Spain

Post: Madrid

Warm and Dry Weather in May Lowers Yield Expectations for Winter Grains

Report Categories:
Grain and Feed

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Report Highlights:
After a rather dry winter, April rains initially improved yield projections for Northern grain regions. However, April rains came in too late for the Southern grain growing regions. Warm and dry conditions in May and June lowered yield expectations in all the territory. On a positive note, increased corn plantings may partially offset the anticipated production decline. As a result, in MY2019/20, grain crop may decline by at least 25 percent compared to MY2018/19, when yields reached record levels. Hence, Spain’s country grain crop may lower to below 18 million MT. Given the below average domestic supplies, the lack of pasture availability, and the thriving Spanish livestock sector’s demand for feed, Spain may import over 17 MMT of feed grains from EU and non-EU suppliers in MY2019/20.
**General Information:**

After a rather dry winter, April rains initially improved yield projections for North grain growing regions. However, April rains came in too late for Southern growing areas. Warm and dry weather conditions in May lowered yield expectations for winter grains. On a positive note, increased corn plantings, which is grown in irrigated conditions, may partially offset the anticipated production decline. In MY2019/20, grain crop may lower to below 18 million MT, more than a 25 percent drop compared to MY2018/19, when yields registered record levels. Given the below average domestic supplies, the lack of pasture availability, and the thriving Spanish livestock sector’s demand for feed, Spain may import over 17 MMT of feed grains from EU and non-EU suppliers in MY2019/20.

**Abbreviations used in this report**

EU: European Union  
FAS: Foreign Agricultural Service  
IPAD: International Production Assessment Division  
Ha: Hectares  
MAPA: Ministry of Agriculture, Fisheries and Food.  
MY: Marketing Year  
MT: Metric Ton (1,000 kg)  
MMT: Million Metric Tons  
MY: Marketing Year.  
MS: EU Member State(s)  
TMT: Thousand Metric Tons

**Precipitation and Temperatures**

The lack of precipitation in October 2018 delayed plantings and persistent rains in November impeded proper planting operations. The dry conditions that prevailed during winter and the first half of the spring raised concerns over the size of the grain crop. However, the long awaited rains arrived in mid-April. While April rains initially improved yield projections for the Northern regions, they came too late for Southern growing areas. The absence of rains in May consolidated the production decline.

Cumulative precipitation levels for the MY2019/20 crop are well below last year’s and below the average precipitation levels in the main grain producing regions in Spain (Graph 1).
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Graph 1. Cumulative precipitation in Main Grain Producing Regions

Temperatures

In general, winter temperatures were mild (Graph 2), with February temperatures reaching abnormally high levels. In mid-April, the beginning of rains drove temperatures down. However, high late spring temperatures accelerated the grain crop development.

Graph 2. Average Temperatures in Spain

Source: IPAD/FAS/USDA
Soil Moisture and Water reservoirs
The abundant precipitations in the second half of April partially restored soil moisture, especially in the northern half of the country, which remained at very low levels until mid-April. However, high temperatures in May dried down the soil (Graph 3).

In regards to storage water in dams (Graph 4), Spain’s total water reservoirs are currently at 58.52 percent of total capacity, which equals 32,814 hm³ of stored water, well below the ten-year average and last year’s level.

Andalusia’s dams are at low levels of storage capacity (Guadalquivir basin is at 49.37 percent of capacity). In the Ebro basin, which covers the grain growing regions of Aragon, Navarra and Catalonia, the dam water reservoir is 79.74 percent of its water storage capacity. The water storage capacity in the Duero basin, which covers most of the Castile y Leon grain growing areas stands at 63.79 percent and the Guadiana basin, which supplies Castile-La Mancha and Extremadura are at 48.76 percent. With this level of storage capacity, Post anticipates no restrictions on irrigation practices.
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Graph 4. Water Reservoirs
Agua embalsada - Guadiana

Source: Embalses.net

Planting Decisions

According to official estimates, the total winter grain area is expected to continue with its long-term decline trend, showing a marginal decline compared to the previous year. Conversely, post anticipates an increase in the corn planted area because of the reduction in alternative crops such as sugar beets. In addition, in response to the world’s corn market situation, farmers are increasing their second crop corn plantings after the early winter grains harvest. This is particularly the case in the Ebro Valley area.

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

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>2,176.4</td>
<td>2,256.8</td>
<td>2,059.2</td>
<td>2,063.2</td>
<td>1,976.4</td>
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<tr>
<td>Soft</td>
<td>1,828.4</td>
<td>1,808.7</td>
<td>1,641.6</td>
<td>1,689.4</td>
<td>1,644.1</td>
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<td>Durum</td>
<td>347.9</td>
<td>448.2</td>
<td>417.6</td>
<td>373.8</td>
<td>332.3</td>
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<tr>
<td>Barley</td>
<td>2,598.9</td>
<td>2,563.2</td>
<td>2,597.5</td>
<td>2,562.2</td>
<td>2,630.1</td>
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<tr>
<td>Oats</td>
<td>483.7</td>
<td>509.8</td>
<td>558.8</td>
<td>553.5</td>
<td>508.0</td>
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<tr>
<td>Rye</td>
<td>146.6</td>
<td>155.3</td>
<td>108.1</td>
<td>134.8</td>
<td>141.1</td>
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<tr>
<td>Triticale</td>
<td>215.6</td>
<td>227.8</td>
<td>195.9</td>
<td>216.0</td>
<td>226.3</td>
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<tr>
<td>Total Winter Grains</td>
<td>5,621.1</td>
<td>5,712.90</td>
<td>5,519.5</td>
<td>5,529.7</td>
<td>5,481.9</td>
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<td>Corn</td>
<td>398.3</td>
<td>359.3</td>
<td>333.6</td>
<td>322.5</td>
<td>335</td>
</tr>
</tbody>
</table>

Source: MAPA. Avance de Superficies and FAS Madrid estimates.
Vegetation index

The vegetation index in Andalucía is well below the historical average vegetation index and significantly lower compared to the same period in crop year 2018/19, when yields registered record levels. In Aragon, Castile-La Mancha and Castile y Leon, the NDVI (Normalized Difference Vegetation Index) improved throughout April. Nevertheless, warm and dry conditions prevailing in May deteriorated the crop conditions forcing yields down.

Graph 5. Vegetation index in main grain producing regions.

Source: IPAD/Foreign Agricultural Service/USDA

Production Projections

The Spanish Ministry of Food, Fisheries and Agriculture (MAPA) just released its winter grain crop estimates, based on field data collected in March and April. The MAPA numbers anticipate just a 20 percent decline in the production as the information was collected before the weather conditions in May lowered yield expectations. It is Post’s assumption that in upcoming updates the Ministry will likely revise figures down. As far as industry actors are concerned, all of them concur that anticipated production will be well below last year’s figure and average levels. While initially April rains contributed to a recovery of the yield projections, in particular for the northern half of the country, warm temperatures and dry conditions in May have significantly driven down production expectations.
Table 3. Spain’s Winter Grain Production Estimates (1,000 MT)

<table>
<thead>
<tr>
<th>Crop</th>
<th>MAPA</th>
<th>Cooperatives</th>
<th>ACCOE</th>
<th>ASAJA</th>
<th>Infomarket</th>
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</thead>
<tbody>
<tr>
<td>Wheat</td>
<td>6,359</td>
<td>5,473</td>
<td>5,300</td>
<td>5,010</td>
<td>6,138</td>
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<tr>
<td>Soft</td>
<td>5,443</td>
<td>4,526</td>
<td>4,466</td>
<td>4,200</td>
<td>5,286</td>
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<tr>
<td>Durum</td>
<td>916</td>
<td>947</td>
<td>848</td>
<td>810</td>
<td>852</td>
</tr>
<tr>
<td>Barley</td>
<td>7,560</td>
<td>6,959</td>
<td>6,201</td>
<td>6,000</td>
<td>6,877</td>
</tr>
<tr>
<td>Oats</td>
<td>995</td>
<td>1,053</td>
<td>773</td>
<td>807</td>
<td>N/A</td>
</tr>
<tr>
<td>Rye</td>
<td>310</td>
<td>290</td>
<td>252</td>
<td>160</td>
<td>N/A</td>
</tr>
<tr>
<td>Triticale</td>
<td>533</td>
<td>538</td>
<td>419</td>
<td>425</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Total Winter Grains</strong></td>
<td><strong>15,575</strong></td>
<td><strong>14,313</strong></td>
<td><strong>12,959</strong></td>
<td><strong>12,400</strong></td>
<td>N/A</td>
</tr>
</tbody>
</table>

Source: MAPA, Agricultural Cooperatives, ACCOE (Grain Elevators Association) and ASAJA (Young Farmers Union) and Infomarket (Private Analyst)

In the case of corn, virtually all is grown under irrigation, so yields are very stable. The higher corn planted are could result in a production of 3.7 MMT, which would only partially offset the nearly 30 percent decline anticipated for winter grains, leaving a total grain crop of less than 18 MMT.

Consumption and Trade

The feed industry is Spain’s primary grain consumer. Feed production continues to grow (Graph 5) driven by the increasing demand from Spain’s livestock sector. Domestic meat consumption grew slightly as Spain continues to break tourist records (See GAIN Report SP1833). However, the production of meat for exports market is the main driver increasing feed demand. Additional information about Spain’s meat exports are available in GAIN Report SP1908. Industry sources estimate that in 2019, feed production in Spain will continue to expand.
As far as the composition of the feed formula is concerned, the short domestic crop in MY2019/20 will result in livestock breeders feeding significantly less barley and more corn or wheat to their animals. However, the ample ending stocks of barley will soften its decline in consumption in MY2019/20. Since May 2018, facing Chinese-antidumping tariffs, the United States resumed sorghum exports to Spain jumping from virtually zero since MY2010/11 to nearly 240,000 MT in MY2018/19. During the first nine months of MY2019/20 U.S. sorghum exports to Spain grew further to 600,000 MT (see Graph 6). Given the competitiveness of other grains suppliers such as other EU MS, Ukraine or Brazil, this trade flow is not expected to continue throughout MY2019/20.
With regards to the bioethanol industry, there are three grain-based bioethanol facilities in Spain whose total grain consumption may amount to over 1 MMT. These plants were processing grains at full capacity during 2018 and are projected to continue to operate at a high capacity throughout 2019. Once again, in MY2019/20, corn is anticipated to be the preferred feedstock for the Spanish grain-bioethanol industry given the Spanish feed industry’s preference for corn-based DDGs.

Winter grains yields in Spain are extremely variable. This situation, combined with its comparatively large and growing livestock sector, the stable demand of food grains, and the full use of bioethanol production capacity, results in a significant structural shortfall in feed grains. On average, Spain needs to import 13 MMT of grains to make up for its structural deficit. This volume of imports has been growing over the years as Spain’s export-oriented livestock sector continues to expand. For instance, in MY2018/19, despite the large domestic crop, Spain imported nearly 15 MMT of grains. (See GAIN Report SP1818 for additional information on MY2018/19 crop conditions).

In MY2019/20, the combination of an anticipated below average crop, the lack of pasture availability for animal feed, and the continuous growth in meat exports could result in a total grain deficit of over 17 MMT. Regarding exports, the projected reduction in Spain’s durum wheat harvest is likely to result in lower supplies for export. This could open the door for increased EU imports of durum wheat from non-EU suppliers.