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## Spain

**Post:** Madrid

### Spain is ready to Export Dried Fodder to China

**Report Categories:**

Grain and Feed

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**Report Highlights:**

The record export levels achieved in MY2012/13 were not repeated in MY2013/14, which ended up with higher stocks. Dried fodder production forecasts for MY2014/15 are positive based on increased area planted to alfalfa and favorable weather conditions during crop development and throughout the beginning of the harvest season. Marketing opportunities for dried fodder in the domestic market increase driven by a tepid recovery of the dairy herd. Additionally, the recently signed agreement with China opens the door to increased exports.

## General Information:

Disclaimer: This report presents the situation for forage production and exports in Spain. This report contains the views of the authors and does not reflect the official views of the U.S. Department of Agriculture (USDA). The data are not official USDA data.

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## Abbreviations used in this report:

CMO Common Market Organization

EC European Commission

EU European Union

FAS Foreign Agricultural Service

GTA Global Trade Atlas

CAP Common Agricultural Policy

SPS Single Payment Scheme

BP Basic Payment

EFA Ecological Focus Area

MAGRAMA Ministry of Agriculture, Food and Environment

AEFA National Dried Alfalfa Producers Association

AQSIQ China's General Administration of Quality Supervision, Inspection and Quarantine

HS Codes: Harmonized System codes for commodity classification used to calculate trade data.

Harmonized Codes for Dehydrated Fodder:

1214 Rutabagas (Swedes), mangolds, fodder roots, hay alfalfa (2ucerne), clover, sainfoin, forage kale,

lupines, vetches and similar forage products, whether or not in the form of pellets.

121410 Alfalfa (Lucerne) meal and pellets; dehydrated, sun-cured and other.

121490 Hay (including alfalfa, whether or not double compressed, and Timothy); clover; and other.

MS EU Member State(s)

MT Metric ton (1,000 kg)

MY Marketing year (May/April)

PS&D Production, Supply and Demand

Ha Hectares

N/A Not Available

## Area and Production

In MY 2013/14, the total area planted to fodder crops grew compared to previous season as there was plenty of irrigation water available. For MY2014/15 an increased area planted to fodder crops is projected at the expenses of lower corn plantings.

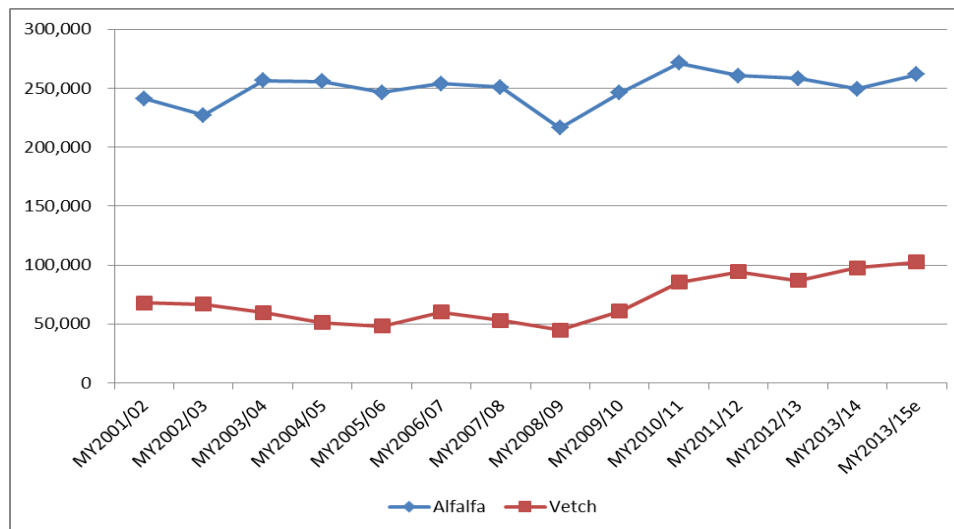
**Table 1. Area Planted to Dried Fodder under Contracts with Dehydrating Plants (Hectares)<sup>1</sup>**

| Market Year | Alfalfa | Vetch  | Sainfoin | Fescue Grass | Corn  | Rye Grass | Other  | Total   |
|-------------|---------|--------|----------|--------------|-------|-----------|--------|---------|
| 2006/07     | 164,020 | 4,716  | 956      | 5,596        | 1,190 | 8,274     | 7,176  | 191,928 |
| 2007/08     | 143,554 | 4,583  | 506      | 6,043        | 1,197 | 7,744     | 5,994  | 169,623 |
| 2008/09     | 122,411 | 4,039  | 679      | 5,696        | 1,248 | 5,972     | 5,993  | 146,038 |
| 2009/10     | 135,747 | 9,106  | 641      | 9,748        | 1,076 | 8,301     | 4,074  | 168,693 |
| 2010/11     | 147,065 | 12,375 | 469      | 7,724        | 1,174 | 8,063     | 7,946  | 184,815 |
| 2011/12     | 140,887 | 14,166 | 760      | 4,051        | 1,230 | 6,946     | 10,431 | 178,920 |
| 2012/13     | N/A     | N/A    | N/A      | N/A          | N/A   | N/A       | N/A    | 144,674 |
| 2013/14     | N/A     | N/A    | N/A      | N/A          | N/A   | N/A       | N/A    | 151,956 |
| 2014/15f    | -       | -      | -        | -            | -     | -         | -      | 155,000 |

Source: FEAGA (Spanish Agricultural Guarantee Fund) AEFA and FAS Madrid estimates.

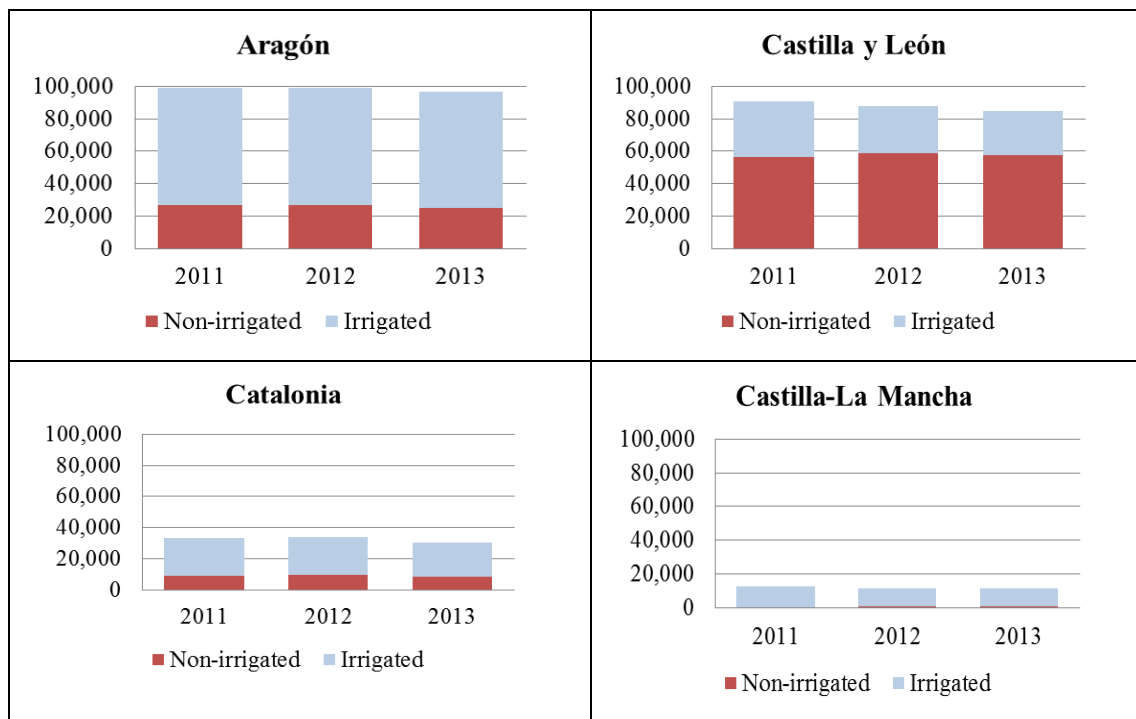
<sup>1</sup> Since April 1, 2012, (MY2012/13) the aid for dehydrated fodder scheme is incorporated into the farmer's Single Payment Scheme (SPS) and processors no longer receive a specific aid. Hence, as of MY2012/13, no official information on the area planted to dried fodder is available. From MY2012/13 on, data in **Table 1** are based on the National Dried Alfalfa Producers Association survey. The coupled support phase-out and competition of corn contribute to explain the decline registered in area planted to dried fodder in MY2012/13.

**Graph 1. Area Planted to Main Fodder Crops (Hectares)<sup>2</sup>**



Source: ESYRCE. MAGRAMA and FAS Madrid estimates.

**Graph 2. Area Planted to Alfalfa in Spain's Main Producing Regions (Hectares)\***



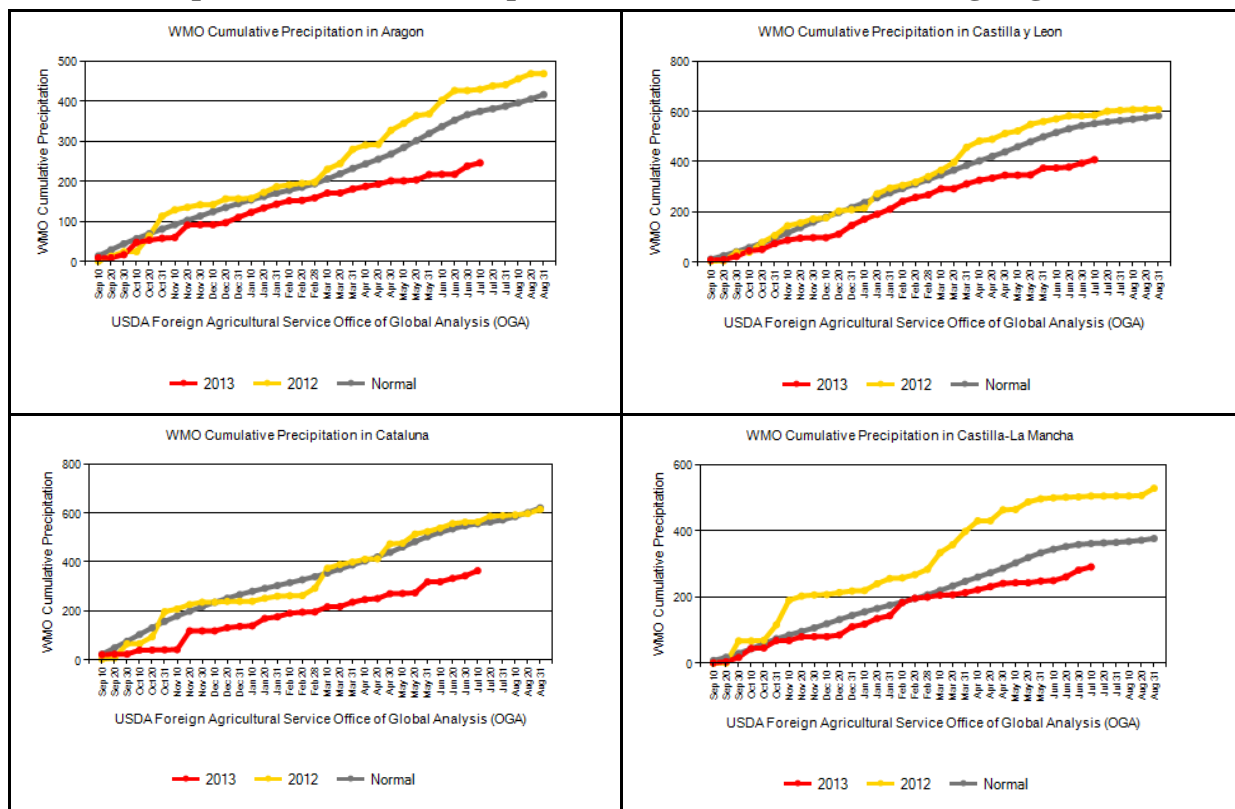
Source: ESYRCE. MAGRAMA.

<sup>2</sup> Data for area planted to alfalfa and vetch in **Graph 1** differ from those showed in **Table 1**, as **Graph 1** includes total area (with uses different than dehydrating process) and **Table 1** includes only area under contracts whose production is subject of industrial transformation.

Yields in MY2013/14 were good; however, the excess of water during harvest operations created some problems in regards to the quality of the dried fodder produced, which made its marketing more complicated. According to sources, MY2013/14 ended with higher stocks than usual.

On the contrary, climate conditions have been very favorable for fodder production in MY2014/15. Precipitation levels in Spain at the beginning of the hydrological year (October) were well below last year's rainfall levels and below the historical average (See **Graph 3**). Nevertheless, abundant precipitations from the beginning of the winter until mid-Spring contributed to improve soil moisture and filling the dams.

**Graph 3. Cumulative Precipitation in main Fodder Producing Regions.**



Source: IPAD/Foreign Agricultural Service/USDA

The dry spell and warm temperatures prevailing since mid-April (see GAIN Report [SP1417](#)), caused yield reductions in non-irrigated crops, but was beneficial for alfalfa development and facilitated harvest operations. Mild temperatures and precipitations throughout June reduced irrigation needs and boosted yields. The anticipated increase in area planted to fodder crops and the good yields projected along with the higher beginning stocks will contribute to an ample supply of dried fodder in MY2014/15 (**Table 2**).

**Table 2. Production of Dried Fodder under Contracts with Dehydrating Plants (MT)<sup>3</sup>**

| MY                     | 2008/09   | 2009/10   | 2010/11   | 2011/12   | 2012/13   | 2013/14   | 2014/15f  |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| <b>Production (MT)</b> | 1,527,500 | 1,710,609 | 1,804,426 | 1,920,533 | 1,619,823 | 1,659,688 | 1,680,100 |

Source: AEFA (National Dried Alfalfa Producers Association) and FAS Madrid estimates.

## Processing

In MY2013/14, precipitation during harvest operation created quality concerns and led to higher pellet production share versus bales. Normally, bales represent over 75 percent of total production, while pellet production represents only nearly 25 percent of total dehydrated fodder produced (**Table 3**).

Good crop development conditions and favorable climate during the harvest season, which started in mid-April, will result in a recovery of the share of bales versus pellets produced in MY2014/15, as higher quality of production is anticipated.

**Table 3. Spain Dried Fodder Product by Production Type (MT)**

| Market Year     | Pellets | Bales     | Total     |
|-----------------|---------|-----------|-----------|
| <b>2006/07</b>  | 671,381 | 1,303,269 | 1,974,651 |
| <b>2007/08</b>  | 605,995 | 1,176,343 | 1,782,339 |
| <b>2008/09</b>  | 534,625 | 992,875   | 1,527,500 |
| <b>2009/10</b>  | 427,652 | 1,282,956 | 1,710,609 |
| <b>2010/11</b>  | 451,106 | 1,353,350 | 1,804,426 |
| <b>2011/12</b>  | 441,723 | 1,478,810 | 1,920,533 |
| <b>2012/13</b>  | 386,495 | 1,233,328 | 1,619,823 |
| <b>2013/14e</b> | 438,158 | 1,221,530 | 1,659,688 |
| <b>2014/15f</b> | 403,224 | 1,276,876 | 1,680,100 |

Source: AEFA (National Dried Alfalfa Producers Association) and FAS Madrid estimates.

There were 100 dried fodder processing plants in Spain in 2005. In 2008, only 76 were operational and only 74 operate in MY 2014/15. Aragon and Cataluña, both irrigated by the Ebro River, and Castile y León in Spain's central plateau, are the regions with the largest installed processing capacity, representing about 80 percent of Spain's total capacity.

**Table 4. Spain Location of Processing Plants**

<sup>3</sup> It includes sun-dried fodder and dehydrated fodder. On average, dehydrated fodder represents over 90 percent, which given its higher homogeneity, is preferred by some importing countries.

| Region                 | Number of Plants | Of which approved to export to China <sup>4</sup> |
|------------------------|------------------|---|
| Aragon <sup>5</sup>    | 37               | 12  |
| Catalonia <sup>5</sup> | 11               | 8   |
| Castile y Leon         | 12               | 3   |
| Castile-La Mancha      | 6                | 0   |
| Navarra                | 4                | 0   |
| Andalusia              | 2                | 1   |
| Extremadura            | 1                | 0   |
| Balearic Islands       | 1                | 0   |
| <b>Total</b>           | <b>74</b>        | <b>24</b>   |

Source: AEFA (National Dried Alfalfa Producers Association) and MAGRAMA.

## Consumption

A tepid rebound on the dairy herd, Spain's main dehydrated fodder consumer, is anticipated for 2014. While the size of the dairy herd has been shrinking over the last years, higher milk prices, lower feed costs along with good weather conditions and hence, increased pasture availability, would have allowed for an increase in the dairy herd throughout 2013, that is anticipated to continue in 2014, driving up domestic milk production.

**Table 5. Dairy cow population, dairy cow milk production and milk average prices**

| Year                       | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2013  | 2014e |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| Dairy cow population       | 903   | 888   | 828   | 845   | 797   | 827   | 857   | 860   |
| Milk production (1,000 MT) | 5,717 | 5,849 | 5,750 | 5,832 | 5,950 | 5,997 | 5,981 | 6,000 |
| Price (Euros/ 100 kg)      | 36.41 | 39.08 | 30.02 | 30.26 | 32.23 | 31.82 | 35.34 | N/A   |

Source: Eurostat. MAGRAMA. Dairy Survey and FAS Madrid estimates.

Despite the anticipated production rebound, domestic consumption of dried fodder only represents a small amount of the demand. Export opportunities (See **Trade** Section), competition with other crops (See **Area and Production** Section) and support schemes available (See **Policy** Section) are seen as this market's drivers.

## Trade

<sup>4</sup> AQSIO approved 24 dehydrating fodder plants out of the 33 plants that showed interest in exporting to the Chinese market. For more information on the Agreement with China, please see **Trade** Section.

<sup>5</sup> As part of its purchase policy, a UAE agricultural company purchased two dehydrating fodder plants in Spain, whose production is completely devoted to the export market. One of them is located in Zaragoza (Aragon) and was acquired in 2009, and two more located in Lleida (Catalonia), acquired throughout 2012.

While Spain fodder imports are limited to a few exchanges at the European level (France, Portugal) (**Table 6**), the country has become a big player in the dried fodder export markets. In the absence of a strong domestic demand, dried fodder producers have managed to find alternative customers in third markets. The increase in Spanish fodder exports up to present has been mainly driven by the growing demand in the Middle East, United Arab Emirates in particular (**Table 7**).

**Table 6: Spain Total Imports of Fodder by Origin in MT \***

| Country of Origin    | MY<br>2008/09 | MY<br>2009/10 | MY<br>2010/11 | MY<br>2011/12 | MY<br>2012/13 | MY<br>2013/14 |
|----------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| EU-28                | 24,336        | 7,588         | 10,664        | 8,175         | 10,141        | 6,134         |
| Others               | 1,171         | 944           | 158           | 351           | 839           | 506           |
| <b>TOTAL IMPORTS</b> | <b>25,507</b> | <b>8,532</b>  | <b>10,822</b> | <b>8,526</b>  | <b>10,980</b> | <b>6,640</b>  |

Source: GTA and FAS Madrid estimates. \* Includes both bales and pellets.

Since MY2008/09, fodder exports have registered a steady growth. Quality issues in MY2013/14 resulted in a reduction of exports. Nevertheless, ample supplies, along with the recently signed agreement with China, could contribute to an exports rebound throughout MY2014/15.

In October 2010, Spain started the eligibility process to export to China (See [SP1305](#)). The process began with audits in October 2012 when China's General Administration of Quality Supervision, Inspection and Quarantine (AQSIQ) visited 18 dehydrating fodder plants out of the 33 plants that showed interest in exporting to China. The Spanish Ministry of Agriculture, Food and Environment (MAGRAMA) announced on July 2014, that, as a result of these audits, Spanish Dried Fodder exports have been granted access to the Chinese market. The protocol agreement signed with AQSIQ covers dehydrated alfalfa exports from Spain in bales or pellets.

The protocol agreement signed with AQSIQ covers dehydrated alfalfa exports from Spain in bales or pellets. The MAGRAMA will be the competent authority to oversight the program and issue certificates. However, given Spain's decentralized structure, the Autonomous Regions will be responsible for carrying out inspections. Alfalfa batches must be produced in one of the 24 [approved facilities](#)<sup>6</sup>.

Additionally, AQSIQ requires alfalfa to be GE free, as China has not authorized yet any GE alfalfa event. In the dehydrating process, the temperature has to be over 250 degrees Celsius for at least 5 minutes to ensure quality and product safety. Reportedly, in the protocol, quarantine pests and animal

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<sup>6</sup> The 9 remaining facilities that showed an interest will need to carry out some adaptations in order to be approved for the Chinese Market.



diseases of concern to China do not include insects, virus or bacteria but do include weeds.

Each batch (container) needs to be labeled with the name of the dehydrating plant, its sanitary registration number and a legend in Chinese that states “*Spanish fodder for the People’s Republic of China*”.

This agreement between the Spanish and Chinese authorities will contribute to boosting Spanish dried fodder exports to China, where Spanish dried fodder will start competing against United States exports, as it currently does in the Middle-East. Reportedly, some processing plants already have contracts in place with China and the first shipments could be loaded as early as August 2014.

China represents a market with a huge growth potential. China’s milk and dairy products demand has grown significantly over the last years. In 2013, EU’s exports of fluid milk to China increased by 80 percent (See GAIN Report [PL1407](#) and [EU milk market observatory](#)). Also, EU-based dairy processors have geared up to supply the Chinese market needs (See GAIN Report [NL3010](#)). Increased fodder exports opportunities in China may contribute to partially counterbalance China’s milk and dairy product import needs by boosting domestic dairy products supply.

**Table 7. Spain Total Exports of Fodder by Destination in MT \***

| <b>Country of Destination</b> | <b>MY 2008/09</b> | <b>MY 2009/10</b> | <b>MY 2010/11</b> | <b>MY 2011/12</b> | <b>MY2012/13</b> | <b>MY 2013/14</b> |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|
| <b>EU-28</b>                  | 131,001           | 115,590           | 238,338           | 254,315           | 161,720          | 139,678           |
| <b>United Arab Emirates</b>   | 260,458           | 370,294           | 335,917           | 707,729           | 782,034          | 643,243           |
| <b>Saudi Arabia</b>           | 8,153             | 60,831            | 60,761            | 92,248            | 118,505          | 73,167            |
| <b>Libya</b>                  | 0                 | 4948              | 32737             | 2989              | 4158             | 34287             |
| <b>Jordan</b>                 | 25,812            | 11,460            | 37,248            | 22,786            | 20,535           | 24,514            |
| <b>Morocco</b>                | 2,342             | 9,185             | 21,360            | 6,630             | 21,331           | 15,460            |
| <b>Lebanon</b>                | 15,341            | 4,833             | 5,433             | 8,104             | 6,943            | 14,081            |
| <b>Kuwait</b>                 | 4,462             | 6,290             | 16,684            | 1,868             | 12,977           | 6,171             |
| <b>Japan</b>                  | 15,966            | 4,561             | 4,873             | 24                | 4,928            | 2,863             |
| <b>Turkey</b>                 | 0                 | 0                 | 0                 | 72                | 6404             | 2815              |
| <b>Tunisia</b>                | 91                | 45                | 7,574             | 3,462             | 7,910            | 2,189             |
| <b>Others</b>                 | 968               | -2,086            | 3,419             | 35,753            | 26,743           | 23,612            |
| <b>TOTAL EXPORTS</b>          | <b>464,594</b>    | <b>585,951</b>    | <b>764,344</b>    | <b>1,135,980</b>  | <b>1,174,188</b> | <b>982,080</b>    |

Source: GTA and FAS Madrid estimates.\* Includes both bales and pellets.

## Production, Supply and Demand

**Table 8: Spain Production, Supply and Demand for Dehydrated Fodder (MT)**

| Market Year             | MY 2008/09       | MY 2009/10       | MY 2010/11       | MY 2011/12       | MY 2012/13       | MY 2013/14       | MY 2014/15 e     |
|-------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| <b>Production</b>       | 1,527,500        | 1,710,609        | 1,804,426        | 1,810,000        | 1,619,823        | 1,659,688        | 1,680,100        |
| <b>Imports</b>          | 25,507           | 8,532            | 10,822           | 8,526            | 10,971           | 6,640            | 9,100            |
| <b>Total supply</b>     | <b>1,553,007</b> | <b>1,719,141</b> | <b>1,815,248</b> | <b>1,818,526</b> | <b>1,626,924</b> | <b>1,666,328</b> | <b>1,689,200</b> |
| <b>Dom. Consumption</b> | 1,088,413        | 1,133,190        | 1,050,904        | 683,254          | 463,524          | 684,248          | 509,200          |
| <b>Exports</b>          | 464,594          | 585,951          | 764,344          | 1,135,980        | 1,174,190        | 982,080          | 1,180,000        |
| <b>Total Demand</b>     | <b>1,553,007</b> | <b>1,719,141</b> | <b>1,815,248</b> | <b>1,818,526</b> | <b>1,626,924</b> | <b>1,666,328</b> | <b>1,689,200</b> |

Source: FAS Madrid estimates.

## Policy

Since April 1, 2012, the aid for dehydrated fodder scheme is incorporated into the farmer's Single Payment Scheme (SPS) and processors no longer receive a specific aid. The amount of money paid to farmers via SPS is based on their historical deliveries in the reference period (Years 2007 and 2008) (**Table 9**). The current SPS has been extended and will be in place until 2015.

**Table 9. Average Single Payment by Region<sup>7</sup> (Euros per Hectare)**

| Region            | 2012 | 2011 | 2010 |
|-------------------|------|------|------|
| Andalusia         | 439  | 436  | 432  |
| Aragon            | 319  | 287  | 287  |
| Asturias          | 197  | 174  | 172  |
| Baleares          | 228  | 220  | 225  |
| Cantabria         | 170  | 182  | 181  |
| Castile-La Mancha | 216  | 211  | 211  |
| Castile y Leon    | 215  | 212  | 212  |
| Catalonia         | 361  | 323  | 322  |
| Extremadura       | 230  | 222  | 211  |
| Galicia           | 278  | 315  | 313  |
| Madrid            | 172  | 169  | 166  |
| Murcia            | 407  | 441  | 439  |
| Navarra           | 293  | 287  | 298  |
| Basque Country    | 290  | 300  | 299  |

<sup>7</sup> Single Payment Scheme payment is non-crop specific. The amounts shown in **Table 9** correspond to the average Single Payment received by farmers in a region, regardless the crop grown.

|                         |            |            |            |
|-------------------------|------------|------------|------------|
| La Rioja                | 198        | 193        | 193        |
| C. Valenciana           | 384        | 349        | 348        |
| <b>National Average</b> | <b>285</b> | <b>278</b> | <b>276</b> |

Source: FEAGA

Spain's regulations implementing the CAP reform are yet to be published. However, it is our understanding that as of 2015, the Single Payment Scheme will be replaced by the Basic Payment (BP) as agreed in the recent CAP reform. Spain would have opted for a region-based system. A total of 316 counties in Spain will be considered. The basic payment calculation for these counties would be based on agronomic counties. Four different land uses would be considered: irrigated land, non-irrigated land permanent crops and pasture land. Other factors such as the amount of support previously received will be taken into consideration for the subsidy calculation in order to create between 22 and 24 regions with similar support levels.

Reportedly, in Spain's implementation of the CAP reform, coupled payments have been defined for protein crops intended for animal feed. Vetch and alfalfa cultivated non-irrigated conditions would be eligible for this coupled payment whose total allocated budget amount to nearly 44.5 million Euros. Additionally, Spanish Agricultural administration intends to consider areas planted to nitrogen fixing crops (grain legumes for human or animal consumption as well as forage legumes) for greening compliance as Ecological Focus Areas (EFAs), which would be mandatory for farms over 15 ha. Also, in order to incentivize crop diversification, farms between 10 and 30 ha must grow at least two different crops, and farms over 30 ha must grow at least three different crops in their arable land. Both requirements for greening compliance could lead to an increase in alfalfa plantings as of MY2015/16.

## Related Reports

| Report Title  | Date Released |
|---|---------------|
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| <a href="#">Dutch Dairy Processors Gear Up for Chinese Demand</a>                 | 05/08/2013    |
| <a href="#">Spanish Dried Fodder Processors Seek New Markets</a>                  | 06/03/2013    |
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