



**Voluntary Report** – Voluntary - Public Distribution **Date:** June 12, 2024

Report Number: BU2024-0009

**Report Name:** Grain and Feed Market Update

**Country:** Bulgaria

Post: Sofia

Report Category: Grain and Feed

Prepared By: Mila Boshnakova-Petrova

**Approved By:** Levin Flake

### **Report Highlights:**

Bulgaria has enjoyed favorable weather so far in MY 2024/25 that has supported the positive development of both winter and spring grains. Currently, FAS/Sofia estimates the MY 2024/25 wheat crop at 6.9 million metric tons (MMT), slightly above last year's crop. Strong yields are expected to more than offset the small decline in planted area. The barley crop is projected up at 850,000 MT due to both larger area and higher expected yields. Spring crops had a promising start to the season and the FAS/Sofia estimate for the corn crop is at 2.8 MMT, above the MY 2023/24 drought-impacted crop level. However, this estimate can be revised depending on the weather conditions during the critical months of July and August. Dynamic export demand in MY 2023/24 is leading to wheat exports above initial expectations and they are estimated to reach 5.2 MMT.

### **Weather Overview**

Bulgaria has enjoyed favorable weather so far in the current growing season for marketing year (MY) 2024/25. The mild winter was followed by an unusually warm period in the first of half of April. However, wetter- and cooler-than-average spring conditions prevailed since then. The weather supported positive developments for both winter and spring grains.

In the first half of April, the country had warmer-than-usual conditions with temperature anomalies up to 4 °C above the long-term average in parts of Bulgaria. The strong positive anomaly accelerated the early progress of winter crops, consistent with the above-average temperatures since winter. Since the middle of April, average to moderately below-average temperatures have prevailed, but these colder-than-usual conditions were accompanied by long-awaited rainfall.

Abundant rainfall has improved soil moisture conditions. Soil moisture levels for <u>winter crops</u> were reported above average in the northern regions while some moderately drier-than-usual areas can be found in the south. About 60–150 mm rain was recorded (exceeding the long-term average by 10–15 percent), but some areas in the North-West of Bulgaria received slightly below average precipitation. Much wetter than usual conditions (rainfall total 100 percent, in some regions 150 percent or more, above the long-term average) were observed on the Black Sea coast. The water supply to winter cereals during the flowering and grain-filling periods has been average to almost optimal in most regions. The biomass accumulation is indicated by the satellite images as above average and yield expectations are optimistic. The development of winter crops is significantly advanced (by 2–3 weeks) and an early start to the harvest is expected.

Sufficient rainfall and warm temperatures allowed for fast progress and an early completion of the <u>spring planting</u> campaign. Dry periods between rainfalls allowed advanced progress of the spring planting, while the rains supported adequate emergence, and initial plant growth and development. The corn planting campaign started early in favorable conditions and initially advanced rapidly, but the last part of the campaign was hampered by considerable rains in early/mid-May. (<u>JRC MARS Bulletin May 2024 Vol 32 №5 and Maps 1-9 Crop Explorer and Bulgaria data</u>).

Satellite maps show a much wetter and warmer season (March – May) (Maps 1, 3, 4, 6, 7, 8, 9) especially in Bulgaria's major grain regions. The vegetation index (NDVI) (Maps 5, 6) indicates better crop development than last year and a very good development promising better yields than in 2023. At the same time, the warmer and drier weather in early June (Map 2) is expected to allow for successful maturing of winter crops.

### **MY 2024/25 Outlook**

Wheat and winter barley: FAS/Sofia crop travel at the end of May (photos at the end of the report) and farm visits indicated that most winter grain fields are in very good to excellent condition and better than in 2023. Still some of the challenges reported by farmers included: negatively impacted tillering of wheat and barley in the first half of April due to a sharp increase of temperatures leading to reduced tillering and lower density; more pests on wheat in the fall (more worms on roots); more rust and pests related to wetter spring weather; shorter heads or empty kernels in the heads due to sharp fluctuations in the temperatures in April; and some small production areas where rains arrived to late to have a strong positive impact.

Farmers confirmed official MinAg (Ministry of Agriculture) data for lower wheat planted area in the fall of 2023 due to the dry and warm fall weather that made field works challenging. Thus, the planted area declined from 1.2 million hectares (MHA) in MY 2023/24 to 1.145 MHA in MY 2024/25 or by four percent (Table 2). Increased interest in barley has been also indicated with much higher planted areas under winter barley reported by the MinAg at 36 percent more than in MY 2023/24. Winter grains planted areas subject to harvesting are indicated in Table 2. Farmers report that harvest is expected to start earlier, at around June 15.

Currently, industry estimates for wheat and barley yields are in a wide range. Private industry estimates for average wheat yields range from 5.4 MT/HA to 5.9 MT/HA while EC MARS' latest <u>bulletin</u> estimates wheat yields at 5.62 MT/HA compared to 5.43 MT/HA in 2023, or 3.5 percent higher, and nine percent above the 5-year average (5.14 MT/HA). The estimates for total wheat production vary from 6.2 MMT to 7.0 MMT. FAS/Sofia estimates MY 2024/25 wheat production at 6.9 MMT (Table 3) or slightly above that in MY 2023/24 (6.855 MMT). However, there is a potential for this estimate to be revised depending on the harvest results.

Barley is expected to have higher yields in the current year, similar to the situation with wheat. In combination with a ten percent increase in area planted (FAS/Sofia estimate, Table 2), production is projected to increase by seven percent. Current private industry estimates for barley production range between 800,000 MT and 935,000 MT. EC MARS bulletin estimates the average barley yields (winter and spring) at 5.33 MT/HA compared to 5.30 MT/HA in 2023 or one percent higher, and eight percent above the 5-year average (4.96 MT/HA). The FAS/Sofia estimate for MY 2024/25 barley production is 850,000 MT (Table 3) or slightly above that in MY 2023/24 (797,000 MT), but there is a potential for an increase depending on the harvest results.

Corn: The MinAg reports stable area planted under corn as of the end of May (Table 2) while private industry and farmers indicate lower acreage. At present, corn enjoys a very good development and is promising a high yield potential, however, the most critical periods remain July and August where summer heat and drought can have devastating impact on the crop, as has occurred during the last two years. FAS/Sofia crop travel revealed that farmers are adamant in feeling that investment in irrigation is a must due to climate change issues related to much lower snow cover (if any) in the winter, and more frequent and longer summer droughts. In addition, farmers opined that changes in climate have led to higher pests and disease infestations while their choice to apply plant protection chemicals is increasingly restricted/limited due to EC regulations. Currently, EC MARS bulletin estimates the average corn yields very high at 6.61 MT/HA compared to 4.20 MT/HA in 2023, or 57 percent higher, and 21 percent above the 5-year average (5.44 MT/HA). Some private estimates for corn production in MY 2024/25 go as high as over 3.0 MMT compared to 2.45 MMT in MY 2023/24. FAS/Sofia MY 2024/25 estimates corn production at 2.8 MMT (Table 3) or above that in MY 2023/24, although final volums will depend on further summer weather and on the harvest results.

### MY 2023/24

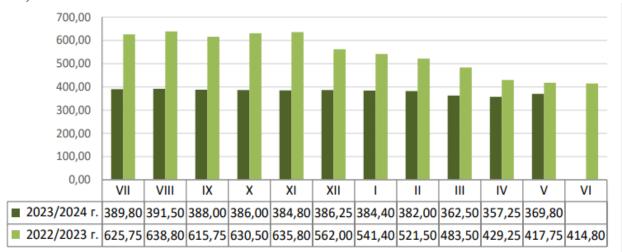
<u>Wheat</u>: Final updated production data is shown in Table 1, based on Eurostat. The data confirms the earlier FAS/Sofia estimate for wheat production at 6.8 MMT.

Large beginning stocks and the good crop made farmers more eager to sell. This was combined with active export demand sincd the beginning of the harvest campaign. Wheat prices, although lower than in

the previous marketing year (Graph 1), were generally stable and provided a positive margin to producers and were gradually getting closer to last year's levels. As of May, wheat prices were about 89 percent of the prices a year ago. The gap between the local ex-farm prices and the EU prices has narrowed since January 2024 (Graph 2).

Exports remained unusually active in the last quarter of the year, along with a market price increase in May. As a result, wheat exports have accelerated and grown. As of May 31, wheat exports reached 5.0 MMT of which 3.8 MMT was exported to non-EU countries (Table 4, MinAg Weekly Monitoring of Commodity Markets <u>bulletin</u>). This is 60 percent more than wheat exports a year ago (3.127 MMT, <u>bulletin</u>). Exports to non-EU countries are also 51 percent more than as of the end of May 2023 (Graph 3). The primary non-EU destinations have been South Korea, Indonesia, Thailand, Morocco, and Algeria. FAS Sofia estimates total wheat exports for MY 2023/24 to reach 5.2 MMT compared to 4.1 MMT exported in MY 2022/23.

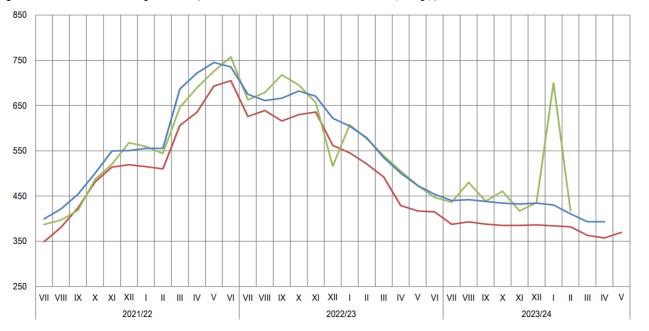
Graph 1. Wheat Monthly Market Prices, MY 2023/24 vs MY 2022/23 in Bulgarian Leva (BGN)/MT



<sup>\*</sup>The chart shows prices for the MY, which begins in July, with MY 2023/24 in dark green and MY 2022/23 in light green.

Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Graph 2. Wheat Monthly Prices, MY 2021/22 - MY 2023/24 (May), BGN/MT

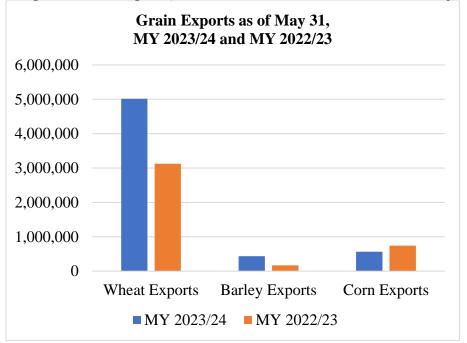


Red line- Bulgarian ex-farm prices, milling wheat, in Bulgarian leva (BGN) per MT Blue line – EU market price, milling wheat, BGN/MT

Green line – Bulgarian FOB export price, milling and feed wheat, BGN/MT

Source: Bulgarian MinAg Dashboard Grains and Oilseeds, June, 2024

Graph 3. Grain Exports, MY 2023/24 and MY 2022/23 (as of May 31)



Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

The year started with record large beginning stocks. Logistical issues caused by the large stocks motivated elevated exports. Expanded exports allowed the country to reduce wheat stocks, estimated by the Bulgarian MinAg at 1.4 MMT at the end of May, compared 1.9 MMT a year ago, or a reduction of 25 percent (Graph 4). Still, the level of stocks is higher than usual and can encourage a further increase in exports provided that market demand encourages farmers' sales.

Grain Stocks as of May 31,
MY 2023/24 and MY 2022/23

2,500,000

1,500,000

1,000,000

Wheat Stocks Barley Stocks Corn Stocks

MY 2023/24 MY 2022/23

Graph 4. Grain Stocks as of the end of May, MY 2023/24 and MY 2022/23

Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

## Barley:

Final updated barley production data is shown in Table 1, based on Eurostat, to about 800,000 MT. The data exceeds the earlier FAS Sofia estimate for barley production due to both higher yields and area, compared to the previous marketing year. This makes MY 2023/24 barley production 28 percent above production in MY 2022/23.

Similar to wheat, export demand for barley has been very good and exports have been driven by the bigger crop and record large beginning stocks (Graph 3). As of May 31 (Table 4), barley exports reached 436,000 MT, or more than double than a year ago (168,000 MT). The major non-EU destination has been Morocco.

Barley monthly prices have been stable with small fluctuations (Graph 5). As of May, barley prices were at 60 percent of the level a year ago.

700,00 600,00 500,00 400,00 300,00 200,00 100,00 0,00 VII VIII IX Χ ΧI XII Ш VI ■ 2023/2024 r. |330,33|333,75|339,00|339,50|341,60|351,50|348,80|346,50|338,75|339,25|343,00| 2022/2023 r. |574,25|586,00|564,50|568,50|572,60|590,00|590,00|590,00|573,75|565,00|

Graph 5. Barley Monthly Market Prices, MY 2023/24 vs MY 2022/23 in BGN/MT

Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

The year started with extra-large beginning stocks (Graph 4). Due to the accelerated exports to date, the country reduced its stocks of barley, estimated at 123,000 MT at the end of May compared 207,000 MT a year ago, or by 40 percent. Total exports in MY 2023/24 are estimated by FAS Sofia to reach about 490,000 MT, compared to 256,000 MT exported in MY 2022/23.

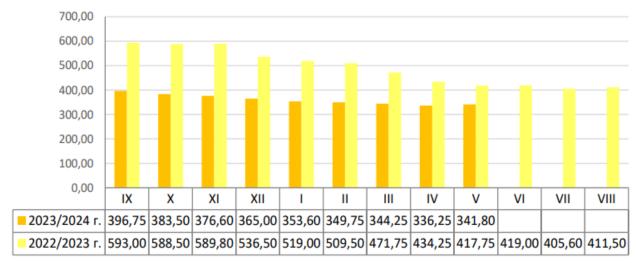
<u>Corn</u>: Final updated corn production data is shown in Table 1, based on Eurostat. The data confirms the earlier FAS Sofia estimate of about 2.5 MMT, four percent lower than in MY 2022/23.

Corn prices have been declining since last fall but had a little pickup in May. As of May, the corn price was 82 percent of the price a year ago. The gap between Bulgarian ex-farm corn price and the EU price has narrowed in March but widened again in April-May (Graph 7).

The smaller crop in MY 2023/24 and tight beginning stocks were the main reasons for declining corn exports. Farmers preferred to keep their stocks and domestic sales dominated the market compared to exports. In addition, export demand has been sluggish due to strong Black Sea competition (Ukraine). As of May 31, corn exports were reported at 568,000 MT, mainly to non-EU countries, compared to 745,000 MT a year ago, or 24 percent lower. Exports to non-EU countries also decreased and were at 360,000 MT versus 537,000 MT the year before, or a drop of 33 percent. The main destinations were China and South Korea. Currently, FAS/Sofia's estimate for MY exports is lower than the earlier expectation to 900,000 MT, compared to 1.37 MMT exported in MY 2022/23.

<sup>\*</sup>The chart shows prices for the MY, which begins in July, with MY 2023/24 in dark red and MY 2022/23 in light red.

Graph 6. Corn Monthly Market Prices, MY 2022/23 – MY 2023/24 (May), BGN/MT



<sup>\*</sup>The chart shows prices for the MY, which begins in September, with MY 2023/24 in dark yellow and MY 2022/23 in light yellow.

Source: Bulgarian Ministry of Agriculture Monitoring of Commodity Markets Weekly Bulletins

Graph 7. Corn Monthly Prices, MY 2021/22 – MY 2023/24 (May), BGN/MT



Red line- Bulgarian ex-farm prices, milling wheat, in Bulgarian leva (BGN) per MT Blue line – EU market price, milling wheat, BGN/MT

 $Green\ line-Bulgarian\ FOB\ export\ price,\ milling\ and\ feed\ wheat,\ BGN/MT$ 

Source: Bulgarian MinAg Dashboard Grains and Oilseeds, June, 2024

## Appendix.

Table 1. Grain Crops Production Data MY 2023/24 and MY 2022/23, June 2024

Crops	Area Harvested (000 HA)		Production (000 MT)	
	MY 2023/24	MY 2022/23	MY 2023/24	MY 2022/23
Wheat	1,221	1,206	6,855	6,448
Barley	149	122	797	625
Corn	533	520	2,445	2,554
Rice	11	11	65	64
Oats	13	11	32	26
Triticale	35	14	118	43
Rye	8	8	15	17
Sorghum	3	2	8	6
Total	1,973	1,894	10,335	9,783

Table 2. Winter Grains to be Harvested and Spring Grains Planted as of May 23, 2024 MY 2024/25, HA

	May 23, 2024	May 25, 2023	Change,		
			Percent		
Wheat	1,145,150	1,191,556	-3.9%		
Barley (Winter)	160,041	117,510	+36.2%		
Rye	6,226	7,966	-21.8%		
Triticale	16,899	13,493	+25.2%		
Corn	465,919	464,983	+0.2%		
Barley (Spring)	1,543	1,436	+7.5%		
Source: Bulgarian MinAg Weekly Bulletin #29, May 29, 2024					

Table 3. FAS Sofia Grain Production Forecast MY 2024/25, June 2024

Crops	Area Harvested, HA	Production, MT		
Wheat	1.145 million	6.9 million		
Barley (winter and spring)	165,000	850,000		
Corn	520,000	2.8 million		
Total	1,830,000	10,520,000		
Source: FAS Sofia				

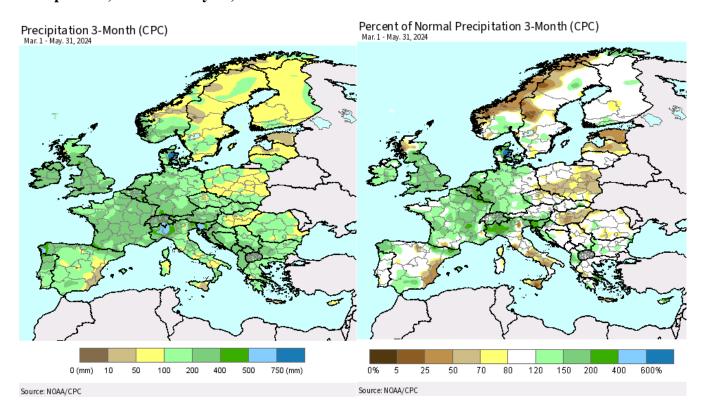
Table 4: MY 2023/24 Trade in Major Grain Crops, as of May 31, 2024

Types of Grains	Imports, MT	Exports, MT
Wheat	57,699MT	5,016,209
		(including 3,857,415 MT to non-
		EU markets);
Barley	902 MT	436,136 MT
		(including 192,423 MT to non-
		EU markets);
Corn*	10,053 MT	567,642 MT
		(including 361,044 MT to non-
		EU countries)

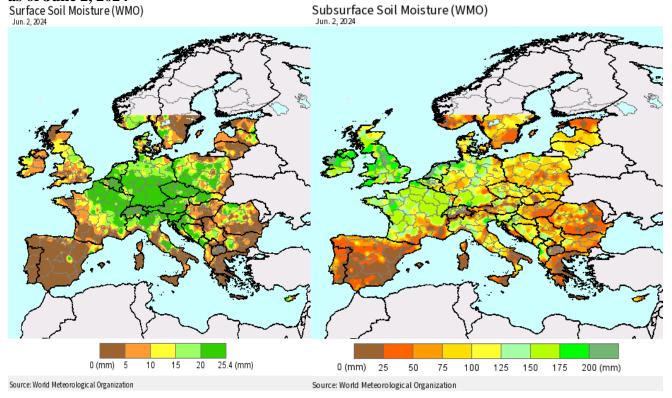
Source: MinAg Weekly Grain Market Bulletins 2024.

\*Note: The Bulgarian MinAg uses September 1-August 31 as a MY for corn. Trade data refers to 2023 corn crop traded since September 1, 2023

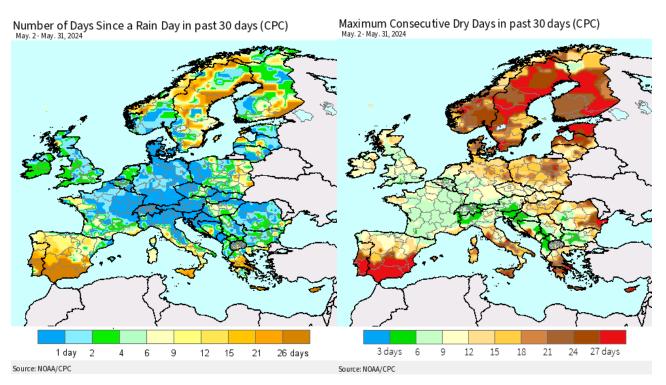
Map 1: USDA <u>Crop Explorer</u>, Europe (including Bulgaria), Precipitation and Percent of Normal Precipitation, March 1-May 31, 2024.



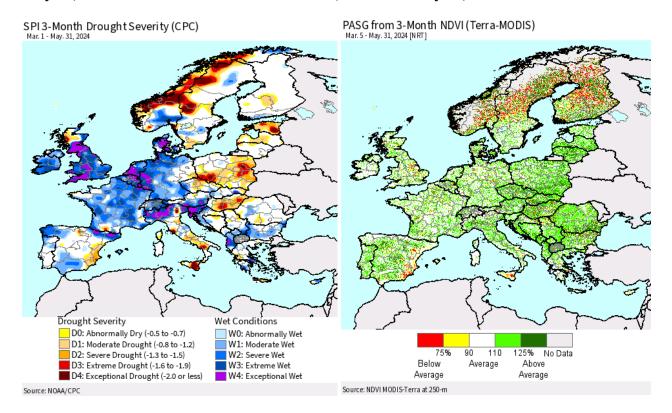
Map 2: USDA Crop Explorer, Europe (including Bulgaria), Surface and Subsurface Soil Moisture as of June 2, 2024



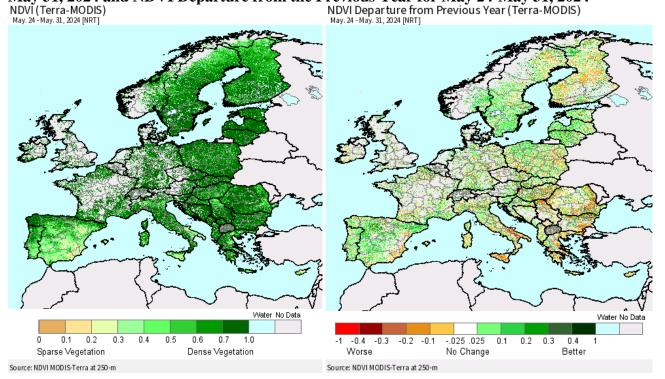
Map 3: USDA Crop Explorer, Europe (including Bulgaria), Number of Days Since a Rain Day and Maximum Consecutive Dry Days in past 30 days, May 2-May 31, 2024



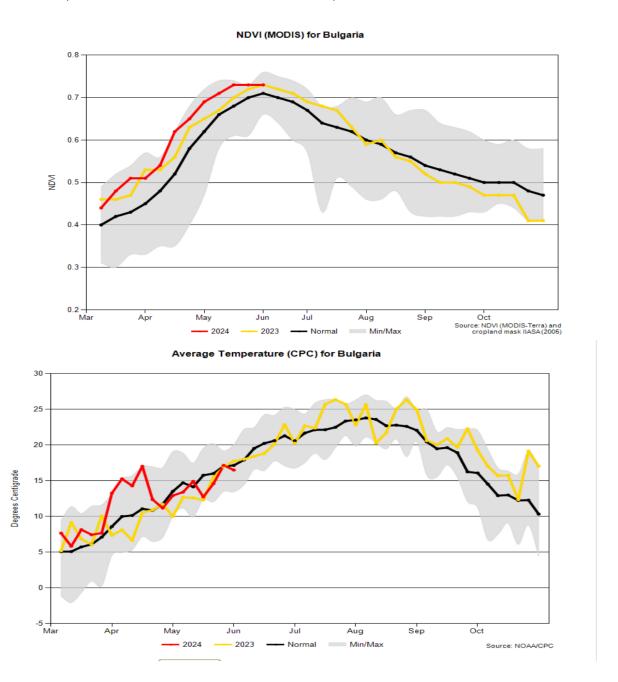
Map 4: USDA Crop Explorer, Europe (including Bulgaria), 3-Month Drought Severity, March 1-May 31, 2024 and PASG from 3-Month NDVI, March 1- May 31, 2024



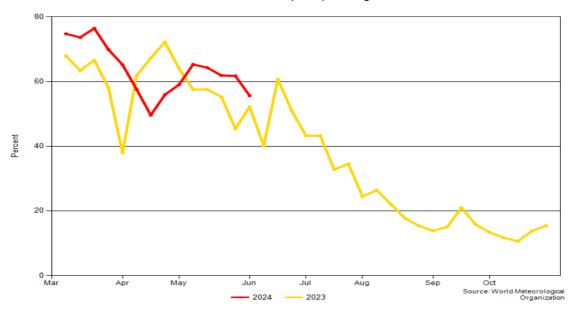
Map 5. USDA Crop Explorer, Europe (including Bulgaria), NDVI (Vegetation Index) for May 24-May 31, 2024 and NDVI Departure from the Previous Year for May 24-May 31, 2024



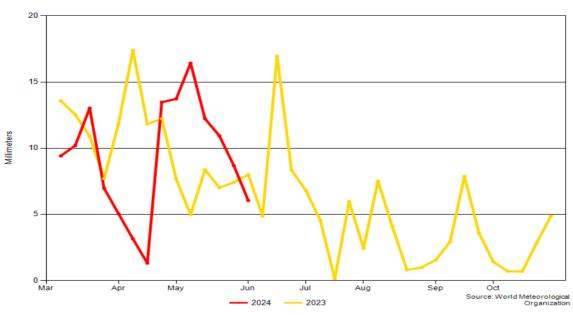
Map 6. USDA <u>Crop Explorer</u>, Bulgaria, Vegetation Index (NDVI), Average Temperature, Percent of Soil Moisture, Surface and Subsurface Soil Moisture, as of June 2024



### Percent Soil Moisture (WMO) for Bulgaria



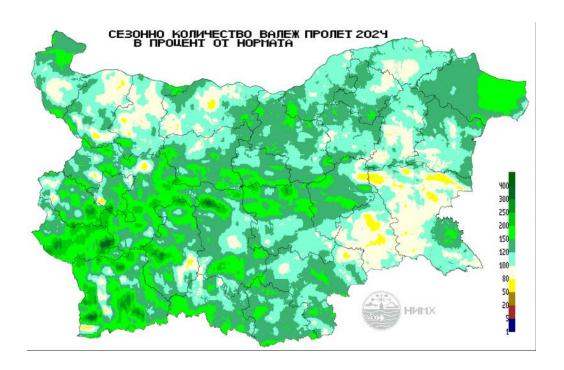
### Surface Soil Moisture (WMO) for Bulgaria



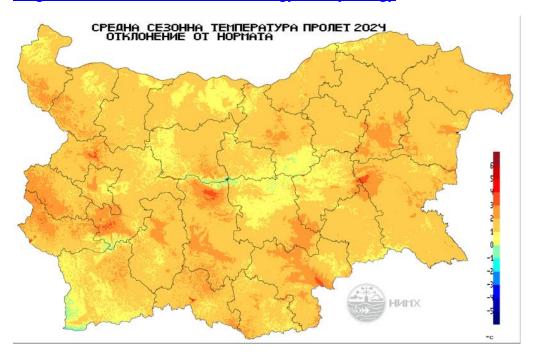
#### Subsurface Soil Moisture (WMO) for Bulgaria



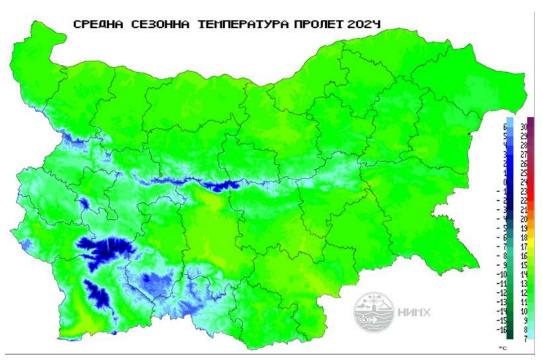
Map 7. Seasonal Rainfall Spring 2024 as a Percent of the Norm, Source: <u>Bulgarian National Institute</u> of Meteorology and Hydrology

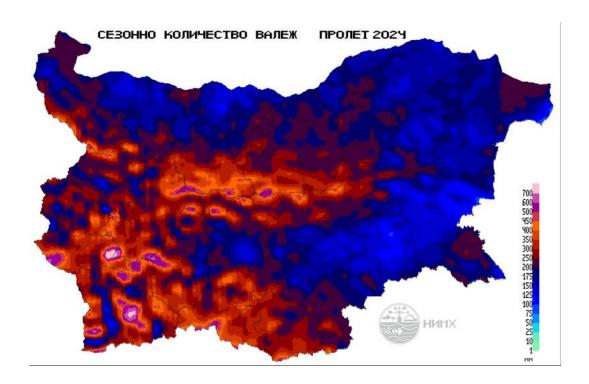


Map 8: Spring Season 2024: Deviation from the Average Seasonal Temperature Norm, Source: Bulgarian National Institute of Meteorology and Hydrology



**Map 9. Average Seasonal Temperature Spring 2024 and Seasonal Rainfall Spring 2024,** Source: Bulgarian National Institute of Meteorology and Hydrology





10. FAS/Sofia Crop Trip May 27-30 Photos from Central North Bulgaria



Malting Barley Field





Wheat Fields, Central North Bulgaria, Sevlievo-Pleven

# **Attachments:**

No Attachments.