

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:** 6/29/2014

**GAIN Report Number:** SP1417

## Spain

Post: Madrid

# **Dry Spell Significantly Reduces Grain Yield Expectations in Spain**

## **Report Categories:**

Grain and Feed
Oilseeds and Products
Sugar
Cotton and Products

## Approved By:

Robert Hanson. Agricultural Counselor

### **Prepared By:**

Marta Guerrero. Agricultural Specialist

## **Report Highlights:**

Dry weather conditions prevailing since mid-spring have driven down yield expectations in Spain. While precipitation levels remained at good levels until mid-spring, the combination of dry and warmer weather prevailing since mid-April has dried out the soil surface. The reduction of yields is expected to be significant in East-central Spain. The Northwest grain producing areas still hold close to average yield potential. Southern regions only report small output reductions. Overall grain production is projected to be somewhat below historical average levels.

### **General Information:**

Dry weather conditions prevailing since mid-spring have driven down yield expectations in Spain. While precipitation levels remained at good levels until mid-spring, the combination of dry and warmer weather prevailing since mid-April has dried out the soil surface. The reduction of yields is expected to be significant in East-central Spain. The Northwest grain producing areas still hold close to average yield potential. Southern regions only report small output reductions. Overall grain production is projected to be somewhat below historical average levels.

## **Table of Contents:**

Abbreviations used in this report	2
Precipitation	3
Temperature	4
Water Reservoirs Situation: Soil and Dams	5
Planting Decisions and Crop Development	5
Ending Stocks	8
Implications on Trade	8
Policy measures	9
Related Reports	10

## Abbreviations used in this report

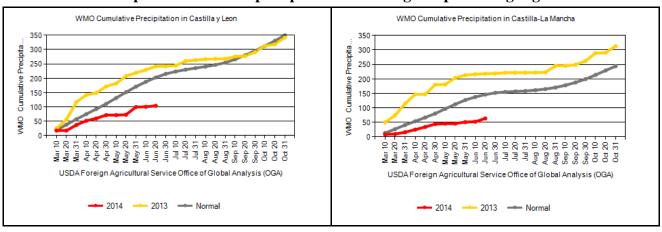
EU European Union
FAS Foreign Agricultural Service
Ha Hectares
MY Marketing Year
MT Metric Ton (1,000 kg)
TMT Thousand Metric Tons
MMT Million Metric Tons
MY Marketing Year.
MS EU Member State(s)

## **Precipitation**

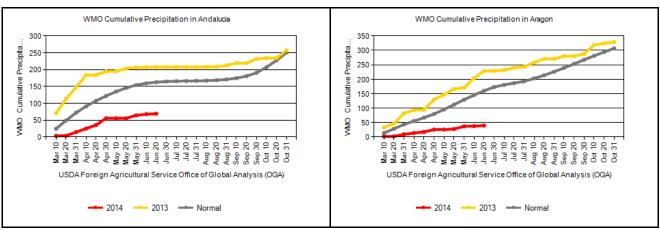
Precipitation levels in Spain at the beginning of the hydrological year were well below last year's rainfall levels and below the historical average (See **Graph 1**). Lack of precipitation during planting season delayed plantings in most of the grain growing areas. At the same time, this lack of soil humidity reduced weed presence.

Rainfall levels throughout the fall were low, however timely rains at the beginning of winter allowed for a normal crop establishment prior to dormancy in most of the grain producing regions. Abundant precipitations from the beginning of the winter until mid-spring contributed to improve soil moisture and filling of the dams. No significant flood damage was reported and an abundant crop was anticipated at that time.

However, the dry spell and warm temperatures prevailing since mid-April dried out the soil and accelerated crop development. Grain crop development is estimated to be 2-3 weeks ahead of schedule compared to normal patterns. The soil dryness is affecting not only to grain and oilseed crops but to all crops grown in non-irrigated conditions, such as **olive groves**, **vineyards** and **tree nuts** that are not grown in non-irrigated conditions.



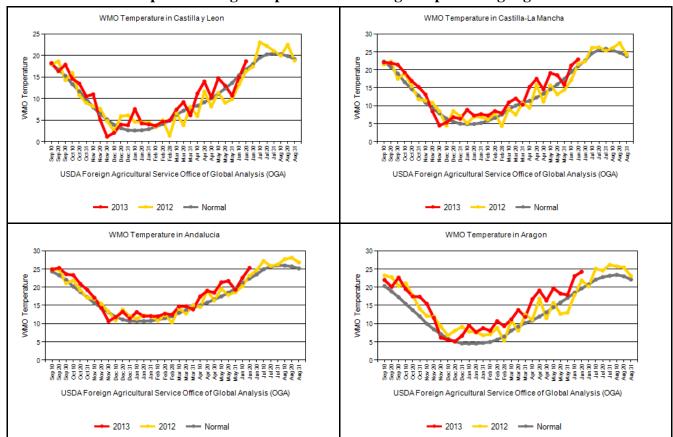
Graph 1. Cumulative precipitation in main grain producing regions.



Source: IPAD/Foreign Agricultural Service/USDA

## **Temperature**

The relatively warmer weather conditions that prevailed throughout April, May and June (see **Graph 2**) have also contributed to the soil surface drying and to the crop development acceleration.



Graph 2. Average temperature in main grain producing regions.

### Water Reservoirs Situation: Soil and Dams

Spain boasts of a large water storage system that contributes to alleviate the recurrent drought periods. Despite the dry weather prevailing during the last months, in mid-June there were 44,965 cubic hectometers of water stored in dams, which represents nearly 81 percent of the total storing capacity. This large amount of water stored assures water availability for irrigation and other purposes. Nevertheless, only 13 percent of Spain's total agricultural land is irrigated.

As it pertains to soil moisture, the dry spell and warm temperatures prevailing since mid-April to present have resulted in a significant reduction of the soil subsurface moisture throughout all the country's territory. However, there is a differentiated situation when it comes to subsoil humidity. Grain producing areas in Andalucía and Castile y Leon managed to keep higher subsoil moisture levels, while in the East-central part of the country subsoil moisture reached very low levels (Castile-La Mancha and Aragon) (See **Graph 3**).

Graph 3. Soil Subsurface Moisture Percentage in mid-April, mid-May and mid-June\*

Source: World Agricultural Outlook Board. Agricultural Weather Assessments.

\*Soil moisture between 4-16 inches.

## **Planting Decisions and Crop Development**

Dry conditions prevailing in the beginning of the planting season delayed winter grains plantings, nevertheless timely rains in December allowed plantings and good crop establishment although with uneven conditions in certain areas. Official statistics reveal that area planted to winter grains (**Table 1**) is expected to be over MY2013/14, which represents the third consecutive increase in area planted to winter grains.

Table 1. Spain's Winter Grain Area (1,000 Ha)

Crop MY2011/12	MY2012/13	MY2013/14	MY2014/15
----------------	-----------	-----------	-----------

Wheat	1,994.7	2,169.3	2,121.9	2,145.4
Barley	2,700.7	2,676.2	2,768.9	2,756.1
Oats	508.3	441.6	431.9	441.8
Rye	149.3	159.8	155.0	159.1
Triticale	81.3	118.5	140.9	139.1
Total Winter Grains	5,434.3	5,565.4	5,618.6	5,641.5

Source: MAGRAMA. Ministry of Agriculture, Food and Environment. Avance de Superficies.

Early plantings present better yield projections compared to those areas where the crop was less developed when the dry and warm weather started. Also the wheat crop seems to have suffered less the lack of water compared to barley.

At the moment, the grain crop is developed between 2 and 3 of weeks ahead of normal and harvest operations are well advanced. Rains in late May came too late to foster a yield recovery in the drought-hit East-central growing regions, where yields have already dropped significantly (see Vegetation Health Index distribution in **Graph 4**). This area has also suffered thunderstorms that have resulted in hail damage and additional yield reduction in grain and other crops' fields such as **tree nuts** and **olives**.

Petile Rank

85 - 100

77 - 94

61 - 72

9 - 90

37 - 48

25 - 36

113 - 24

7 - 12

1 - 6

Graph 4. Vegetation Health Index in Mid-May compared to Mid-June

Source: World Agricultural Outlook Board. Agricultural Weather Assessments.

However, northwest growing regions such as Castile y Leon, Spain's largest grain growing region - where the grain crop is less developed - still hold near-average yield potential.

In Andalucía, where harvesting operations are already well advanced, a reduction in production is projected. However, good quality is anticipated, for durum wheat in particular, for which field contacts report good protein content, vitreosity and sufficient specific weight.

Lower yields are projected for most of Spain's grain growing regions. Official statistical data project a production winter grains production of 16,099 TMT of grains, which represents a 17 % decline to previous year's levels (**Table 2**).

Table 2. Spain's Winter Grain Production (1,000 MT)

Crop	MY2011/12	MY2012/13	MY2013/14	MY2014/15e
Wheat	6.876,7	5.090,7	7.602,6	6,751
Barley	8.287,1	5.976,2	10.060,5	7,861
Oats	1.119,2	681,2	964,7	825
Rye	362,1	256,1	383,3	321
Triticale	207,2	209,0	393,6	341
Total Winter Grains	16,852	12,213	19,405	16,099

Source: MAGRAMA. Ministry of Agriculture, Food and Environment and FAS Madrid estimates.

Industry sources are more pessimistic in their projections: The Spanish Agricultural Cooperatives Association pegs grain production at 14,810 TMT whereas the Spanish Grain Merchants Association (ACCOE) forecast goes down to 13,766 TMT (**Table 3**).

Table 3. Spain's Winter Grain Production Estimates for MY2014/15 (1,000 MT)

Crop	MAGRAMA	Cooperatives	ACCOE
Wheat	6,751	6,330	5,906
Soft	5,879	5,652	5,269
Durum	905	678	637
Barley	7,861	6,958	6,505
Oats	825	815	725
Rye	321	245	281
Triticale	341	462	349
Total Winter Grains	16,099	14,810	13,766

Source: MAGRAMA. Ministry of Agriculture, Food and Environment and FAS Madrid estimates.

Latest official estimates for **corn** plantings, indicate a drop in corn area (from 439 thousand hectares in 2013 to 428 thousand hectares in 2014). However, some sources indicate that area planted to corn could be even lower and return to average levels after the record plantings achieved in MY2013/14. Lower margins than expected and high irrigation costs are the two main factors driving the decline given corn's high demand of water. Increased area of other irrigated crops such as high **protein wheat** grown under irrigated conditions, **sugar beet** and, **tomatoes for processing**, **cotton** and **rice** to a lesser extent, could substitute corn plantings in some areas.

Domestic oilseed crops, other than olives, consist primarily of **Sunflower**. Sunflowers in Spain are mainly planted in non-irrigated land and depend largely in subsoil humidity for its growth. Sunflower area in Andalucía is projected to be close to last year's levels, since sub surface soil moisture remained at higher levels (See **Graph 3**). On the contrary, low sub-superficial moisture has discouraged sunflower plantings in Castile-La Mancha, Spain's largest sunflower growing region. In Castile y Leon, good winter grain planting conditions, as well as better margins for barley compared to sunflower, might have also resulted in reduced sunflower spring plantings. While official estimates (**Table 4**) report an increase in area planted to sunflower in MY2014/15, the large majority of our contacts in the field believe that the tendency would be the opposite.

Table 4. Spain's Sunflower Area and Production according to Official Statistics

Marketing Year	MY2012/13	MY2013/14	MY2014/15
Area (1,000 Ha)	761	849	862
Production (1,000 MT)	619	1,029	N/A

Source: MAGRAMA. Ministry of Agriculture, Food and Environment and FAS Madrid estimates.

While, dry conditions prevailing since mid-April have hit soil moisture levels, winter rains were abundant and contribute to fill dam water reservoirs and no water limitation for irrigated crops is anticipated.

**Rice** plantings are expected to remain at similar levels as previous years. In the case of **cotton**, farmers are expected to have maximized their plantings as the reference period for basic payment calculation in the case of cotton farmers will be MY2014/15 (See GAIN Report <u>SP1404</u>). **Sugar beet** plantings in the northern producing area are anticipated to remain strong to make up for the reduced yields resulting from the delayed plantings and the lower corn plantings.

## **Ending Stocks**

The large domestic crop in MY2013/14 along with the significant level of grain imports have resulted in high ending stocks of barley and wheat, which could add up to over 1.4 MMT and over 0.8 MMT respectively. These higher stocks levels of domestically grown grains would partially make up for the reduced crop in MY2014/15.

### **Implications on Trade**

Spain's grain import needs range from 9 to 12 MMT depending on the domestic grain supply, pasture availability and the feed grains demand. Latest official data released indicate that winter grains output could drop by 17 percent compared to last year. Industry sources though are more pessimistic when estimating the production decline.

The lack of rain has affected pasture availability. Extensive livestock farmers need to supplement their animals with feed, which leads to somewhat increased feedstuff needs, despite the anticipated stability in the livestock sector demand. The abundant crop anticipated in neighboring countries and Spain's main grain commercial partners is offsetting the effect of the lower domestic crop.

In the export side, good quality characteristics in the durum wheat domestic crop will encourage exports, mainly to EU destinations, and diminish import needs.

Overall grain imports are expected to grow compared to MY2013/14 to offset the reduction in the domestic supply. Nevertheless, the growth in imports is expected to be negated to some extent by the ample ending stocks.

Also, as the grain crop is estimated to be developed 2-3 weeks in advance compared to normal patterns, there will be earlier availability of new crop of Spanish-grown grains – including spring planted grains such as corn, which, along with abundant carryout, will contribute to a softer landing in the new marketing year for grain users.

As far as origins are concerned, the introduction of zero import duties for 950,000 MT of wheat, 400,000 MT of corn and 250,000 MT of barley from the Ukraine where introduced in April 25th, 2014 will not have a significant impact in barley trade, as it is limited to a few Mediterranean or intra-European exchanges. In corn trade, given the current import duty for corn is set at zero, these duty free quotas might encourage Extra-EU wheat imports. Nevertheless, the balance between intra and extra-EU imports of wheat will be determined by the final quality of the wheat harvest in the Black Sea Region.

## **Policy measures**

Drought is the most important climate hazard for crops in Spain, given the frequent occurrence of dry periods. A government supported Insurance System covering drought hazard is in place to mitigate the effects of drought in agricultural production. According to the National Agricultural Insurance Agency (ENESA) data, in 2014 over 50 percent of arable land is under insurance programs. In order to respond to the critical situation in some regions, damage assessment teams have been reinforced in order to facilitate the compensation payments.

On top of this ongoing government-supported insurance program, the Spanish Minister of Agriculture, Food and Environment, announced in Congress that the Ministry is currently working on a set of measures to diminish the impact of the dry conditions in Spain. The measures presented include granting with beneficial conditions to certain types of loans subscribed by farmers, and anticipated payments of EU CAP direct payments.

Aware of the difficult situation that grain and livestock farmers are going through, the Ministry of Agriculture is also negotiating with the Ministry of Finance and Public Administration beneficial income tax conditions for farmers, and with the Ministry of Employment and Social Security an extension for social security payment obligations. Ministries of Agriculture at the regional level of the most affected areas are also exploring possibilities to diminish the drought impact in farmers' income.

## **Related Reports**

Report	Date Released
Romania Set to Strengthen its Export Success	05/30/2014
Polish Producers Bullish on the Winter Crop	05/28/2014
Bulgaria Grains and Oilseeds Market Update	05/02/2014
Record Rapeseed Production but Sunflower Production Down	04/04/2014
Cotton and Products Spain 2014	04/02/2014
Grain and Feed Annual 2014 EU-28	04/01/2014
Below average temperatures in late Spring Help Spanish Cereal Crop	07/08/2013
Spain - Arable Crops Hold Potential despite Record Precipitation	04/26/2013