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Report Name: Grain and Feed Market Update

Country: Bulgaria

Post: Sofia

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Report Highlights:

In marketing year (MY) 2022/23, Bulgaria expects to harvest a corn crop of 2.8 million metric tons (MMT), 18 percent lower than in MY 2021/22. The decrease can be attributed to nine percent decline in area planted, yields severely impacted by the summer drought and heat, and higher pest infestation. Winter grains had better results due to more favorable weather and are estimated at 6.3 MMT of wheat and 640,000 MT of barley, however, the crops are 13 and 10 percent lower than in MY 2021/22, respectively. Increasing production costs, inflation and softening prices in the Black Sea region, are the main concerns for the farmers. Although Bulgaria imported small quantities of Ukrainian wheat and corn, producers are upset about the pressure on market prices. Currently, exports are stalled as farmers are holding grain stocks due to declining prices, leading to significant logistical/storage challenges. Due to increased production costs, producers may reduce input use in MY 2023/24, putting future yields in question

Weather Overview
Hot and dry summer weather conditions substantially reduced yield outlook for the summer grain crops. Bulgaria was among the most negatively affected in Europe, with summer temperatures persistently between 1.8 F and 7.2°F above the average, with the highest values recorded toward the end of July when daily maximum temperatures reached 102°F in central and western parts of the country. July was also among the driest on record. The lack of precipitation, worsened by the high temperatures, increased crop water demand, caused depletion of soil moisture reserves, and exposed the corn crop to water stress during the critical grain-filling period. No significant precipitation in July, combined with warmer-than-usual temperatures in the second half of the month, accelerated crop ripening by about two weeks. As a result, the corn harvest started at the end of August.

The first half of August remained extremely dry. In north-eastern regions no rain was recorded, while about 0.78 inches fell in western and central regions. Since the middle of August, though, rainfall was abundant throughout Bulgaria, especially in the west. However, the precipitation arrived too late for most of the corn crop, except for some late hybrids.

The lack of summer precipitation supported the wheat and barley harvest, especially in eastern Bulgaria. The rainfall in August and September was favorable for increased soil moisture levels and allowed MY 2023/24 winter grains to be sown in the optimal window. (See Maps 1-8, Crop Explorer, Bulgaria data, MARS August Bulletin Vol.30 #8 and MARS September Bulletin Vol.30 #9).

Wheat
MY 2022/23 Production Estimates
The wheat harvest was completed on-time and in favorable weather conditions at the end of July. However, late planting, decreased input use, spring frosts, and insufficient rainfall in May negatively affected average yields. Currently, average yield estimates are 5.3 MT/HA. Area harvested was officially confirmed at 1.2 million hectares (MHA) (MinAg Weekly Bulletin #35). Harvested production was recorded by the Bulgarian Ministry of Agriculture (MinAg) at 6.3 MMT, with some private estimates reaching 6.5 MMT (Table 1 and 2). Wheat yields vary by region and by farm, with leading farmers reporting yields as high as 9.0 MT/HA. Regions with the highest yields were in the north and northeast. Thus, area harvested remained stable in MY 2022/23, while production is 13 percent (1.0 MMT) lower than in MY 2021/22 due to a similar decline in yields (Table 1 and 2).
In June, MinAg made a crop survey of winter grains to forecast the upcoming crop. The most popular wheat varieties were reported to be mainly French: Avenue (10 percent), followed by Sofru (nine percent), and Annapurna (eight percent). The average density of wheat fields was recorded at 508 plants/square meter, and the average number of kernels per a wheat head was recorded at 33. The MinAg production forecast at that time was 6.5-7.0 MMT.

In September, MinAg also published the first official data about wheat crop quality. Increasing from 50 percent in the previous season, the report stated that 66.3 percent of total wheat is suitable for milling purposes, with the remainder for feed. According to private estimates, the share of milling wheat is at 40 percent in MY 2022/23, compared to 36 percent in the previous season. The average hectoliter is 76 and protein content is at 12.6 percent.

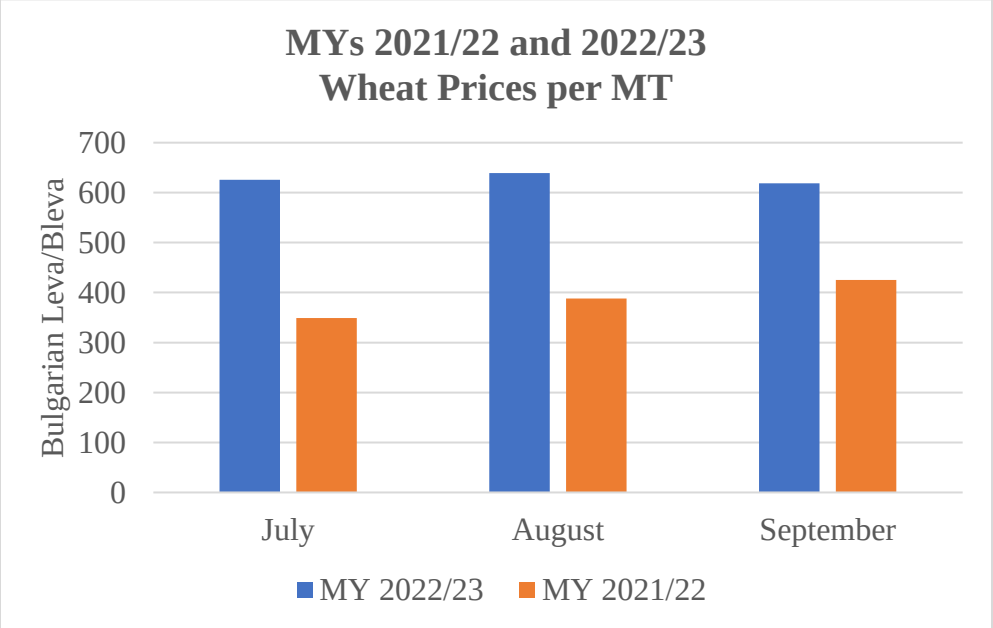
Farmers are deeply concerned about their growing production costs. Many producers have estimated the annual increase in their expenses at over 50 percent, with an official inflation rate of 18 percent as of

August. The highest growth in costs was recorded for fertilizers, followed by energy, plant protection chemicals, and seeds.

A very important expense is the skyrocketing land rent. Most farmers in Bulgaria cultivate about 20-40 percent of their own land, while the rest is leased. The availability of cheap money and inflation stimulated non-agricultural investors as well as larger farmers to buy agricultural land, thus inflating its price. According to official data, land rent in the main grain region of Dobrudja (in the northeast) increased by 96 percent last year. Currently, the land rents there are between $600-$900/HA, followed by central Bulgaria at $400/HA and the northwest at $300/HA. Reportedly, this is almost double the land rents paid in neighboring Romania. Some farmers surmised that this is a prohibitively high level of rent for farming and will force them to shrink production and cancel investment plans for the near future. As a workaround, farmers have been attempting to pay land rents in grains instead of cash, but it is unlikely that the landowners will accept this change. It is estimated that the total amount of land rents paid by farmers this year will exceed $750 million, a significant source of income and social support for people living in rural areas.

Wheat prices have been higher in the current MY. According to MinAg, the average farm-gate price for milling wheat in September 2022 was at 619 Bleva/MT ($309/MT) compared to 425 Bleva/MT ($254/MT) in September 2021. This represents a considerable increase of 46 percent compared to the corresponding period a year ago. Although the price in local currency (tied to Euro) has seriously increased, the price in U.S. dollars grew less steeply (22 percent) due to the exchange rate. This made farmers reluctant sellers, with many preferring to hold stocks in anticipation of higher prices later in the season as a hedge against increasing prices of inputs (energy and fertilizers) and unclear market trends due to the instability in the Black Sea.

Graph 1. Wheat Monthly Market Prices, Bulgaria, MY 2022/23 vs MY 2021/22 for July, August, and September in Bleva/MT



Source: MinAg Weekly Grain Market Bulletins

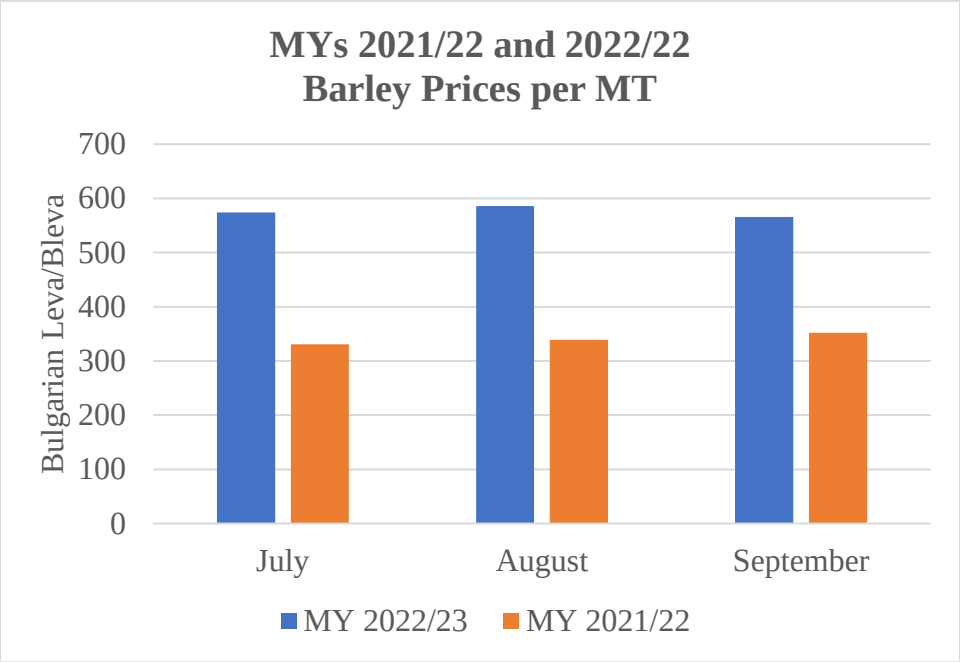
MY 2023/24 Forecast
Farmers are likely to benefit from August and September rains which improved surface soil moisture. As of September 23, MinAg shared its first wheat planting progress report, indicating more advanced planting compared to last season. During recent Post crop travel, most farmers indicated that they don't intend to change their wheat area, and it will likely remain stable at 1.2 MHA.

Barley
MY 2022/23 Production Estimates
Barley harvest was completed on-time and in favorable weather conditions at the end of July. However, lower input use and insufficient rainfall in May affected the average yields. The average yield estimates are 5.2 MT/HA. Area harvested was officially confirmed (Eurostat) at 124,000 HA. Harvested production was recorded at 636,000 MT (Eurostat), with some private estimates ranging between 590,000 MT and 650,000 MT (Table 1 and 2). Thus, barley production in MY 2022/23 is 10 percent lower than in MY 2021/22, due to a seven percent decline in yields, while the area harvested declined by two percent (Table 1 and 2).
Barley yields vary by region, with the highest yields reported in north and northeast. During Post crop travel, farmers in the northeast shared that in recent years the barley crop performed better than wheat, with higher average yields and better cost/price ratio.

The MinAg crop survey of winter grains reported that the most popular barley varieties were Casanova (13 percent), followed by Emon (eight percent), and Jup (eight percent). The average density of barley fields was recorded at 465 plants/square meter, and the average number of kernels per a barley head was recorded at 30.

Barley prices have been higher in the current MY. According to MinAg, the average farm-gate price for barley in September 2022 was at 566 Bleva/MT ($283/MT) compared to 351 Bleva/MT ($211/MT) in September 2021. This represents the highest growth among grain and oilseed crops at 61 percent compared to the corresponding period a year ago. The price in U.S. dollars grew less (34 percent) due to the exchange rate. Like in the case with wheat, farmers are reluctant sellers and prefer to hold onto their stocks.

Graph 2. Barley Monthly Market Prices, Bulgaria, MY 2022/23 vs MY 2021/22, July, August, and September in Bleva/MT



Source: MinAg Weekly Grain Market Bulletins

MY 2023/24 Forecast
Farmers are likely to benefit from August and September rains which improved surface soil moisture. As of September 23, MinAg shared the first barley planting progress report, indicating more advanced planting compared to last season. Area planted is estimated to increase slightly to 125,000 HA.

Corn
MY 2022/23 Production Estimates
Corn harvest began earlier this year, and as of September 23 was 42 percent complete (MinAg data). Recorded yields to date are 4.8 MT/HA and production is 1.1 MMT. Yields are improving as harvest progresses.

Area planted decreased to 523,000 HA according to authorities, nine percent below the record area planted last season (Table 1 and 2). Farmers reduced corn area due to higher production costs (especially fertilizers, energy, and plant protection chemicals) as compared to sunflower.

Corn had a promising early start due to abundant rains in May and June and cooler temperatures. Summer drought and heat, however, especially in the most critical period of July, severely affected average yields (Crop Travel Photos 1-12). Post decreases its production estimate to 2.8 MMT (Tables 1 and 2) and reduces its average yield estimate to 5.3 MT/HA (11 percent lower than in MY 2021/22). Market players average yield estimates vary widely from 4.8 MT/HA to 5.9 MT/HA, and production from 2.5 MMT to 3.1 MMT.

Post crop travel in September and interviews with trade sources showed that this year the crop suffered from higher infestation of corn rootworm (Diabrotica virgifera) and corn leaf weevil (Tanymecus dilaticollis). According to local experts, the rootworm is spreading faster than usual and can be found in

new locations. Agronomists opined that the lack of neonicotinoids are seriously affecting yields due to the lack of any alternatives, while pest pressure is growing. Moreover, neighboring Romania can still use a derogation for neonicotinoids.

Farm-gate corn prices have softened lately, but as of September they continued to exceed last year's level. MinAg reported average prices in September at 598 Bleva/MT ($299/MT) compared to 416 Bleva ($249/MT) in September 2021. This price is 44 percent higher than a year ago in local currency and 20 percent higher in U.S. dollars. Currently, farmers harvest and store corn stocks and don't sell in expectation of higher prices.

Grain Trade and Consumption Estimates

Grain trade was hampered during the summer and in September by the very low level of the Danube River, which was impacted by the aforementioned drought. In addition, logistics remain high due to a deficit of barges and overloaded capacity at the Constantsa port (Romania), which is used for most of the Bulgarian grain exports.

Exports were also challenged by increased price-competitive Ukrainian exports. Traders report that some advantages of local grains, such as certification for non-genetically modified organisms, and certain quality characteristics are increasingly ignored by foreign buyers due to the significant price advantage of the Ukrainian product.

Another challenge for grain farmers is declining domestic feed consumption and demand. Most dairy, livestock, and poultry farms have had difficulties coping with sharply increasing feed prices, while the prices of their products remain stable or increase only marginally. This leads to distress slaughter and lower inventory, as well as to less optimal feeding.

Wheat, MY 2021/22: According to Trade Data Monitor (TDM), wheat imports in MY 2021/22 were 102,000 MT (Table 3), 55 percent more than in the previous season. These imports are mainly of high-quality wheat for confectionary purposes. The main suppliers were Spain, Greece, and Austria.

Exports were historically high at 5.9 MMT due to a larger crop, strong export demand, and attractive prices, especially after the Russian invasion in Ukraine when MinAg reduced their efforts to limit exports due to international pressure related to food security issues. These exports were 62 percent higher than in MY 2021/22 (Table 3). Exports were destined mainly for Algeria, Spain, Greece, Romania, South Korea, and Tunisia.

Wheat, MY 2022/23: Exports in the current MY (as of the end of September) were reported by MinAg at 1.0 MMT, of which 881,000 MT is destined outside the EU. For the period July 1–September 26, EU Customs data shows that Bulgaria exported 881,074 MT to non-EU countries. Export demand has been sluggish and lags behind last year, while domestic users offer better prices to farmers. Still, most farmers are holding their stocks and prefer not to sell.

Barley, MY 2021/22: Barley exports in MY 2021/22 were at 443,000 MT (Table 3, TDM), 39 percent more than in the previous season, due to a larger crop and very strong export demand. Exports were destinated mainly to Greece, Israel, Cyprus, and Spain.

Barley, MY 2022/23: Exports in the current MY (as of the end of September) were reported by MinAg at 338,000 MT, of which 158,000 MT is destined outside the EU. For the period July 1–September 26, EU Customs data shows that Bulgaria exported 33,000 MT to non-EU countries. Like in the case with wheat, exports demand has been weak and farmers are holding their stocks.

Corn, MY 2021/22: The TDM data for October 2021–June 2022 shows imports at 97,000 MT, which is 52 percent higher than in the corresponding period in MY 2020/21. This is mainly due to more competitive prices (Table 3). MinAg data shows imports for MY 2021/22 (based on September 1-August 31 marketing year) at 73,645 MT. The main sources of imports are Romania, Serbia, and Turkey.

Corn exports for October 2021–June 2022 are at 1.33 MT (TDM), which is 4 percent lower than in the corresponding period in MY 2020/21 (Table 3). MinAg data shows exports for MY 2021/22 (based on September 1-August 31 marketing year) at 1.45 MMT. The main export destinations were South Korea, Greece, and Romania.

Corn, MY 2022/23 – Trade has been depressed in September. Farmers are focused on harvesting and keep their stocks. Domestic users began to buy small quantities, while exports are non-existent. It is believed that trade will become more active in October when there should be a better understanding of the Black Sea situation, especially about crops and potential exports from Ukraine and Russia. Consumption for food (starch) and for bioethanol in MY 2022/23 is projected to grow due to expanded domestic capacities.

Stocks MY 2021/22

Ending stocks of wheat in MY 2021/22 as of June 30 were reported by MinAg at 296,648 MT, or about 15 percent lower compared to the ending stocks in MY 2021/21 (348,472 MT).

Ending stocks of barley in MY 2021/22 as of June 30 were reported at 116,294 MT, much higher than the ending stocks in MY 2020/21 (5,534 MT) due to the abundant crop and despite the growth in exports.

Ending stocks of corn at the end of MY 2021/22 (August 31) were reported by MinAg at 474,511 MT, almost double the stocks at the same time a year ago (248,820 MT), due to the larger crop and stable domestic use. Due to the earlier start of the harvest this year, however, it is believed that some of these stocks contain 2022 corn crop.

Policy

Following the Russian invasion in Ukraine, local farmers and authorities expressed strong support for accommodating Ukrainian transit exports via Bulgaria to other EU and international destinations. However, local infrastructure is not technically suitable or cost efficient for such transit shipments. Instead, most Ukrainian shipments go to the Romanian port of Constantsa. Shipments using barges on the Danube usually come to Bulgaria via the ports of Rousse and Silistra, or by rail or trucks in the Northeast. The leading domestic users as well as most grain production are also located there.

Some feed mills imported corn, and a few flour mills also imported small quantities of wheat. Both feed and flour mills have reported that the quality of Ukrainian product is very good. One miller reported

high wheat hectoliter of 82 compared 72-76 for local wheat. The price difference between domestic and imported corn/wheat was reported at 50-100 Bleva/MT ($25-$50/MT). Nevertheless, imported corn and wheat quantities have been small, reportedly about 8,000 MT of wheat and 10,000 MT of corn. The local Union of Millers made public statements that no imported wheat is used for bread production.

Farmers, however, have expressed concerns that the imported product is depressing local prices, with imported prices of Ukrainian product equal to or below their costs. The situation has been exacerbated by the lower yields and higher production costs of the MY 2022/23 crop. Producers claim that the lack of phytosanitary inspections is the reason for importing new pests (Diabrotica virgifera), diseases, and weeds. Some farmers argue that imported product comes from old stocks and has a higher presence of storage pests. They also have protested against imports of commodities from non-EU countries that can use a wide variety of plant protection chemicals which are banned in the EU, such as neonicotinoids. All this led to massive national farm road protests in the middle of September.

Authorities stated that the country will continue to support transit of Ukrainian product and will strengthen phytosanitary inspections. The Minister of Agriculture also emphasized that all imports from Ukraine are safe for human use. At the end of September, MinAg requested an extraordinary measure for private storage aid from the European Commission. The goal was to pay for keeping stocks at private storage at times of lower prices. MinAg also plans to renew the old registration regime for local storage operations, which was removed several years ago, with the goal to have better real-time control over available stocks. The new regime may require declaring the origin of the product and is intended to differentiate local product from imported and provide for better traceability.

Appendix:

Table 1. Grain Crops Final Production Data MY2022/23 and MY2021/22, September 2022

Crops	**Area Harvested (000 HA)**		**Production (000 MT)**	
	MY2022/23	**MY2021/22**	**MY2022/23**	**MY2021/22**
Wheat	1,207.78	1,206.00	6,340.99	7,326.00
Barley	123.00	126.31	636.45	704.87
Corn	523.00	573.02	2,353.49*	3,427.32
Rice	11.00	12.05	60.50	58.19
Oats	12.00	9.94	27.94	24.54
Triticale	14.00	15.94	47.09	54.03
Rye	9.00	7.63	18.42	16.88
Sorghum	3.00	1.86	9.62	5.27
Total	1,902.78	1,952.75	9,494.5	11,563.1
Source: Eurostat data based on EU standard moisture content- updated as of September 2022 *It is not known if this data represents final Eurostat estimates or a tentative harvest result.				

Table 2. FAS Sofia Grain Production Estimates MY2022/23, September 2022

Crops	**Area Harvested, HA**	**Production, MT**
Wheat	1.2 million	6.4 million
Barley (winter and spring)	130,000	640,000
Corn	573,000	2.8 million

Table 3: MY 2021/22 Trade in Major Grain Crops, MY 2021/22

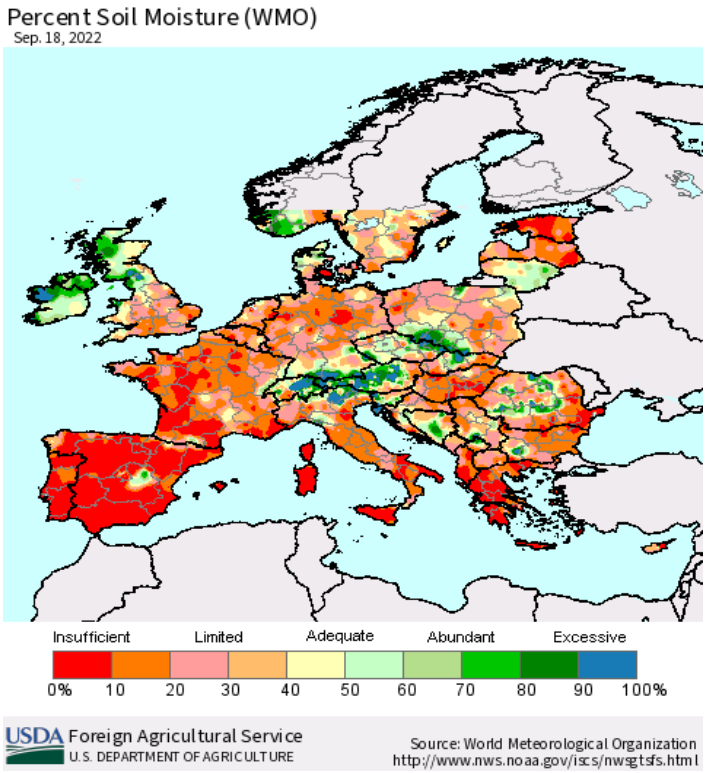
Types of Grains	Imports, MT	Exports, MT
Wheat, in WGE	102,458 MT -31,365 MT from Spain -23,974 MT from Greece -11,848 MT from Austria - 7,243 MT from Ukraine	5,912,650 MT -909,316 MT to Algeria -789,578 MT to Spain -689,837 MT to Greece -619,781 MT to Romania -407,396 MT to South Korea -385,863 MT to Tunisia -291,160 MT to Israel
Barley	1,485 MT	443,457 MT -139,973 MT to Greece -78,408 MT to Israel -77,127 MT to Cyprus -62,778 MT to Spain
Corn*	73,645 MT TDM data as of June is at 97,422 MT	1,453,779 MT (including 622,207 MT to non-EU countries) TDM data as of June is at 1,330,801 MT
Source: TDM and MinAg Weekly Grain Market Bulletins for corn trade *****Note: The Bulgarian MinAg uses September 1-August 31 as a MY for corn. Trade data refers to 2021 corn crop traded since September 1, 2021.		

Table 4: MY 2022/23 Trade in Major Grain Crops, as of September 23, 2022

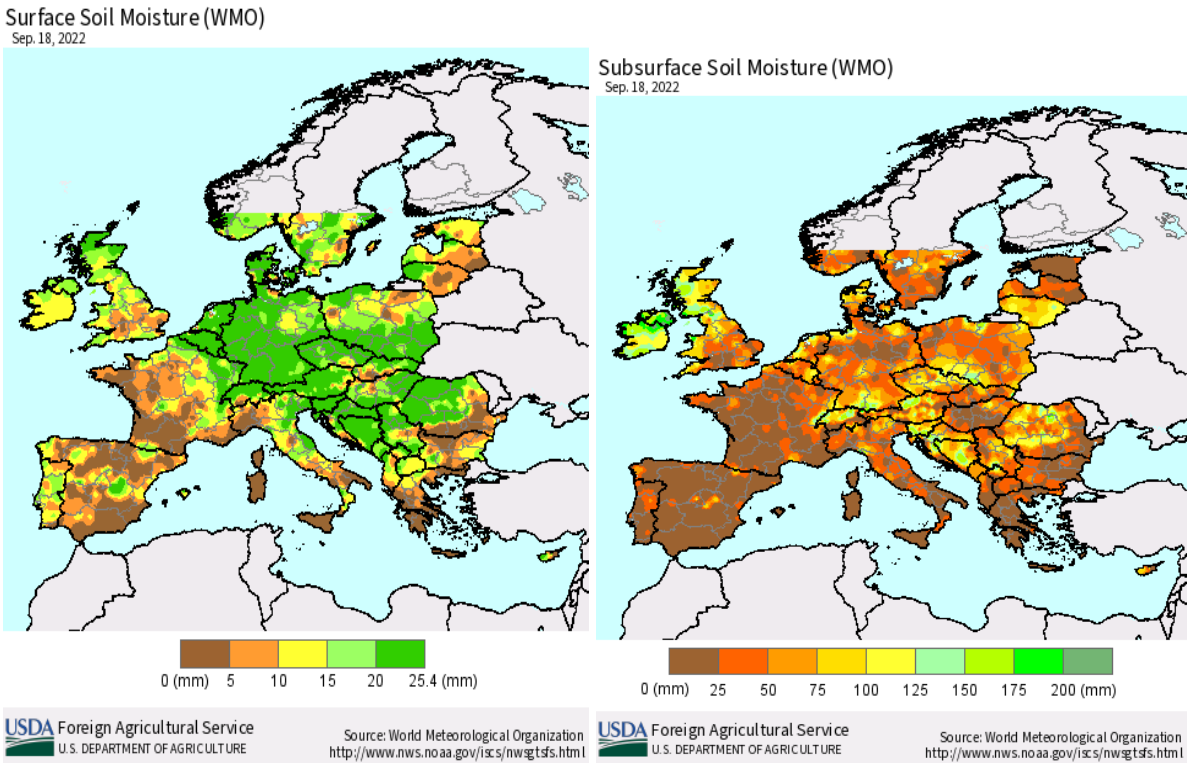
Types of Grains	Imports, MT	Exports, MT
Wheat	9,069 MT	1,002,196 MT (including 881,315 MT to non-EU markets);
Barley	690 MT	338,171 MT (including 157,701 MT to non-EU markets);
Corn*	5,373 MT	No exports
Source: MinAg Weekly Grain Market Bulletins. *****Note: The Bulgarian MinAg uses September 1-August 31 as a MY for corn. Trade data refers to 2022 corn crop traded since September 1, 2021.		

Appendix:

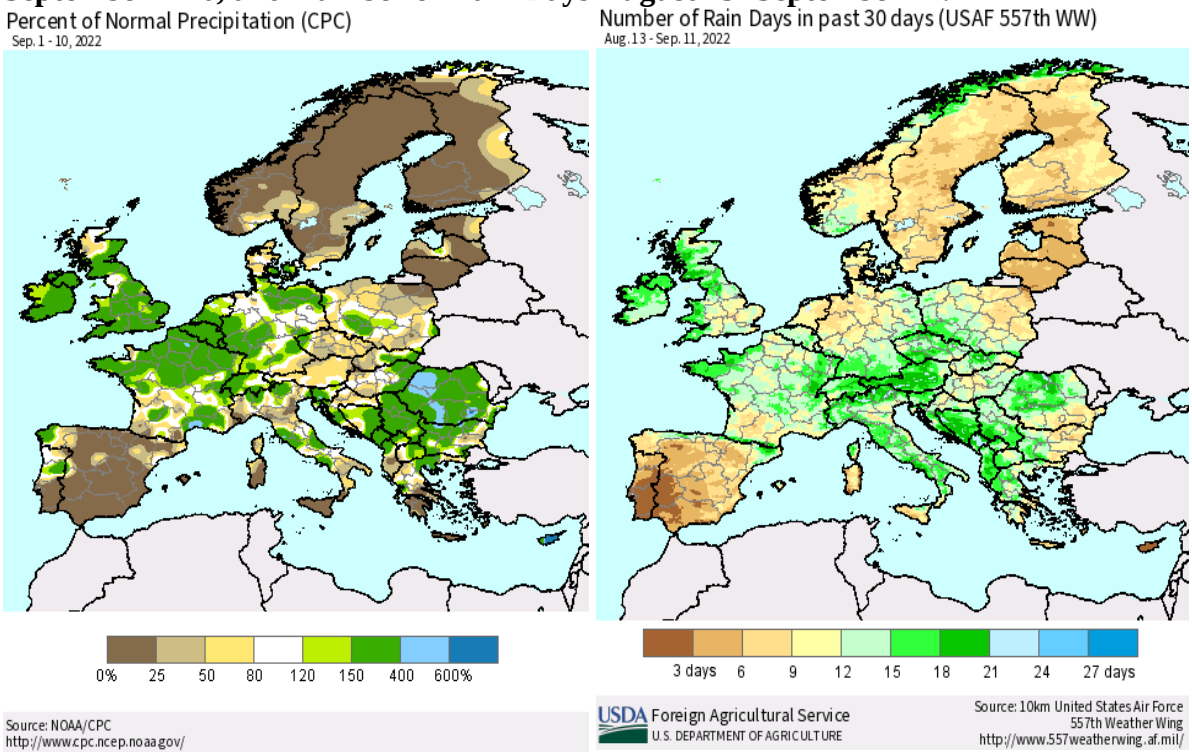
Map 1: USDA Crop Explorer, Europe, Percent Soil Moisture, September 18, 2022



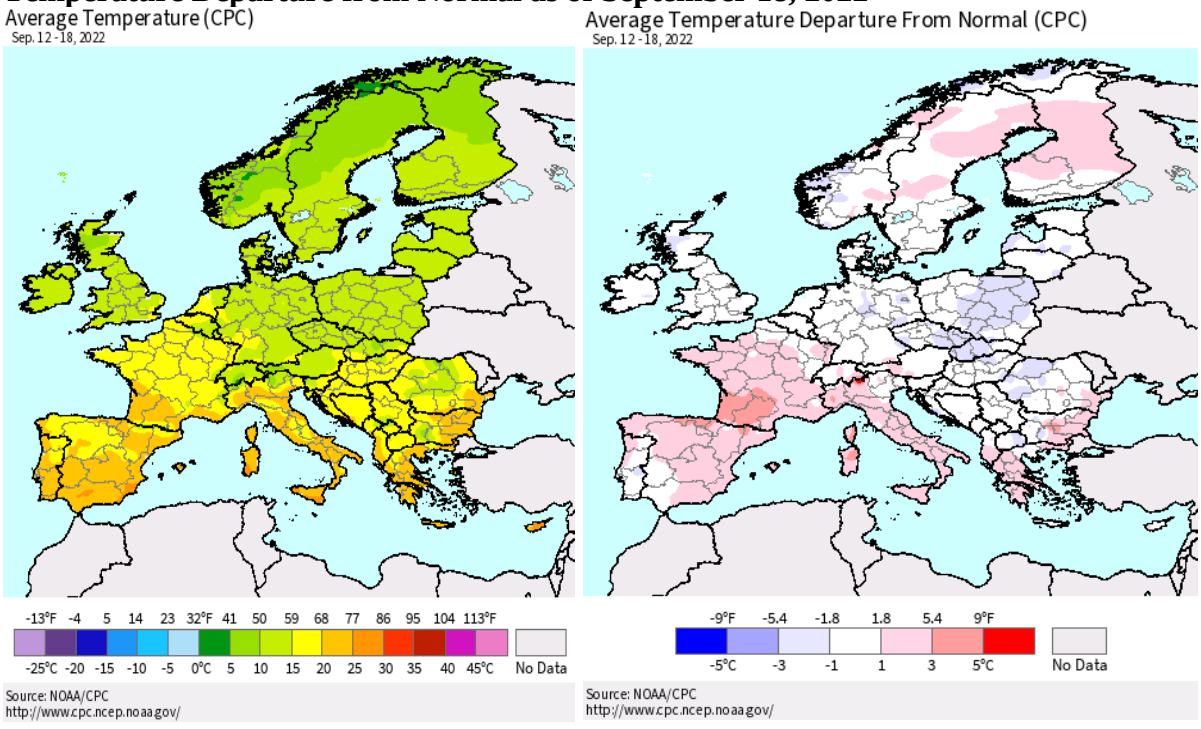
Map 2: USDA [Crop Explorer], Europe (including Bulgaria), Surface and Subsurface Soil Moisture as of September 18, 2022



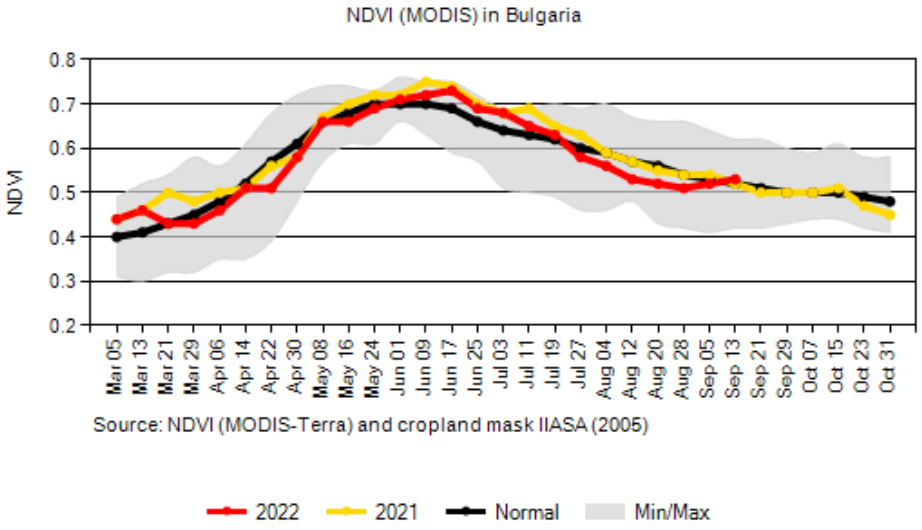
Map 3: USDA [Crop Explorer], Europe (including Bulgaria), Percent of Normal Precipitation September 1-10, and Number of Rain Days August 13- September 11.

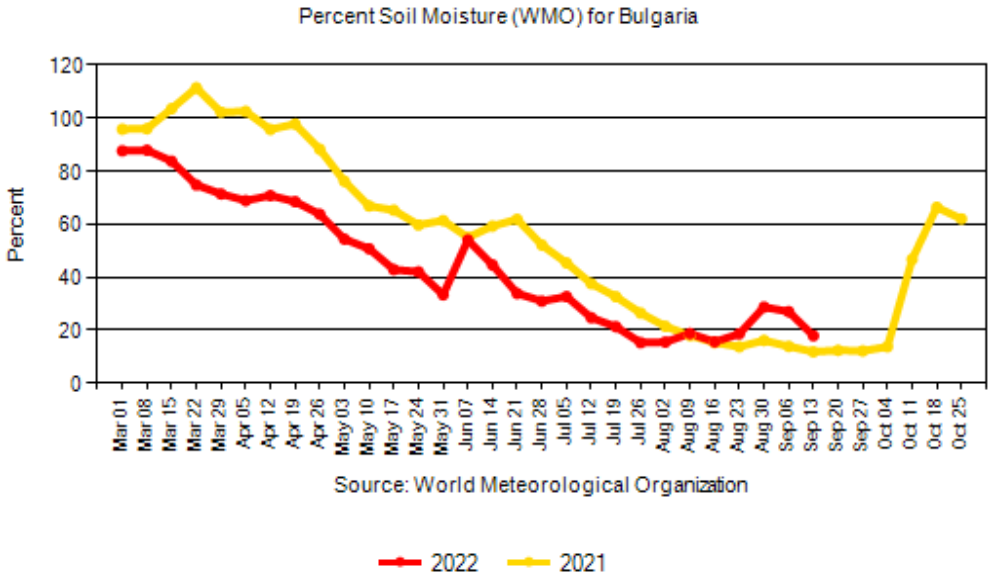


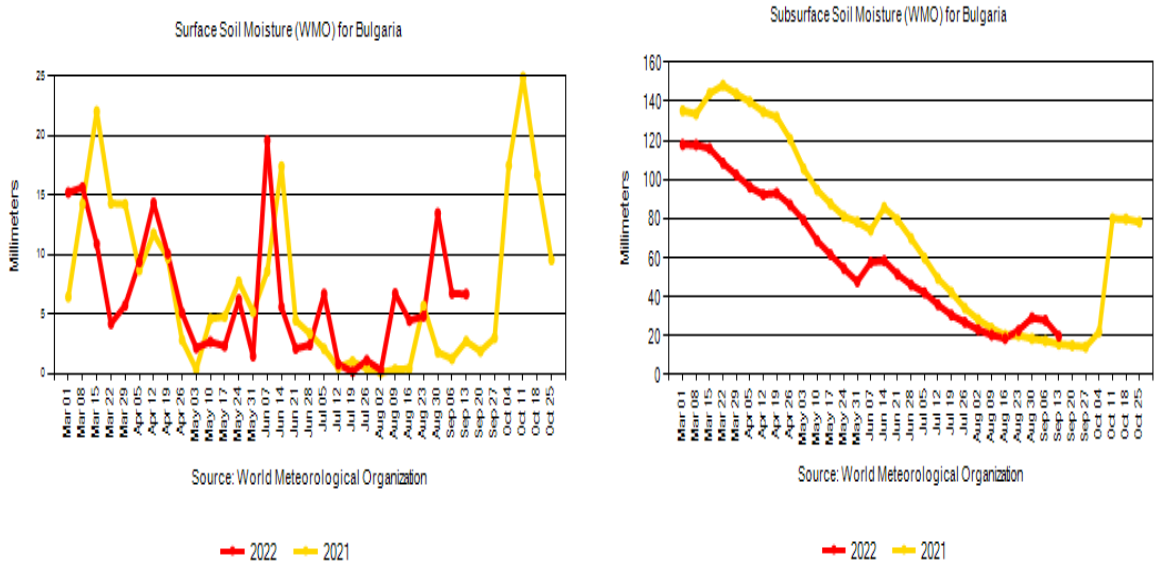
Map 4: USDA Crop Explorer, Europe (including Bulgaria), Average Temperature and Average Temperature Departure from Normal as of September 18, 2022



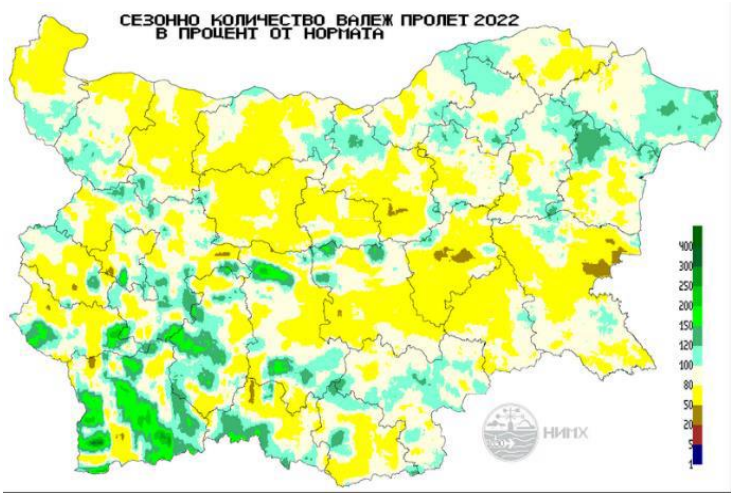
Map 5. USDA Crop Explorer, Bulgaria, Vegetation Index (NDVI), Percent of Soil Moisture, Surface and Subsurface Soil Moisture, as of September 18, 2022



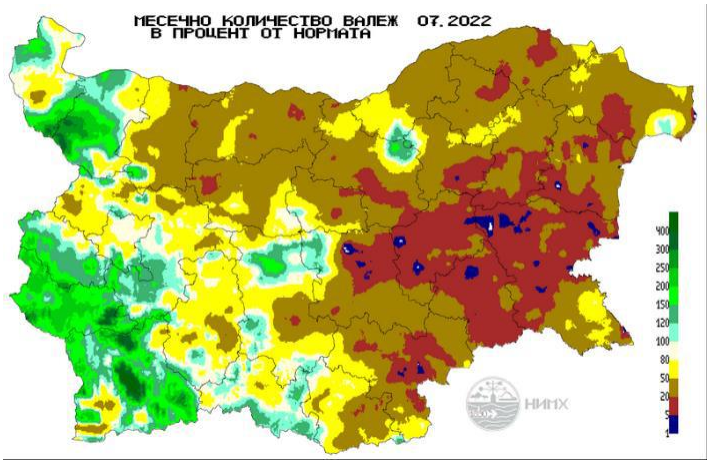


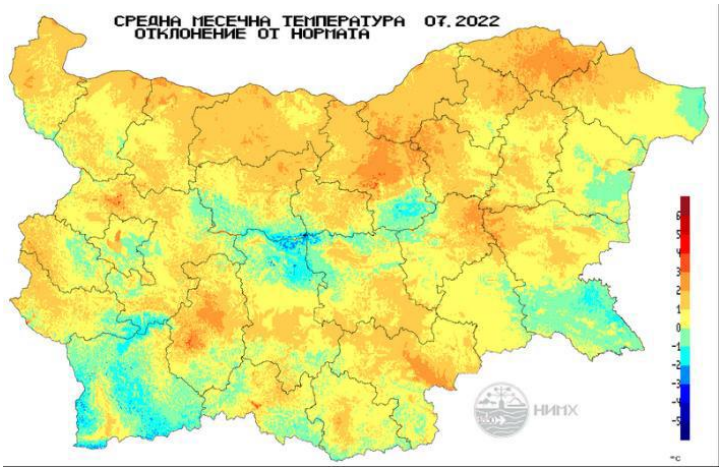


Map 6. Seasonal Rainfall Spring 2022 as a Percent of the Norm, Source: [Bulgarian National Institute of Meteorology and Hydrology]

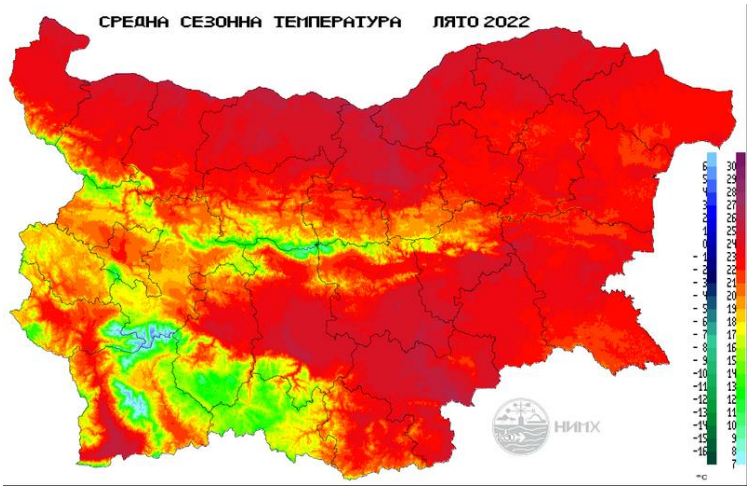


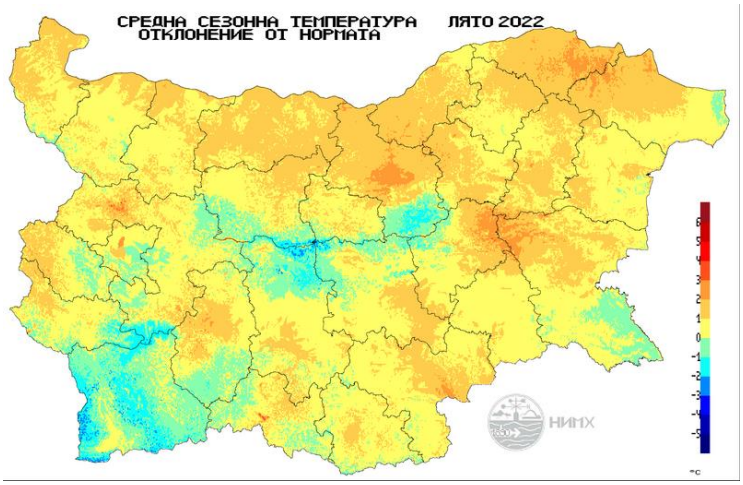
Map 7. Monthly Rainfall as a Percent of Norm, July and Deviation from the Average Monthly Temperature, July 2022, Source: [Bulgarian National Institute of Meteorology and Hydrology]

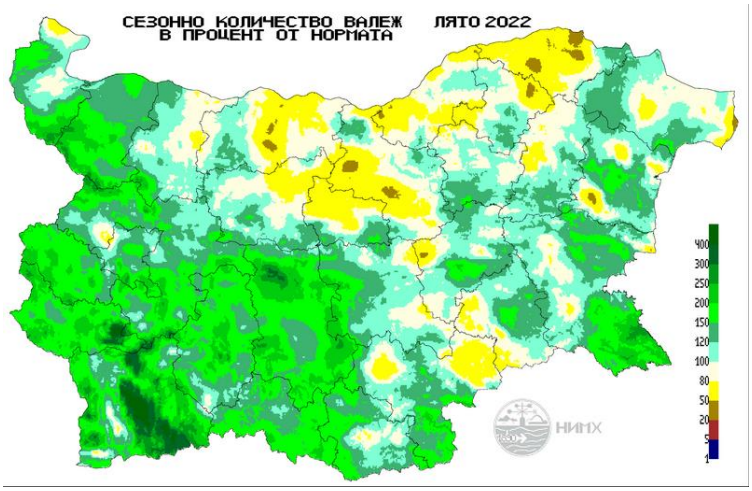




Map 8: Summer Season 2022: Average Seasonal Temperature, Deviation from the Average Seasonal Temperature Norm, and Average Seasonal Rainfall as a Percent of the Norm, Source: [Bulgarian National Institute of Meteorology and Hydrology]







Crop Travel Photo 1

Corn field, Dobrich region, estimated yield 8.0-9.0 MT/HA, photo taken in August 9-12, 2022, compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 2

Corn field, Varna region, estimated yield 5.5-6.5 MT/HA, photo taken in August 9-12, 2022 compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 3

Corn field, Shoumen region, estimated yield 4.5-5.5 MT/HA, photo taken in August 9-12, 2022, compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 4

Corn field, Veliko Turnovo region, estimated yield 7.5-8.5 MT/HA, photo taken in August 9-12, 2022 compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 5

Corn field, Silistra region, estimated yield 6.0-7.0 MT/HA, photo taken in August 9-12, 2022 compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 6


Corn field, Pleven region, estimated yield 5.0-6.0 MT/HA, photo taken in August 9-12, 2022 compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 7


Corn field, Montana region, estimated yield 7.0-8.0 MT/HA, photo taken in August 9-12, 2022, compliments of Agroportal (Crop Tour 2022)

Crop Travel Photo 8

The photo is taken in Razgrad region in the middle of July and demonstrates the effect of heat/drought wave on grain filling.

Crop Travel Photo 9

Photos taken by Post in September in Razgrad, Tunovo, and Dulovo, showing not fully filled ears.

Crop Travel Photo 10

Photos taken by Post in September in Pleven and Varna

Crop Travel Photo 11

Photos taken by Post in September in Popovo and Dulovo

Crop Travel Photo 12

Corn field, Sliven region, estimated yield 4.5-5.5 MT/HA, photo taken in August 9-12, 2022, compliments of Agroportal (Crop Tour 2022)

Attachments:

No Attachments.