USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

Voluntary _ Public

Date: 3/7/2012
GAIN Report Number: SP1209

Spain

Post: Madrid

Still no Rain in Spain

Report Categories:
Grain and Feed
Agricultural Situation

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Report Highlights:

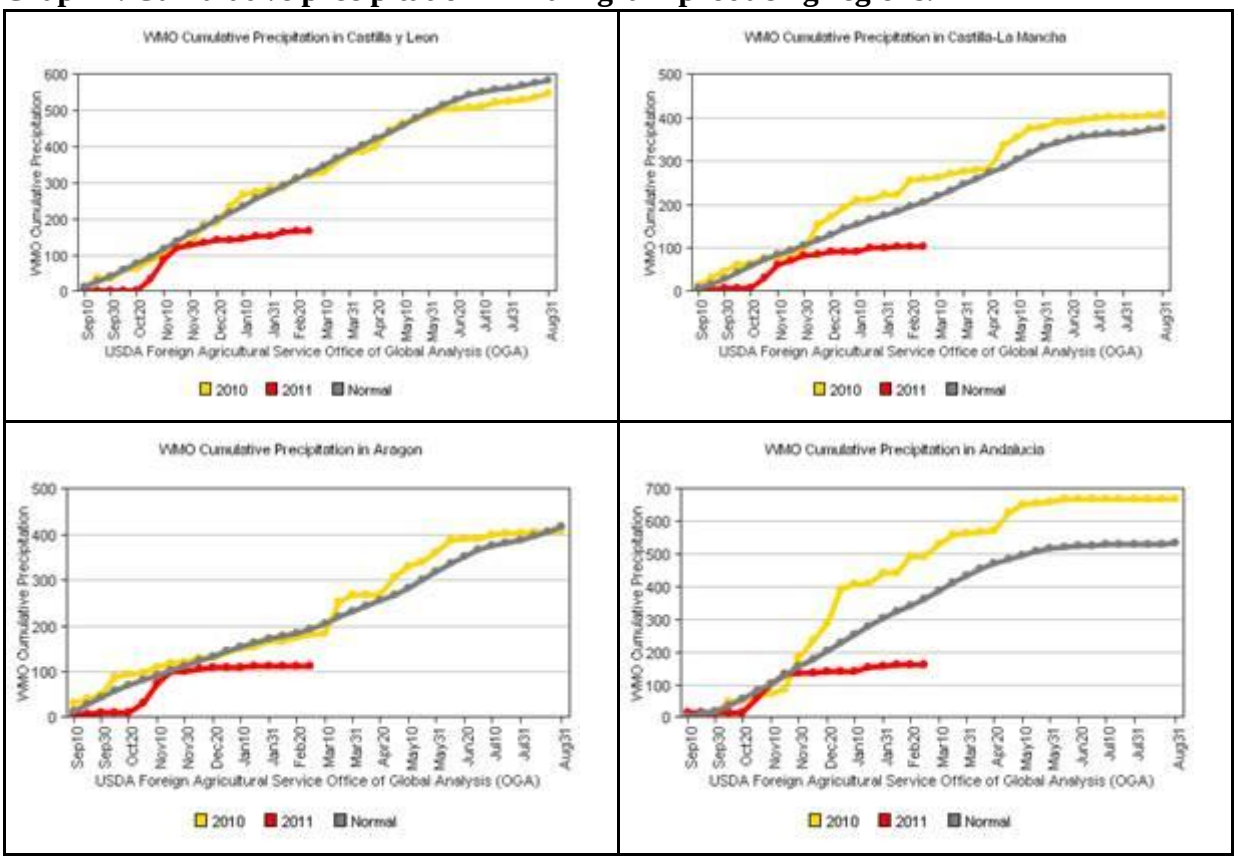
Spain has faced the driest winter ever recorded. Spain's grain crop for Marketing Year 2012/13 is currently at a very critical situation. The lack of rain and snow fall in key regions prevailed throughout February. While April and May rainfalls usually determine the size of the crop, this year's dry conditions might have already taken a toll on final yields on winter grains.

General Information:

Precipitation

Spain has faced the driest winter recorded. **Graph 1** shows how below rainfall levels have stayed below average throughout the winter in the main Spanish grain growing regions. This represents a challenge particularly for grain crops in Southern regions where the crops are in more advanced stages of maturity. Strikingly, in some areas there has been no rain since the first week of November.

Graph 1. Cumulative precipitation in main grain producing regions.



Source: IPAD/Foreign Agricultural Service/USDA

Water reservoirs situation: Soil and Dams

While similar rain patterns have occurred in previous years, initial soil moisture, which is critical for the first crop development stages, is particularly low this year. Low soil moisture conditions impede proper crop development and also prevent farmers from fertilizing their fields. Surface soil moisture (**Graph 3**) is below 5 mm in most of Spain's grain growing regions. Rains occurred in the first week of March increased soil moisture in Castile y Leon, Spain's region with the largest grain production, and gave some relief to stressed crops by increasing soil moisture up to 10-15 mm in some areas. Subsurface soil

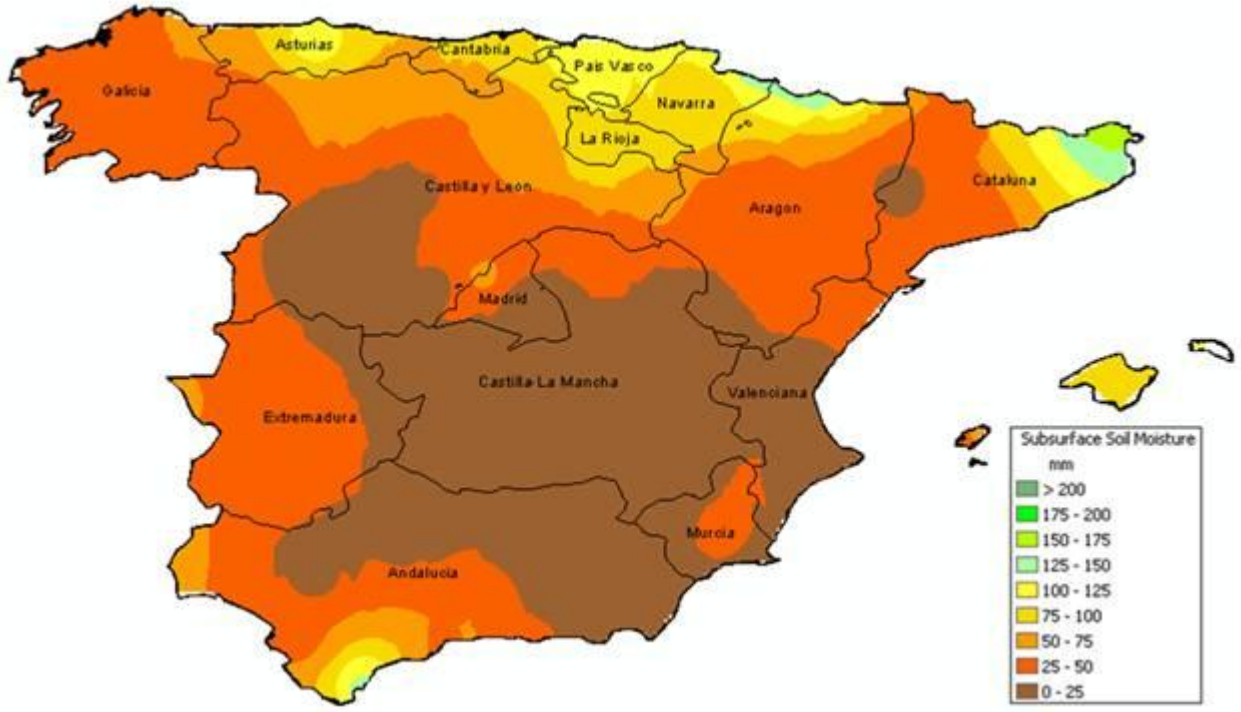
moisture (**Graph 4**) is below 50 mm in virtually all grain growing regions.

Graph 3. Surface Soil Moisture Conditions

Source: IPAD/Foreign Agricultural Service/USDA.

Note: WMO Surface soil moisture *levels are useful for monitoring the planting and harvesting activities for most crops. The surface soil moisture is assumed to hold a maximum of one inch (or 25-mm) of available water, which means the top-layer soil depth is dependent on the soil texture. Surface soil moisture levels from: 20-25-mm are best for germinating and emerging a new crop, but can halt fieldwork and could damage newly-seeded crops that remain in the wet environment for an extended period of time. 15-20-mm of water are normally best for vigorous field activity. 10-mm or less will not support seed germination or early growth potentials for a recently emerged crop.*

Graph 4. Subsurface Soil Moisture Conditions



Source: IPAD/Foreign Agricultural Service/USDA.

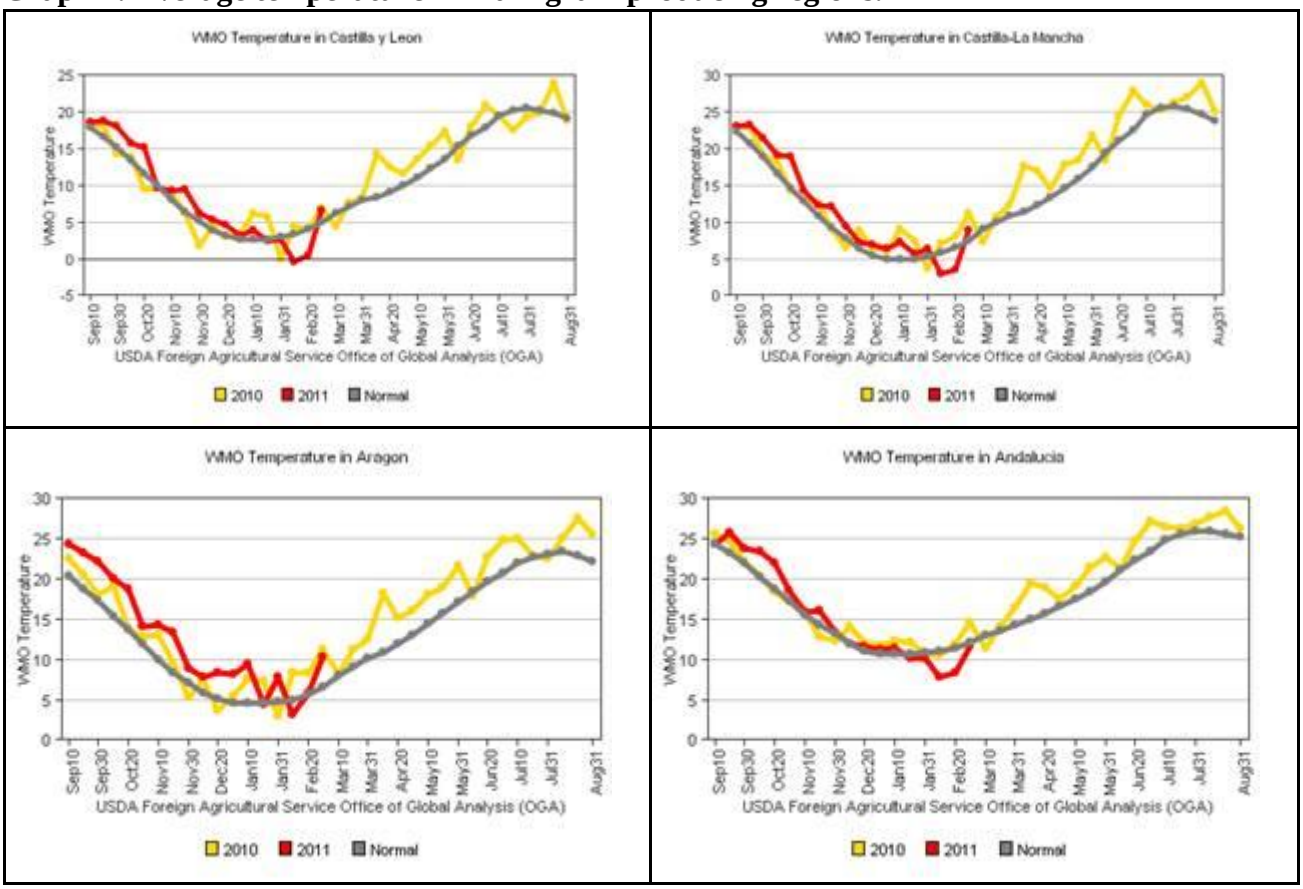
Note: Sub-surface soil moisture levels *are best used to monitor an established crop. The sub-surface soil moisture is assumed to hold 0-400 mm/m of water depending on the soil's water-holding capacity (based on soil texture and soil depth). In general, sub-surface soil moisture levels ranging from:*
>100-mm indicates an abundance or at least favorable amount of moisture in the subsoil.
<100-mm indicates the sub-surface soil moisture storage is short but can still support a well-established crop.
<25-mm has very little sub-surface soil moisture and the crop could be severely stressed and reduce yields, especially if it occurs when the top-layer has little or no significant soil moisture and the crop is at a critical stage of growth.

Spain's total dam water reservoirs are at 62.5 percent of capacity, which means that there are 34,764 hm3 of dam water available. While in Andalusia dams are at good levels of storage capacity, the Ebro basin, which covers the grain growing regions of Aragon, Navarra and Catalonia, is reportedly at 59.0 of its water storage capacity. The Duero basin that covers most of the Castile y Leon grain growing areas is at 55.2 percent of its total capacity. In Castile-La Mancha, the Guadiana basin water storage capacity is at 76.1 percent.

Temperature

Cold temperatures kept the grain crops dormant until mid February, preventing them from drought damage. The return to above-average temperature levels throughout the last week of February has broken dormancy and resumed plant growth and effects of lack of water started to be noticeable.

Graph 2. Average temperature in main grain producing regions.

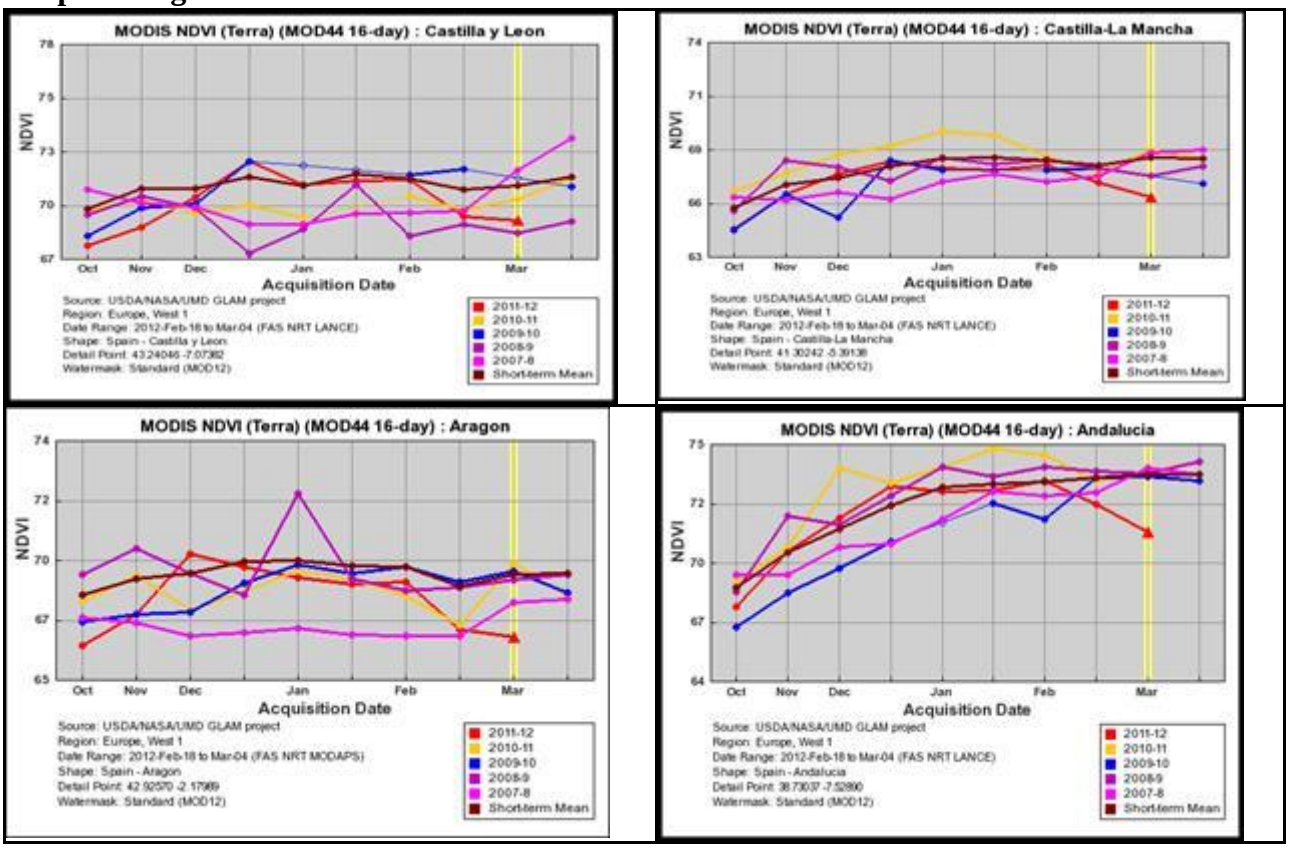


Source: IPAD/Foreign Agricultural Service/USDA

Vegetation Index

Crops in Andalucía, Castile-La Mancha and Aragón (**Graph 5**) already show signs of lowered vegetation health. While the same signs apply to Castile y Leon, based on previous years' crop behavior, the situation could still be reversed if weather conditions improve.

Graph 5. Vegetation Index



Source: IPAD/Foreign Agricultural Service/USDA.

Impact in grain crops

In Spain, nearly 85 percent of the agricultural land is cultivated without irrigation. Non-irrigated land crops are so far the most affected by the scarce rainfall. However, plantings in irrigated land, which represents the remaining 15 percent of agricultural land, could be reduced based on fears about water supplies due to limited aquifers recharge and lack of snow in mountaintops.

Despite larger acreage planted to winter grains in MY2012/13, should the dry conditions prevail, the grain crop will be below normal. Andalucía, where the crops mature earlier and the large majority of the durum wheat is grown, the dry conditions and low temperatures throughout February have resulted in a crop size below normal. In Castile y Leon and Castile-La Mancha, the main barley growing regions, favorable weather conditions could still prevent from an output decline.

Table 1. Spain's Official Winter Grains Area Estimates (1,000 ha)

Area (1,000 Ha)	MY2010/11	MY2011/12	MY2012/13
Soft Wheat	1,448.20	1,612.00	1,628.60
Durum Wheat	487.2	380.7	409.5
Total Wheat	1,935.40	1,992.60	2,038.10
Barley	2,870.00	2,697.90	2,695.60
Oats	538.6	491.3	493.9
Rye	135.8	148.8	151.1
Triticale	65.4	82	82.6
Total Winter Grains	**5,545.20**	**5,412.60**	**5,461.30**

Source: Avance de Superficies. January 2012. Ministry of Agriculture, Food and Environment.

Impacts on livestock breeders and trade

Spain boasts of one of the EU's largest livestock sectors. While grains are the largest crop in terms of area, Spain's yearly grain import needs to meet the grain structural shortfall rank between 9 and 12 million metric tons of grains, depending on the size of the domestic crop. Spain is a net exporter of durum wheat, mainly to other EU MS and North African countries. If the reduced harvest in Andalucía is confirmed, a lower exportable supply of durum wheat will be available in MY2012/13 and higher imports would be needed to meet the country's grain demand.

The large majority of Spanish livestock production is carried out under intensive production conditions; however, weather conditions are also putting extensive livestock farming at risk. Pasture land has been affected by dry conditions and less pasture availability is forcing extensive livestock farmers, mainly suckling cows' breeders and sheep and goat breeders, to increase their input costs by supplementing their animals in quantities over normal levels.