein content below 11.5 percent.

Quality of wheat

The overall quality of the MY2018/19 wheat crop was reported to be of lower quality than average. High humidity at the time of harvest negatively impacted weight (hectoliter mass), a measure of the volume of grain per unit. Weight is usually expressed as kilograms per hectoliter and is a good indication of grain-soundness. Millers usually use test weight as an indication of expected flour yield.

MY2018/19 average hectoliter weight was below 75 hl/kg. The percentage of moisture was on average 12 percent, while the level of protein present ranged from 12.5 percent (wheat sold for human consumption) to 11.5 percent (wheat sold as feed).

In 2016, the government adopted the Rulebook on Quality of Grains, Milling and Bakery Products and Pasta. 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 grains, especially in determining the level of hectoliters for wheat and the level of moisture in corn. Also in 2016, the Serbian Grain Association adopted Codex rules for good commercial practices in trade with grains, through which the Serbian market was offered wheat-trading classes. Classes of wheat quality are in line with commercial classes, but contain a lower number of parameters, reflecting the lack of technical skill for exporters to identify all wheat quality groups.

Despite the new rulebook, challenges remain for wheat producers regarding the mixing and mingling of different wheat qualities when stored and inconsistency in offering constant quality for wheat exports. The rulebook also mandated that producers and operators of storage separate wheat for human consumption and cattle consumption, which will also assist exporters in fulfilling international trade contracts.

Trade:

In MY2017/18, Serbian wheat and flour exports were relatively low at approximately 970,000 MT. In the extreme drought year of MY2017/18, when most Serbian crops were reduced by as much as 50

percent, wheat was in good condition, due mostly to being harvested before the drought began in July 2017. Lower-quality wheat and flour are mostly shipped by truck to neighboring Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Albania. The largest quantities of wheat are shipped by barge to Port Constanza, Romania.

Export of wheat is mostly by foreign international companies, FOB from one of the Serbian ports on the Danube River. Higher quality wheat sales are destined to Italy, Romania, Spain, Germany, and France. By presenting one template for all contracts, international buyers signaled their unwillingness to negotiate price, leaving producers with a take-it or leave-it scenario. Offered prices varied depending on protein content: protein content above 12.5 percent; between 11.5 and 12.5 percent; or below 11.5 percent. In MY2018/19, most of the wheat sold FOB from Danube Ports was wheat of lower quality for feed, while wheat of higher quality was mostly sold to neighboring countries.

From July 2018 to February 2019, Serbia exported approximately 940,000 MT of wheat and flour: 795,000 MT of wheat and 145,000 MT of wheat flour. As of March 2019, four months before the new wheat harvest season, there are 860,000 MT of wheat available. Wheat exports in MY 2018/19 are forecast to reach 1.4 MMT, approximately 43 percent higher than in the previous year when total exports were 970,000 MT. Exports were mainly destined for the EU and neighboring countries (Bosnia and Herzegovina, Montenegro, Croatia, Italy, Switzerland, Macedonia and Albania). The current FOB Danube wheat price is between \$146-\$157/MT for the new wheat crop and \$180-\$181/MT for the old wheat crop, depending on the quality.

Due to extreme dry summer in the whole of Europe in 2018, the level of the Danube was at a record low and river transportation was severely restricted from October-December 2018. From October 2018, exports began to decrease, mostly due to a nearly 50 percent reduction in the loading of barges and a 30 percent increase in transportation costs. This created challenges for exporters to deliver previously contracted wheat, putting Serbia at a competitive disadvantage. Serbia exports approximately 55 percent of wheat and wheat flour to the CEFTA (Central European Free Trade Agreement) countries (Albania, Moldova, Montenegro, North Macedonia, Kosovo and Serbia) and the remaining 45 percent to the Romanian port of Constanza.

In November 2018, Kosovo imposed a blockade on all commodities exported from Serbia, coupling the blockade with a 100 percent tax. As a result, Serbia was annually exporting almost 100,000 MT of wheat and 15,000 MT of flour, valued at \$45 million. Kosovo traditionally is a main buyer of Serbian wheat, which is now displaced by Bulgarian and Croatian suppliers.

In January 2019, the Ministry of Agriculture announced that phytosanitary certificates for export of wheat to Egypt were harmonized and that the Egyptian market is now open for exports from Serbia. In addition to wheat, exports of beef, sunflower and corn are now eligible to ship to Egypt.

Table 3: Wheat exports in MY18/19 (July 2018-February 2019)

Month	Wheat MY18/19 in MT	Flour MY18/19 in MT
July	197,812	16,616
August	208,854	16,613
September	139,982	13,103

October	90,886	14,544
November	50,741	13,907
December	46,347	13,621
January	30,414	10,680
February	30,801	11,670
TOTAL:	795,837	110,754

Source: Serbian Grain Fund

Table 4: Customs tariffs of grains in Serbia for 2019

Product	Custom tax for other countries (including U.S.)	Custom tax for EU countries	Custom tax for Russia, Belarus, Kazakhstan	CEFTA countries
Wheat	30%	0%	0%	0%
Corn	30%	0%	0%	0%
Barley	20%	0%	0%	0%

Source: Serbian Customs Office

The MY2019/20 wheat planted area is reported to be 11 percent lower than last year or approximately 600,000 HA. With estimated good wheat yields of approximately 4.5 MT/HA, total production is expected to be 2.7 MMT. Approximately 1.4 MMT will be available for export, leaving the estimated MY2019/2020 wheat ending stocks at approximately 560,000 MT.

The Serbian Grain Association (SGA) has approximately 49 members representing a sector valued at over \$500 million. Since 2016, the FAO and the European Bank for Reconstruction and Development (EBRD) have been working on different projects with the SGA in order to assist with the export of grains and oil crops to new markets. FAO experts focused on providing public sectors with the skill set to meet sanitary and phytosanitary requirements in the export of grains, wheat to Egypt and corn to China. In 2019, FAO and EBRD will support SGA to organize crop travel in June 2019 and the first grain conference in to be held in October 2019.

In CY2018, the largest foreign buyers of grain and oilseeds from Serbia, FOB Danube Port were: COFCO (China), Cargill (US), ADM (US) and Ameropa AG (Switzerland). The largest domestic exporters were Agroglobe, Delta, Konzul, Matijevic and Agro-Export.

Main logistical bottlenecks for grains in Serbia:

- Railways in bad state of repair (low maximum weight load and speed with only about half of the railway tracks allowing for speeds over 60 km/h);
- Significant problems in river fleet (limited number of old and inefficient vessels) and the infrastructure of internal waterways downstream;
- Still limited number of intermodal grain terminals;

Stocks:

As of March 2019, Serbia has one MMT of wheat available. Domestic consumption until the new harvest in June 2019 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 900,000 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.

Grain and oilseeds storage in Serbia is currently estimated at around 8 million MT. The main storage issues in Serbia are the following:

- Insufficient number of belt conveyors;
- Small number of quality controlling laboratories present at the silos;
- Lack of equipment for quick quality parameters determination;
- Equipment for cleaning (elevating) and transport of outdated goods;
- Smaller capacity silos do not have dryers;
- Attempt to form a system of public storages has failed;
- Guarantee for stored goods is only given from a warehouse operator;
- Insurance cannot be applied for goods at state warehouses;
- Disputes are resolved in regular judicial processes that last for several years;
- Poor representation of arbitration;

Total storage capacity for grains at Danube ports in Serbia is 214,000 MT.

In-port storage capacity for grains:

- Port Bogojevo 30,000 MT
- Port Beocin 24,000 MT
- Port Novi Sad 65,000 MT
- Port Belgrade 40,000 MT
- Port Pancevo 50,000 MT
- Port Prahovo 5,000 MT

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 has limited payment of incentives to smaller agricultural concerns by reducing the maximum farm size for registered agricultural households eligible to use federal subsidies, from 100 HA to 20 HA. 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 2018, the government decided to purchase 28,144 MT of wheat from MY 2018/19 for the State Commodity Reserves. The conditions for selling wheat to the state were that wheat be of domestic origin, produced in MY2018/19 and stored in one of the state certified grain storage facilities. The price offered was \$178/MT for purchases from registered individual farmers and farmer cooperatives. The minimum quantity of corn was set at 10 MT while the maximum was 1,000 MT depending on the status of the farmer as an individual farmer, agriculture cooperative or the authorized grain facility. Through this purchasing program, the State Commodity Reserves was mostly filling its own stocks of wheat, rather than attempting to affect the domestic supply and price for wheat.

In August 2018, the Ministry of Agriculture approved the exchange of seed wheat for mercantile wheat from MY2018/2019 through the State Commodity Reserves. The goal of this activity was to assist wheat farmers to sow certified wheat seeds of domestic varieties in the fall planting season. Recipients of this exchange were individual farmers with active agricultural holdings, as well as cooperatives and legal persons registered as companies whose main activity is the cultivation of crops.

The maximum quantity of seed which given in exchange for the wheat to an individual farmer was 20 MT, while the authorized warehouse owners, cooperatives and other legal entities could request the maximum amount of 500 MT . The proposed parity was 1.8 kg of mercantile wheat for 1 kg of seed wheat. Total quantity of wheat that was accepted for exchange was 30,000 MT; one-third of Serbia's monthly consumption. The small quantity of wheat offered likely did not have much effect on wheat prices.

In mid-December 2018, Parliament approved the agriculture budget for 2019 for \$410 million, similar to the previous year (\$441 million). Agriculture makes up 3.3 percent of the total state budget for 2019. The majority of the budget for agriculture in 2019 is set for incentive measures in crops, livestock and dairy production, support for the use of EU IPARD funds, investments in the food processing industry, development of new markets for agriculture and food products, and improvement of the irrigation system in-country. In 2019, the agriculture budget for the Ministry of Agriculture and the Provincial Secretariat is harmonized with measures from the EU IPARD program (Instrument for Pre-Accession Assistance in Rural Development).

In January 2019, the government adopted the new Rulebook on Allocation of Subsidies for Agriculture Production and Rural Development. Planting subsidies for crop production will be 4,000 dinars (\$40) per hectare. State support for milk production in 2019 will remain the same as previous years (7 dinars [\$0.07] per liter). Livestock production subsidies will range from 100 dinars (\$1) for laying hens to 25,000 dinars (\$250) per cow. Incentives for beehives will be 720 dinars (\$7) per hive. The government is also offering to cover 40 percent of the storage costs for farmers. For support to organic production, the State set aside 108 million dinars (\$1.1 million) and for preservation of plant and animal genetic resources approximately 124 million dinars (\$1.3 million).

The total agricultural budget for 2019 consists of direct payments (farmer subsidies) in the amount of 17.22 billion dinars (\$170 million). Support for rural development totaled 4.73 billion dinars (\$46 million); credit support to agriculture producers 400 million dinars (\$4 million). The outlay for specific incentives totaled 230 million dinars (\$2.3 million) and funds for IPARD support, 6 billion dinars (\$6 million), of which 75 percent is provided through EU IPARD funds and 15 percent is provided from the state agriculture budget.

The Serbian Government adopted the Decree on Subsidizing Diesel Fuel for Farmers in February 2019. The decree increased the agriculture budget by an additional 1.9 billion dinars (USD18.8 million) to provide subsidized diesel fuel at 20 dinars per hectare (\$0.20/lit) for a maximum 60 liters per hectare. Each farmer can obtain subsidized diesel for up to 20 hectares in total.

In the current budget, the government eliminated support for the mandatory production and sale of "social" bread made from "T-500" flour. As a result, there is no longer a maximum retail price of 46

dinars (\$0.46/loaf) for this bread, and bakers are no longer required to dedicate at least 40 percent of their output to its daily production.

Marketing:

Market prices during the June-July 2018 harvest increased from \$170/MT to \$200/MT, due to the record wheat crop and increased demand. However, prices began to decrease when the low quality of yields became evident and widely-known. By October 2018, the price of wheat, FOB Danube Port, was between \$160/MT and \$170/MT depending on protein content.

Shortly after, in November 2018, prices began to increase as difficulties in river transportation began to mount leading to a drop in exports. Prices finally began to stabilize by the end of the year at around \$180/MT, relatively high compared with Russian and Ukraine supply in the Black Sea market. This competition has kept Serbian exports at roughly 30,000 MT a month since the end of 2018. Currently, the MY2018/19 price for wheat ranges from \$180/MT for wheat with 12.5 percent of protein to \$170/MT for wheat with protein content below 11.5 percent.

As of March 2019, wheat from MY2019/20 is offered for sale at approximately \$150/MT. After four months of low exports, sales are forecast to increase leading up to the new season as producers look to fund spring planting. The new season will begin June-July 2019. Wheat prices will probably decline in the coming months due to the large quantities of wheat currently available four months before the new harvest.

Production, Supply and Demand Data Statistics:

Wheat Market Begin Year Serbia	2017/2018		2018/2019		2019/2020	
	Jul 2017		Jul 2018		Jul 2019	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	540	540	675	0	0	600
Beginning Stocks	883	883	752	564	0	916
Production	2300	2300	3200	3400	0	2700
MY Imports	9	7	10	2	0	2
TY Imports	9	7	10	2	0	2
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	3192	3190	3962	3966	0	3618
MY Exports	840	976	1500	1400	0	1400
TY Exports	840	976	1500	1400	0	1400
Feed and Residual	400	450	450	450	0	450
FSI Consumption	1200	1200	1200	1200	0	1200
Total Consumption	1600	1650	1650	1650	0	1650
Ending Stocks	752	564	812	916	0	568
Total	3192	3190	3962	3966	0	3618

Distribution						
Yield	4.2593	4.2593	4.7407	0	0	4.5
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Corn

Production:

For MY2018/19, corn production nearly reached a record level of 7 MMT, 75 percent more than the previous marketing year in 2017/18 when corn was one of the crops hardest hit by extreme summer temperatures and lack of precipitation. Corn planted area in MY2018/19 was reported at 900,000 HA and estimated average yields reached record levels of 7.7 MT/HA. From October 2018 to February 2019, Serbia exported approximately one MMT of corn. Large stocks remain, due to 2.5 MMT of corn crop from MY 2018/19 currently available for export.

The corn harvest last fall began earlier than usual - end of August 2018 - and lasted until the end of October. Corn yields in some parts of Vojvodina reached a record high of 10-15 MT/HA, while corn yields in the areas south of the Danube were lower, approximately 6-8 MT/HA. The record corn crop of MY2018/19 not only occurred in Serbia, but also throughout the region. This large supply created low prices that put pressure on farmers to sell due to limited storage.

For MY2019/20, Serbia’s planted corn area is projected to be 950,000 HA, 5.6 percent more than last year due to the decreased wheat crop. Total corn production is forecast at 6.7 MMT, which equates to an average yield of 7 MT/HA. Corn accounts for roughly 35 percent of total planted area of field crops in Serbia. This year’s corn planting in is expected to begin mid-April and to last until mid-May. 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.

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. 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 in Serbia: 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 huge 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 U.S. Du Pont Pioneer with 28 percent market share of the entire seed

market. Du Pont Pioneer and two domestic institutes account for 71 percent of the corn seed market, while the remaining 29 percent of the market is shared by approximately 15 foreign companies that are present in the market (KWS, Limagrain, Syngenta, Monsanto, Dekalb, Agrimax, Maisdour etc).

Consumption:

Serbia’s MY2018/19 total consumption requirement is estimated at approximately 4 MMT annually, with most being used for animal feed (3.6 MMT) and 200,000-300,000 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 2018, there were less than 1 million cattle (700,000 cows and pregnant heifers) with the tendency to decrease even further. At the same time, there has been a trend of rural depopulation as well.

Trade:

Serbia is a net corn exporter. In MY2017/18, due to very small production of only 4 MMT of corn, Serbia exported much smaller quantities than usually of 900,000 MT. Serbia is one of the largest corn exporters in Europe and in record good years among top ten countries in the world. If corn exports reach 2.5 MMT in MY2018/19, the country will once again enter the list of top corn exporters in the world. 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.

Due to very low Danube River from October to December 2018, Serbian corn exports were lower than in other good years. From October 2018 to February 2019, Serbia exported one MMT of corn MY2018/2019. Monthly exports in this period was about 200,000 MT, except for February 2019, when export increased to 250,000 MT. 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. Serbia is also exporting corn to Japan and South Korea due the fact that all Serbian corn is non-GE.

The largest buyers of the Serbian corn in MY2018/19 were COSCO (China), ADM (US), Cargill (US) and Ameropa (Switzerland). Most of the quantities were shipped by barges via Danube River to the Port Constanza in Romania.

Table 5: Corn exports in first half of MY18/19

Month	MY18/19 in MT
October	193,907
November	163,601
December	212,417
January	192,661
February	250,406
TOTAL:	1,012,992

Source: Serbian Grain Fund

Effective January 1, 2014, the duty rate for corn imports from the EU and CEFTA countries, as well from Russia, Belarus and Kazakhstan 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.

Stocks:

Corn ending stocks in MY2018/19 are estimated to be at a low level, about 300,000 MT due to the low corn crop in MY2017/18. 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.

Policy:

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

In October 2018, the government decided to purchase 12,072 MT of corn from MY2018/19 for State Commodity Reserves. The conditions for selling corn to the state was that the corn be of domestic origin, produced in MY2018/19 and stored in one of the state certified grain storage facilities. The government offered a price of \$173/MT for purchases from registered individual farmers, farmer cooperatives and authorized storages. 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.

Marketing:

After the harvest, the price of corn dropped from \$145/MT to \$130/MT, making it quite competitive with Hungary, Romania and Croatia. Export of corn was slow from October to December due to the same issues cited above with the Danube last fall. Prices gradually increased from \$130/MT in the fall to \$140/MT in by the end of February 2019.

A portion of corn exports is shipped to neighboring countries (Bosnia and Hercegovina, Albania, North Macedonia, and Montenegro) by truck, while the majority is shipped by international companies via the Danube River on vessels and barges to the Black Sea region. The current price for corn is competitive and exports are expected to rise in the following months.

Production, Supply and Demand Data Statistics:

Corn Market Begin Year	2017/2018		2018/2019		2019/2020	
	Oct 2017		Oct 2018		Oct 2019	
Serbia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1000	1000	900	900	0	950
Beginning Stocks	1039	1039	438	91	0	301
Production	4000	4000	7000	7000	0	6700
MY Imports	18	20	10	10	0	10

TY Imports	18	20	10	10	0	10
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	5057	5059	7448	7101	0	7011
MY Exports	819	868	2700	2500	0	2400
TY Exports	819	868	2700	2500	0	2400
Feed and Residual	3500	3800	3800	4000	0	4000
FSI Consumption	300	300	300	300	0	300
Total Consumption	3800	4100	4100	4300	0	4300
Ending Stocks	438	91	648	301	0	311
Total Distribution	5057	5059	7448	7101	0	7011
Yield	4	4	7.7778	7.7778	0	7.0526
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Barley

Production:

Barley is a secondary grain crop in Serbia. Barley area increased over the past several years from 70,000 HA to 110,000 HA in MY2018/19. Total production varies from 300,000-470,000 MT annually.

For MY2018/19, barley was planted on 110,000 HA, of which 80,000 HA was winter barley and 30,000 HA was spring barley. Production reached record high volumes of approximately 473,000 MT, with an average yield of 4.3 MT/HA. In MY2019/20, barley area is projected to be the same, on 110,000 HA (40 percent for brewery sales and 60 percent for cattle feed). It is projected that average yields will be approximately 4 MT/HA, and that total barley production could reach approximately 440,000 MT.

Table 6: Area planted to barley from MY2013/14 to MY2018/19

Year	Barley		
	Harvested area HA	Yields	
		Total MT	Per HA/MT
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	110,000	473,000	4.30
2019/20	110,000	440,000	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 breweries. Local breweries have been successfully sold to several well-known Belgian, U.S., Canadian, German, Austrian, and Turkish companies. Barley planted for brewery use 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 22,000 MT in MY2012/13 to only 2,000 MT in MY2018/19. Most of the barley imports are for the brewing industry and come from France, the Czech Republic, Hungary, Romania and Bulgaria. Total barley exports have significantly increased over the past years. This is mostly barley used for feed. In MY2018/19, it is estimated that exports of barley can reach a record high volume of over 50,000 MT, the largest for the last five years. Serbia mostly exports barley to EU countries, Bosnia and Herzegovina and Montenegro.

Stocks:

Barley beginning stocks in MY2018/19 are estimated at 57,000 MT.

Policy:

The 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 for barley ranges from \$175/MT to \$180/MT.

Production, Supply and Demand Data Statistics:

Barley Market Begin Year	2017/2018		2018/2019		2019/2020	
	Jul 2017		Jul 2018		Jul 2019	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Serbia						
Area Harvested	95	95	100	110	0	110
Beginning Stocks	33	33	10	40	0	57
Production	380	380	435	470	0	440
MY Imports	0	4	5	2	0	3
TY Imports	0	4	5	2	0	3

TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	413	417	450	512	0	500
MY Exports	53	27	80	55	0	70
TY Exports	57	27	80	55	0	70
Feed and Residual	200	200	200	200	0	200
FSI Consumption	150	150	150	200	0	200
Total Consumption	350	350	350	400	0	400
Ending Stocks	10	40	20	57	0	30
Total Distribution	413	417	450	512	0	500
Yield	4	4	4.35	4.2727	0	4
(1000 HA) ,(1000 MT) ,(MT/HA)						