

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY  
USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT  
POLICY

Voluntary  Public

**Date:** 8/27/2012

**GAIN Report Number:** BU1223

## Bulgaria

**Post:** Sofia

### Drought Hits Bulgarian Spring Crops

**Report Categories:**

Grain and Feed

Oilseeds and Products

Trip Report

**Approved By:**

Michael Henney, Agricultural Attaché

**Prepared By:**

Mila Boshnakova, Agricultural Specialist

**Report Highlights:**

During the August 13-15 period, Ag Sofia accompanied by an FAS/Washington analyst, retraced a crop tour conducted five years ago of corn/sunflower production regions in Bulgaria. Participants assessed the drought situation in the region, evaluated general development of agriculture in the region over the last 5 years and engaged producers, agricultural associations and agri-business entities to better understand trends emerging in the sector.

This report summarizes observations of the participants and includes AgSofia's revised estimate for the 2012 corn and sunflower crop

**General Information:**

During the August 13-15 period, Ag Sofia accompanied by an FAS/Washington analyst, retraced a crop tour conducted five years ago of corn/sunflower production regions in Bulgaria. Participants assessed the drought situation in the region, evaluated general development of agriculture in the region over the last 5 years and engaged producers, agricultural associations and agri-business entities to better understand trends emerging in the sector.

This report summarizes observations of the participants and includes AgSofia's revised estimate for the 2012 corn and sunflower crop.

**Crop Estimates**

Bulgaria's corn and sunflower crops were severely affected by persistent hot and dry weather during second half of June and July, the most critical period for pollination of the spring crops. The combination of these three factors, drought, hot weather and timing, had a large negative impact on the crops that would have been more pronounced if progress in crop genetics and applied agricultural technology had not taken place in the years since 2007, the last very dry year.

Regional differences – Based on Post observations and farmer reports, the drought's most adverse effects appear in Southern Bulgaria, followed by Northwest. The North central part of the country represents a mixed picture while in Northeast most farmers report yield averages similar to the previous year. The mixed picture, in general, can be attributed to occurrence of scattered showers throughout the country during the summer with other factors such as altitude, level of inputs applied, seed genetics, application of irrigation, influencing the crop. For example, there were some exceptional fields in the hardest –hit Northwest which are expected to yield 10 Metric Tons/Hectare (MT/HA) non-irrigated corn. Overall, the corn and sunflower development was 1-2 weeks ahead of the normal with corn and sunflower harvest starting at many fields.

In general, the trend is towards higher corn areas/production in Northwest and North central regions compared to sunflower, with the opposite in Northeast. Unlike in the past where farmers were observed using a wheat/corn/sunflower crop rotation, many producers met practices a monoculture region with corn only, or corn and wheat, especially in Northwest and North central. All farmers reported a significant increase in 2012 planted area to corn due to reseeded of winterkilled rapeseed fields and attractive corn prices.

Yields Estimates - Most farmers reported 10 to 40 percent lower yields on corn and sunflower fields compared to 2011. In most cases, reported and estimated yields fell about 1.0-1.5 MT/HA lower than the average for the farm over the last 5 years.

In the Northwest region corn yields were reported at 2.0-3.5 MT/HA (with exceptions for irrigated corn which project 7.0-9.0 MT/HA, but on very limited planted area); in the North central region estimated yields were 3.5-5.5 MT/HA, and in Northeast at 4.5-6.0 MT/HA. The North-East region received the most rainfall and reported yields at 5.0 – 6.0 MT/HA.

Sunflower performance was similar to corn. Early harvest yields in Southern Bulgaria are below 1.0 MT/HA, in the Northeast at 2.5 MT/HA, in the North central at around 2.0-2.5 MT, and in the Northwest between 1.5-2.0 MT/HA. Sunflower heads were smaller, had often smaller, not well filled seeds, and often empty seeds due to poor pollination. Reported oil content from early harvest fields were lower at around 37 percent.

In Southern Bulgaria, which usually does not plant much corn due to drier and warmer climate, saw an increase in planted area this year due to re-seeding of lost rapeseed crops and attractive corn prices. However, the dry weather has had a devastating effect on yields and early harvest results show yields below 2.0 MT/HA. Most likely such results will dampen interest in corn plantings for the foreseeable future.

Physical characteristics of the drought stressed corn crops observed showed corn ears shorter, with rarely more than 35-36 kernels in a row, many plant stalks showing signs of aborted ears, and plants both shorter and underdeveloped. In the country's North-West and North-Central regions, kernels were shallow and small, held visibly lower weights, revealed seeds vulnerable to cracks, with dockage expected to be high this year. In the North-East region, ears in general were bigger, with more uniformly filled grain kernels, and holding higher test weight and moisture content. Pest infestation was visibly higher in Northwest and North central.

Planting density of the corn fields was irregular. On average, most farmers planted 58,000 to 62,000 plants/HA. Higher density fields were observed ranging from 70,000 plants/HA (dry land) to even 90,000 plant/HA (irrigated). Most farmers report a trend of increasing density over the last several years.

Planting of early maturing hybrids appears to be another trend observed. The yield performance of earlier hybrids proved better than that of the late hybrids under these adverse growing conditions experienced this year. This trend will likely continue as the early maturing hybrids avoid the July pollination risks.

No-till and minimal tillage cultivation practices were observed across a broader area this year. This technology, considered controversial by many in the industry because of Bulgaria's heavy black soil, seems to be attracting converts, especially in North Central region. Several producers expressed satisfaction with their estimated yields as critical soil moisture was better preserved applying these newer cultivation practices.

Official crop estimates are not available. On August 14, the Minister of Agriculture announced in a public statement that corn production would be approximately 40 percent lower than in 2011 with an average yield of 3.0 MT/HA or 1.2 Million MT (MMT). Prior to this announcement the Ministry had been projecting 2012 production of the corn and sunflower crops at 80 percent of 2011 crops.