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Report Name: Grain Production Decline to Test Supply Chain Logistics

Resilience in Spain

Country: Spain

Post: Madrid

Report Category: Biofuels, Grain and Feed, Oilseeds and Products, Agricultural Situation

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Report Highlights:

Spain is facing a second consecutive year of poor grains crops. While northernmost grain producing areas still hold production potential, yields in the country's southeast are estimated to have declined significantly. Despite the somewhat sluggish overall grains demand, a large amount of grain imports will be necessary to meet Spain's consumption needs. Ports are expected to operate at high capacity. Unloading, in-land transport, and grain storage logistics will be particularly key to allow grains to flow towards consumption areas.

Area

According to the latest official statistical release by the Spanish Ministry of Agriculture, Fisheries and Food (MAPA), winter grains area is expected to amount to 5.2 million Hectares. Fall moisture levels were generally positive, allowing farmers to carry out their winter grains plantings uneventfully. Although the European Union's elimination of fallow land requirement last year resulted in increased area available for winter grain plantings, more profitable tree crops, and less input intensive sunflowers in the case of spring plantings, continue to compete for fertile land.

Spring grains plantings in Spain consist of rice and corn. While responsive to agroeconomic conditions, they are also strongly correlated with irrigation water availability¹ and alternative crops competitiveness. Current irrigation water allocation is threatening the size of the corn area, including second-crop corn plantings in the Ebro Valley, whereas plantings in the country's northeast (León) area are anticipated to remain steady. According to Post projections, Spain's grain corn plantings could potentially amount to less than 250 thousand Hectares in MY 2023/24.

In the case of rice, a recovery in plantings is anticipated in Extremadura, bouncing back from last year's water limitation-driven low area levels, although it will not ultimately counter the absence of plantings in Andalucía, where small water allocations preempt farmers from planting rice. Cataluña may also witness a reduction in area planted to rice given concerns surrounding water availability. In the rest of the rice growing regions, stable plantings are projected. According to the latest official estimates, the country's total rice area is expected to reach 59.8 thousand Ha. However, industry sources indicate that rice plantings area could be lower and amount to less than 50 thousand hectares, in line with the limitations in water allocations.

Weather Conditions

The size of the mostly non-irrigated winter grain crop depends on crucial rain during the period of April and May. Persistent dry conditions (**Figure 3**) and above average temperatures (**Figure 4**) through mid-May have reduced expectations for Spain's winter grain crops in 2023, particularly in the country's southern growing regions.

Spain faces the second consecutive dry year in a row, which has ultimately taken a toll on water reserves, which are currently at just 47.7 percent of total storage capacity, the lowest level registered since 1995. The lack of snow in the mountain also represents a problem since it constitutes an important source for replenishing water reservoirs during spring and summer. The situation is particularly worrisome in Andalucía and Extremadura, where water reservoirs (Guadalquivir and Guadiana River Basins) are comparatively lower than in the central and northern grain growing regions (Tajo, Ebro, and Duero River Basins).

¹ There are five major river basins in Spain, four of which (Duero, Tajo, Guadiana, and Guadalquivir) are tributaries to the Atlantic, whereas the Ebro River flows into the Mediterranean.

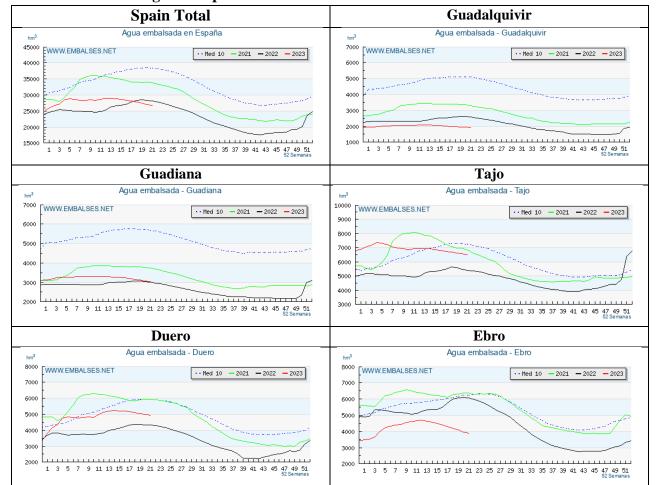


Figure 1. Spain Total and River Basin Water Reservoirs

Source: Embalses.net

The winter crop growing season started off with good soil moisture levels, with December showers encouraging farmers to carry out proper fertilization operations. However, the extremely dry conditions prevailing since the beginning of year 2023 have reduced the good superficial and sub superficial soil moisture achieved as the result of December's ample precipitation levels. Rainfall in the second half of May has only partially alleviated the extreme soil dryness prevailing across the country (**Figure 2**).

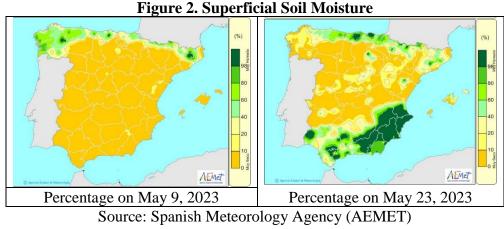


Figure 3. Cumulative Precipitation in Spain and in Main Grain Producing Regions Spain Andalucía Cumulative Precipitation (CPC) for Spain Cumulative Precipitation (CHIRPS) for Andalucía 600 600 400 400 Source: CHIRPS and crop mask from IIASA cropland 2005 2022 / 2023 -- 2021 / 2022 -- Normal 2022 / 2023 --- 2021 / 2022 --- Normal Extremadura Castile-La Mancha 600 400 300 200 200 Feb Mar Apr May Jun Jan Feb Mar Apr May Source: CHIRPS and crop mask from IIASA cropland 2005 Source: CHIRPS and crop mask from IIASA cropland 2005 ← 2022 / 2023 ← 2021 / 2022 ← Normal --- 2021 / 2022 --- Normal **Castile and Leon** Aragon Cumulative Precipitation (CHIRPS) for Castilla y León Cumulative Precipitation (CHIRPS) for Aragón 800 600 600 400 200 200 Feb Mar May Source: CHIRPS and crop mask from IIASA cropland 2005 Source: CHIRPS and crop mask from IIASA cropland 2005

Despite abundant December precipitation and localized spring showers, year-to-date rainfall is the lowest on record across most of Spain's main grain growing regions (**Figure 3**). The lack of precipitation has been most severe in the country's southeast, where abnormally high temperatures also occurred. Rainfall in the second half of May came too late to make up for the yield losses in the south of the country, and only partially alleviate the production declines anticipated for the northernmost grain producing regions.

Fall, winter, and spring temperatures remained at higher-than-average levels. In particular, the last week of April registered record-setting heat levels (above 30 Celsius degrees) across the country, further deteriorating the already damaged winter grains' crop condition (**Figure 4**). The milder temperatures prevailing since mid-May have come as a relief for grain crops in late-maturing growing regions.

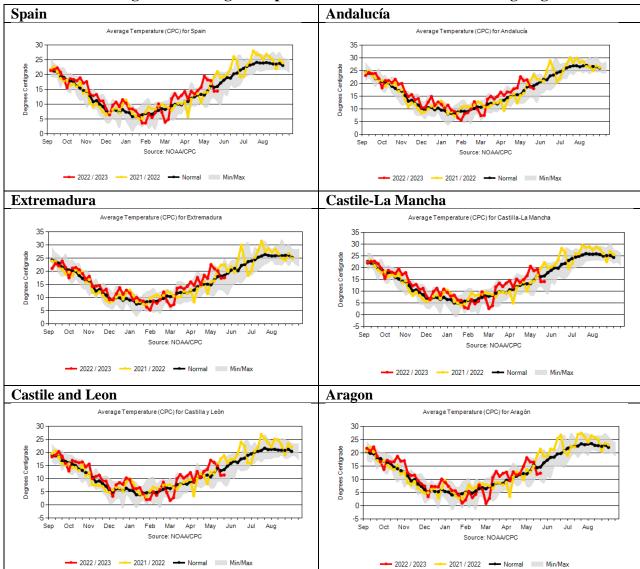


Figure 4. Average Temperatures in Main Grain Producing Regions

Source: IPAD/Foreign Agricultural Service/USDA.

Production

The combination of poor winter grains production projections and lower than anticipated area planted to corn is expected to keep the country's total grain production to barely 12 million Metric Tons (MT). Yields are expected to be down well below MY 2022/23 levels, when limited rainfall volumes already resulted in a short domestic grain crop.

As a result of the crop condition deterioration, wheat and barley production forecasts have been lowered compared to previous Post estimates. With proportionally less of Spain's barley and more wheat production located in the southern producing regions, the cut in the barley production forecast is not anticipated to be as severe as that for wheat.

A smaller corn crop is also projected given the water-deficit led reduction in planted area, in addition to the combination of the warmer and drier weather conditions, and limitations in water allocated for irrigation purposes, despite the stability in yields that irrigation normally provides.

Spanish farmers adequately fertilized their winter grains driven by the improved affordability of fertilizers and the promising precipitations that occurred in mid-winter. Both the costly crop implantation operations and declining global grain prices may ultimately squeeze farmers' margins and erode cashflow availability, potentially affecting MY 2024/25 planting decisions.²

The lack of precipitation has been most severe in the country's southeast, where abnormally high temperatures also occurred. In Andalucía, grain yielding potential has already been negatively affected by the water deficit. Given current condition of the crop, particularly in dryland areas, some producers are questioning whether it will be worthwhile to harvest and or ultimately to leave fields unharvested or devote them for direct grazing. Others may opt for harvest as hay, as livestock farmers increasingly demand it, given the low pasture availability and limited straw production anticipated. In some instances, these alternative uses are conditioned by crop insurance damage appraisals. With about two-thirds of Spain's durum area and production located in Andalucía, durum production is forecast to be only about one third the level the previous year.

workers in extreme heat, flexibilization of requirements for the Common Agricultural Policy (CAP) support, and funding for new infrastructure to increase water resources.

² Spain's Council of Ministers approved urgent measures on May 11 to provide direct aid to farmers impacted by the drought. The approved support includes subsidies to offset rising feed and agricultural inputs costs, increased drought insurance subsidies, exemptions on certain taxes, improved access to financing, health support for workers in extreme heat, flexibilization of requirements for the Common Agricultural Policy (CAP) support and

While not to the extent as in the southern areas, the dry weather is also affecting production in some central and northern grain producing areas as well, further contributing to the cut in the production forecast. The continued dry weather has reduced expectations for the harvest in Castilla-Mancha, a major barley producing area. In Castilla y Leon, the grain crop condition is comparatively better than in the southern regions, given the more delayed stages of the grain crops. Across the region, differences exist between areas where heavier soils with larger retention capacity prevail, like the northernmost region above the Duero River, as opposed to sandy soils where the water percolates faster. However, even with the late spring precipitations cushioning the decline, crop losses are already being reported by industry sources in this region. Drought-affected tilling has been followed by abnormally high temperatures jeopardizing winter wheat and barley filling across the country. The milder temperatures registered since mid-May are expected to reduce stress during grain filling stages, avoiding further yield reductions due to the temperature-induced shriveling of grain kernels in this region.

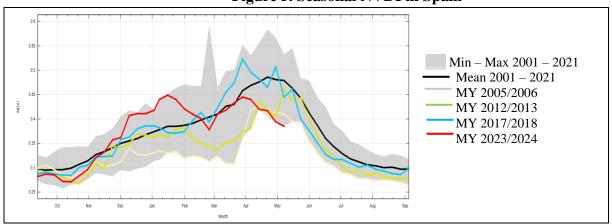


Figure 5. Seasonal NVDI in Spain

Source: IPAD/Foreign Agricultural Service/USDA.

Consumption

Spain's total grain consumption in MY 2023/24 is currently projected at over 34.6 MMT, down from the over 34.9 MMT estimated for MY 2022/23. Animal feed accounts for over 75 percent of the country's demand. The Spanish feed market (compound and on-farm) absorbs annually about 26 million MT of grains. In the declining prices scenario, hand to mouth purchase policy prevails. Spain's feed compounders supply the dynamic domestic livestock sector, whose demand is determined by livestock products export demand and internal consumption. In MY 2023/24, the reduction in feed ingredient prices has come as a relief for shrinking livestock producers' margins. Spain's Feed Compounders Association (CESFAC) estimated a 4 percent reduction in industrial feed production in CY 2022 driven by the initially tight margins and animal health issues that the poultry and swine sector faced.³ Industry sources concur that in CY 2023, feed demand would continue to decline, although at a much lower rate. However, when it comes to extensive livestock producers, the limited pasture availability supports higher feed demand in MY 2022/23 and MY 2023/24.

 $^{^3}$ For additional information, please consult the latest $\underline{EU\ Livestock}$ and $\underline{Poultry}$ reports.

Slaughters numbers constitute an advanced indicator of livestock feed demand evolution. According to Spanish official data, in MY 2022/23, in-country total slaughter-based meat production declined by nearly 3 percent until February 2023. Meat exports data available until March 2023 indicate that in MY 2022/23 Spain's total meat exports⁴ have declined by 5 percent.

On a positive note, the total tourist numbers up to March were only 3.5 percent below 2019 prepandemic levels, which ultimately contributes to a more dynamic Hotel, Restaurant, and Institutional (HRI) activity. However, food inflation continues to curb demand and reduced consumers' purchasing power negatively affecting consumption of livestock products. The reduction of Spanish VAT on certain food items (which did not include meat) as of January 2023 was not enough to reduce the increase in inflation, which in April amounted to 4.1 percent. Food and non-alcoholic beverages inflation rate reached 12.9 percent in April 2023, down from the previous month's figure, partially driven by the fact that the increase in prices of meat, bread and cereals, oils and fats and milk, cheese and eggs is smaller than in April 2022, when the Ukraine crisis negatively impacted food prices. According to Ministry of Agriculture household consumption data for November 2022, compared to the previous year, rice consumption declined by 7.3 percent, wheat-based products such as bread and bakery products by 7.9 percent, and pasta by 2.2 percent. Livestock products' household consumption registered a sharper decline, amounting to 10.7 percent in the case of pork and 13.5 percent for broiler meat.

In the <u>Spring economic forecast for Spain</u>, the EU Commission improved its prospects for the Spanish economy and forecasts an 1.9 percent expansion of the country's economy driven by the good performance of the tourism sector. However, the EU forecasts points out risks to the country's performance such as tightening financial conditions in households.

The grain-based bioethanol industry is a significant consumer in Spain, absorbing annually about 1.1 million MT of grains. In 2022, maintenance operations and energy cost-driven production halts pushed bioethanol production slightly down. Industry sources anticipate a rebound in production in 2023 as energy prices stabilize, fuel consumption continues to recover and blending mandates expand. Given the poor domestic grain crop anticipated, bioethanol plants are expected to run entirely on corn.

Trade and Stocks

Spain is the EU grain imports leader, accounting on average for 70 percent of the bloc's grain imports. The reduced in-country grain availability anticipated, despite the somewhat lower demand projected, will lead to a greater grain shortfall and increased import needs. Early estimates indicate that Spain's grain imports in MY 2023/24 are set to break the 20 million MT ceiling.

⁴ Under HS Code: Chapter 02.

Spain's grain consumption is supplied by agricultural cooperatives, private grain elevators and grain importers. Each of these business models normally accounts on average for one third of the total grain demand. In the absence of a sizeable domestic crop, importers will need to gear up to meet the country's needs. In the context of a larger import dependency, private grain elevators may switch their business model to store imported grains, in intermediate or consumption areas, to allow for higher stock rotation rates at the port facilities and to help better navigate the logistical challenges that the above grain import dependency may entail.

Spain's grain import needs are normally supplied by other EU grain producing Member States, Brazilian corn during the summer months, and Ukrainian grains, mostly corn but also wheat, barley, and sorghum, during the fall and winter months. Other countries that participate to a much lesser extent in meeting Spain's grain shortfall needs include the United Kingdom, Canada, the United States, and Russia.

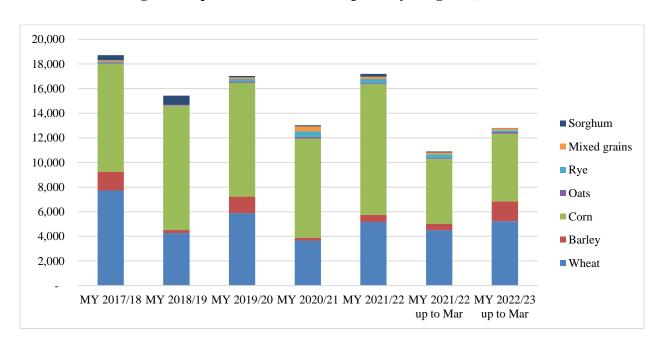
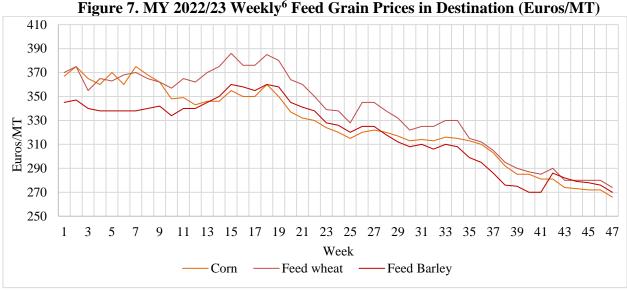


Figure 6. Spain's Total Grain Imports by Origin (1,000 MT)

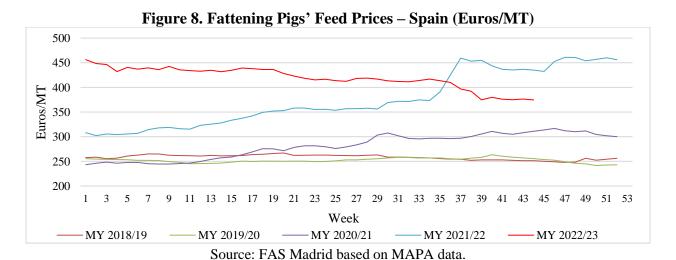
Source: Trade Data Monitor, LLC.

In MY 2023/24, Spain is expected to turn to other EU Member States for grain sourcing, given the rebound in grain production levels projected for other EU Member States. Brazil is also expecting an abundant corn crop that will be available to the export market during the northern hemisphere summer months. Ukraine is expected to remain a key supplier to Spain, although to a smaller extent than in MY 2022/23 due to reduced grain crop expectations. However, MY 2023/24 imports from Ukraine are highly correlated with the continuation of the U.N. Black Sea Grain Initiative. As in MY 2022/23, most of the Spain's grains and oilseeds trade with Ukraine occurs via sea vessels. Consequently, the recent EU decision preventing Ukrainian agricultural exports from staying in bordering countries should not impact Spain's access to Ukrainian grains.

Grain prices in consumption areas continue to decline (**Figure 7**). In the absence of an ample domestic barley crop, feed demand may ultimately switch to wheat and corn in MY 2023/24. Currently the price differential favors corn as the preferred feed grain. The quality and quantity of the EU's wheat crop will play a key role in determining which type of grain prevails for feed purposes. The current grain price levels still preempt the EU from establishing import duties for grains. Under the Black Sea Grain Initiative corridor, low protein wheat originating in Ukraine avoids import duties in place,⁵ keeping Ukrainian low protein wheat as competitively priced as intracommunity acquisitions.



Source: Lonja de Barcelona.



⁵ Low protein wheat is subject to 12 Euros/MT and 95 Euros/MT inside and outside quota. For additional information regarding EU Grains quotas management, please consult the latest EU Grain and Feed Annual Report.

⁶ Weekly Prices on MY July/June basis.

Interestingly, despite Spain's strong import dependency and the poor domestic crop registered in MY 2022/23, the country's ending stocks of grains are projected to expand compared to the previous season, as farmers may opt to hold onto their grains in expectation of a recovery of grain prices during MY 2023/24. In the case of corn, ending stocks are normally large given the large amount of corn imports from Brazil that are carried out during the summer months, which are ultimately stored in port locations or inland storage facilities until customers withdraw their purchases.

Attachments:

No Attachments.