The Agricultural and Fisheries sector in Andalusia
Region of Andalusia

Member State: Spain
Area: 87,597 km²
(17% of the Spanish area, 2% of the UE28 area)

Region included in the Convergence Objective¹ period 2014-2020

Andalusia is classified as Intermediate region², according to the OECD classification

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¹ Region included in the Convergence Objective: those NUTS 2 regions whose GDP per head is between 75% and 90% of the European Union average.

² Intermediate Region (IR): those where the share of population living in rural areas is between 15% and 50%. Andalusia has a share of 32% of its population living in rural areas.
A very diverse agriculture that... (*)

- Dehesa
- Andalusian farming systems
- Campiña
- Olive growing
- Sierras Béticas
- Lower part of the river Guadalquivir
- Coastline

...plays an important role in our landscapes
Socio-economic context. Population

**Andalusian population represents 1.66% of the EU 28 total population and 18.06% of the Spanish population**

High growth rate of the Andalusian and Spanish population compared to the EU28 population between 2004 and 2014.

However, in 2014 Spanish population was 0.27% lower than in 2013. Moreover, Andalusia and EU28 increased their populations in 0.05% and 0.25% respectively.

**Total population in 2014**

<table>
<thead>
<tr>
<th></th>
<th>UE28</th>
<th>Spain</th>
<th>Andalusia</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difference 2004-2014</td>
<td>2.88%</td>
<td>7.56%</td>
<td>9.17%</td>
</tr>
<tr>
<td>Difference 2013-2014</td>
<td>0.25%</td>
<td>-0.27%</td>
<td>0.05%</td>
</tr>
</tbody>
</table>

Source: EUROSTAT, Spanish Office for National Statistics

Socio-economic context. Population

Andalusia has a population density a little bit higher than the Spanish one and, lower than the EU 28 density...

...in any case, population density changes depending on the area:

- Higher density: capital cities and coastal areas
- Lower density: inland areas of Eastern Andalusia and North of the region

Population density in 2014

Source: prepared by the author on the basis of data from EUROSTAT and the Spanish Institute of Statistics.

Socio-economic context. Population

The population pyramid shows a younger population in Andalusia compared to Spain and the EU 28.

Source: EUROSTAT, Spanish Office for National Statistics
(*) The Andalusian GDP shows a growth rate higher than the European one and slightly higher than the Spanish rate until 2007.

In 2009, the Andalusian GDP growth rate just like the European and Spanish ones registered negative figures.

In 2010, the GDP growth rate registered a recovery at the four levels although only the Spanish rate is the only one that still have negative results.

In 2011, the Spanish GDP growth rate increased in relation to the previous year, while the European, Eurozone and Andalusian GDP showed a slight decline.

In 2012, the Andalusian, Spanish and European GDP rates decreased. This decrease was far higher in Andalusia.

In 2013, the GDP growth rate showed a recovery at the four levels, but only the European reached a positive figure (0.1%).

In 2013, the GDP per head in Andalusia (72%) was lower than the European, Eurozone and Spanish ones.

The Andalusian GDP per head between 2012 and 2013 showed a decline compared to 2011, when it represented 74% of the GDP per head of the EU28.
The Andalusian agricultural GDP accounts for around 4.5% of the total Andalusian GDP. It witnessed a slight growth in 2013 compared to 2008.

The share of the agricultural sector in the Andalusian total GDP exceeds the share of the agricultural sector at Spanish and European levels.

The Andalusian agricultural GDP has increased from 2.59% of Spanish agricultural GDP in 2008 to 26.0% in 2013, therefore growing its share.
The Andalusian employment rate was below the Spanish and European rate regarding both the population rate in general and male and female employment rates in particular.

Source: EUROSTAT
Since 2008 there has been a step backwards in the European, Spanish and Andalusian employment rates due to the general economic situation. This step has been more striking among the total population compared to women’s population.

...but it shows a high growth and convergence speed, until 2007.
The Andalusian unemployment rate is higher than the Spanish and European rates…

Unemployment rate. 2013

- EU 28: 10.8%
- EU 27: 10.8%
- Eurozone: 11.9%
- Spain: 26.1%
- Andalusia: 36.2%

Men’s unemployment rate. 2013

- EU 28: 10.8%
- EU 27: 10.8%
- Eurozone: 11.9%
- Spain: 25.6%
- Andalusia: 34.8%

Women’s unemployment rate. 2013

- EU 28: 10.9%
- EU 27: 10.8%
- Eurozone: 12.1%
- Spain: 26.7%
- Andalusia: 38.0%

Source: EUROSTAT
... but it showed a fast growth and convergence speed until 2007

In 2008 this trend at national and regional levels changed due to the general economic situation

The Spanish unemployment rate in 2013 increased to 26.1%, a figure lower than the Andalusian unemployment rate which was at 36.2%

Spanish and Andalusian unemployment rates are much higher than European and Eurozone unemployment rates.

The Spanish women’s unemployment rate in 2013 was at 26.7%, while the Andalusian unemployment rate was a bit higher, standing at 38.0%

Spanish and Andalusian women’s unemployment rates are much higher than European and Eurozone women’s unemployment rates.
The population working in the agricultural sector in Andalusia in 2013 stood at 7.6%, figure much higher than the Spanish figure (4.3%) and the Eurozone figure (3.4%).

The average agricultural unemployment rate registered in 2013 was 44.4%, while the average total unemployment rate registered in the same year was 36.2%.

Agricultural activities are the main employment source in half of Andalusian municipalities.
The share of the agricultural population compared to the total active population is more representative in Andalusia than in Spain throughout the period considered.

The active agricultural population increased in Andalusia from 2008 to 2011, but in 2014 began to show a new trend.

In Spain, the active agricultural population showed a stable trend from 2008 to 2014.

Whereas at national level the number of agricultural population fell by scarcely 0.3% in the period 2008-2014 in Andalusia this number increased by 5.7%.
The importance of those employed in the agricultural sector compared to the total employed population showed a downward trend until 2009 both in Spain and in Andalusia.

This trend changed in 2010, when the importance of the agricultural employed population compared to the total employed population slightly recovered at national level and, prominently in Andalusia.

In 2012, there was a decrease in the importance of the agricultural employed people compared to the total employed population in the region of Andalusia, while at national level there was a slight increase. However in 2014 this trend changed again in Andalusia, while in Spain this trend remained stable.

The employment rate in the agricultural sector dropped substantially in the period 2008-2014 both at national and Andalusian levels, falling to 16.3% and 6.0% respectively.
The importance of those unemployed in the agricultural sector compared to the total unemployed population has decreased slightly by 0.5% in Spain and by 0.6% Andalusia, from 2008 to 2014.

The unemployment rate in the agricultural sector grew significantly in the 2008-2014 period both at national and Andalusian levels.
The number of people affiliated to the Special Agricultural scheme in Andalusia has increased since 2008. In two years, the number of affiliates has increased by 30,400 people, what represents a growth of 6.6%. The main reason of this increase could be the number of employees that have decided to go back to the agricultural sector after having been working in other productive sector for years.

In 2010, there was a deceleration in the rate of affiliation to the Special Agricultural scheme over the previous year, and a less pronounced loss among members of the General Social Security Scheme in Andalusia. In 2012 the rate of affiliation to the Special Agricultural began to show a new upward trend, but in 2014 it decreased again.

From 2010 to 2014 the number of people affiliated to the General Social Security Scheme in Andalusia increased, showing an annual growth of +3.7%.
Distribution of arable land

**EU27**

The Utilised Agricultural Area accounts for about 172 million hectares, in which farmland (60.0%) and permanent pasture lands (33.6%) highlight.

**Spain**

Most of the Spanish UUA is used to cultivate arable crops (47.5%) and permanent pastures (35.3%). This area represents 13.8% of the UAA of the EU27. Olive groves account for just 9.1% of the UAA.

**Andalusia**

The Andalusian UAA represents 18.5% of the Spanish UAA and its shows a balance between permanent and annual crops. Olive groves represent an important share accounting for 1.5 million hectares (30.9% UAA).

The Agriculture Sector in Andalusia

According to Data from the Agricultural Census 2009, of the Spanish Office for National Statistics, in Andalusia, arable land occupies 3,183,567 hectares, permanent grazing land occupies 1,219,193 hectares, and the areas considered as “other types of land” occupy 1,091,067 hectares. The total area of these lands is 5,493,830 hectares, that represents 63% of the total Andalusian area.

Farms characterization

Provincial distribution of the Utilised Agricultural Area (UAA) in Andalusia

The Utilised Agricultural Area in Andalusia reaches 4,402,460 hectares. It represents 18.5% of the Spanish UAA.

Sevilla is the province with the highest UAA. It represents more than a fifth of the total Andalusian UAA.

There are 246,104 farms in Andalusia (*)

Jaén is the province with a greater number of farms, representing 26.8%. However, Cadiz just has 4.2% of the total number of Andalusian farms.

(*) Agrarian Census excludes farms of less than 1 hectare.
Farms characterization

The Andalusian farm’s average size per total area (22.3 hectares) is 27.8% lower than the Spanish farm’s average size per total area (30.9 hectares).

The Andalusian farm’s average size per usable agricultural area (17.9 hectares) is 25.4% lower than the national average (24.0 hectares).

Source: Spanish Institute of Statistics. Agricultural Census 2009
The farm’s average size by total area in Andalusia is 22.3 hectares, but if we measure it by UAA, the farm’s average size is 17.9 hectares.

The farm’s average size by total area and by UAA are higher in Western provinces than in Eastern provinces.

Source: Spanish Institute of Statistics. Agricultural Census 2009
Main livestock populations have decreased in Spain and Andalusia in recent years. In fact, swine population was the only one that slightly increased.

Sheep population suffered the highest decreased in Spain (-29.1%) between 2005 and 2013. On other hand, swine population increased (+2.1%) slightly in the same period.

In Andalusia, sheep population also suffered the highest decreased (-29.3%) since 2005 to 2013. However, from 2005 to 2014 the highest decline corresponded to bovine population (-31.7%). It is also important to note that swine population in Andalusia decreased by 11.2% from 2005 to 2014.
The main Andalusian livestock herds are less representative in the national herds in recent years.

Andalusian sheep have kept their share more stable in the period 2005-2013. The share of the Andalusian pig population in the Spanish one decreased just 0.9% in the period 2005-2012, which made it become one of the most stable herds. However, in 2013, this herd sharply decreased in Andalusia, reducing its share at Spanish level by 1.1% between 2005 and 2014.

Goats have experienced a decline of 1.9% in terms of importance in the Spanish goats herd between 2005 and 2013.

Andalusian cattle had a 3.2% smaller share at Spanish level between 2005 and 2014.

Source: Livestock surveys. Spanish Ministry for Agriculture, food and environment.
Horses are the herd with a higher presence in Andalusian farms (39%), followed by sheep (31%). In Spain, cattle is the herd that is present in a larger number of farms (46%).

Those Andalusian farms which have goats represent 23% at national level, followed by those with horses, which represent 21% at Spanish level.

Andalusian goats represent 37% of those registered in Spain, followed by horses (34%), and beehives, 17% of those registered in Spain.
Agricultural activity provides in Andalusia around 260,000 AWU, distributed as follows:

- Jaén (19%): Accounting for 27% of farms, it generates a greater number of AWU (19%);
- Almería (17%): Followed by Almería, accounting for 9.3% of farms, providing 17% of the agricultural employment.
- Huelva (12%): Huelva is a province whose average farm requires more manpower, having 2.6 AWU/farm.
- Almería is in second position, requiring about 1.9 AWU/farm.
- On the one hand, the average area necessary to generate an AWU in Almería is 5.4 hectares (intensive farms).
- On the other hand, Cadiz, requires 32.6 hectares to achieve an AWU (extensive farms).

**Characterization of farms according to their legal status**

<table>
<thead>
<tr>
<th>Legal status</th>
<th>Nº farms</th>
<th>Total UAA (ha)</th>
<th>Total AWU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal person</td>
<td>231,482</td>
<td>2,802,110.4</td>
<td>183,898.8</td>
</tr>
<tr>
<td>Trading company</td>
<td>6,276</td>
<td>804,300.6</td>
<td>45,553.4</td>
</tr>
<tr>
<td>Public entity</td>
<td>213</td>
<td>119,936.7</td>
<td>622.4</td>
</tr>
<tr>
<td>Cooperative society</td>
<td>800</td>
<td>71,193.3</td>
<td>9,294.9</td>
</tr>
<tr>
<td>Other legal status</td>
<td>7,333</td>
<td>605,788.1</td>
<td>20,384.4</td>
</tr>
<tr>
<td>Andalusia</td>
<td>246,104</td>
<td>4,402,760</td>
<td>259,754</td>
</tr>
</tbody>
</table>

**Legal people** are holders of 94% of farms, representing 64% of the total UAA of Andalusia and 71% of the AWU generated by agriculture.

**Trading companies** (3% of farms owners), account for 18% of the total UAA of Andalusia and 18% of the total employment generated by farming.

**Average employment generated by agriculture by legal status**

<table>
<thead>
<tr>
<th>Legal status</th>
<th>AWU / farm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal person</td>
<td>7.3</td>
</tr>
<tr>
<td>Trading company</td>
<td>2.9</td>
</tr>
<tr>
<td>Public entity</td>
<td>2.8</td>
</tr>
<tr>
<td>Cooperative society</td>
<td>f.f</td>
</tr>
<tr>
<td>Other legal status</td>
<td>f.f</td>
</tr>
<tr>
<td>Andalusia</td>
<td>11.6</td>
</tr>
</tbody>
</table>

**UAA area required to generate a AWU according to the legal status**

<table>
<thead>
<tr>
<th>Legal status</th>
<th>UAA (ha) / AWU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal person</td>
<td>151.2</td>
</tr>
<tr>
<td>Trading company</td>
<td>17.7</td>
</tr>
<tr>
<td>Public entity</td>
<td>f.f</td>
</tr>
<tr>
<td>Cooperative society</td>
<td>191.8</td>
</tr>
<tr>
<td>Other legal status</td>
<td>29.7</td>
</tr>
<tr>
<td>Andalusia</td>
<td>16.9</td>
</tr>
</tbody>
</table>

Source: Spanish Office for National Statistics. Agricultural Census 2009
Gender of the owners and managers of Andalusian farms

<table>
<thead>
<tr>
<th>Farm owner</th>
<th>%</th>
<th>Person in charge of the farm management</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man</td>
<td>70.1%</td>
<td>Man</td>
<td>89.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Woman</td>
<td>10.2%</td>
</tr>
<tr>
<td>Woman</td>
<td>29.9%</td>
<td>Man</td>
<td>59.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Woman</td>
<td>41.0%</td>
</tr>
</tbody>
</table>

70.1% of farms are owned by a man. These farms have a man as manager in 89.8% of cases.

The management of those holdings owned by women is more balanced, represented as follows: men (59.0%) and women (41.0%).

81.0% of farms have a man as manager. 50.2% of these men are in the age range between 45 and 64 years old, while only 0.5% are under 25 years old and just 6.3% are between 25 and 34 years old.

19.0% of farms have a woman as manager, being 47.6% of these women in the age range between 45 and 64 years. 0.5% of women managers are under 25 years old and 7.3% are between 25 and 34 years old.

25.6% of those who manage farms are under 45 years old, representing women a little bit more (26.8%) and men, a little bit less (25.3%) of this figure. This fact indicates that women who are responsible for the management of farms are proportionally younger.

Source: Spanish Office for National Statistics. Agricultural Census 2009
Local distribution of young farmers

Young farmers are principally located in the areas of the coast of Almeria and Huelva, followed by the municipalities located in the mountains in which olive growing plays an important role.

Local distribution of female farm managers

In 87.4% of the Andalusian municipalities with farms, the management of between 15% and 25% of them is carried out by a woman. The coast of Huelva and the lower part of the river Guadalquivir are places where there are fewer women managing farms.

Source: Spanish Office for National Statistics. Agricultural Census 2009
## Farms Characterization

### Technical Economic Guidelines (TEG)

**Andalusia**

**% farms by TEG**

<table>
<thead>
<tr>
<th>Category</th>
<th>% Farms by TEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>General agriculture</td>
<td>68.9%</td>
</tr>
<tr>
<td>Woody crops</td>
<td>11.2%</td>
</tr>
<tr>
<td>Crops and livestock production</td>
<td>11.2%</td>
</tr>
<tr>
<td>Mixed livestock production</td>
<td>11.2%</td>
</tr>
<tr>
<td>Granivores</td>
<td>11.2%</td>
</tr>
<tr>
<td>Grazing livestock</td>
<td>11.2%</td>
</tr>
<tr>
<td>Horticulture (vegetable gardens and flowers)</td>
<td>11.2%</td>
</tr>
</tbody>
</table>

**% UAA by TEG**

<table>
<thead>
<tr>
<th>Category</th>
<th>% UAA by TEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>General agriculture</td>
<td>39.4%</td>
</tr>
<tr>
<td>Woody crops</td>
<td>5.4%</td>
</tr>
<tr>
<td>Crops and livestock production</td>
<td>2.8%</td>
</tr>
<tr>
<td>Mixed livestock production</td>
<td>1.5%</td>
</tr>
<tr>
<td>Granivores</td>
<td>1.5%</td>
</tr>
<tr>
<td>Grazing livestock</td>
<td>1.5%</td>
</tr>
<tr>
<td>Horticulture (vegetable gardens and flowers)</td>
<td>1.5%</td>
</tr>
</tbody>
</table>

Source: Spanish Office for National Statistics. Agricultural Census 2009
Main Technical Economic Guidelines (TEG) in Andalusia

**Total UAA**
4,402,760 ha

**Total employment**
259,754 AWU

**Total number of farms**
246,104 farms

**Total standard production (TSP)**
7,818 million €

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**% area by TEG**
- Olive groves: 32.6%
- Grain (except rice), oilseeds and pulses: 15.6%
- Rest TEG: 51.6%

**% employment generated (AWU) according to TEG**
- Olive groves: 39.8%
- Greenhouse vegetables: 20.2%
- Rest TEG: 40.0%

**% farms by TEG**
- Olive groves: 57.0%
- Grain (except rice), oilseeds and pulses: 6.4%
- Greenhouse vegetables: 6.0%
- Rest TEG: 30.6%

**% total standard production by TEG**
- Olive groves: 25.9%
- Greenhouse vegetables: 14.6%
- Citrus: 4.0%
- Fresh vegetables cultivated in farm land: 9.0%
- Greenhouse flowers and ornamental plants: 5.1%
- Rest TEG: 41.4%

Source: Spanish Office for National Statistics. Agricultural Census 2009
"Olive growing" is the farming system that creates more jobs (29.4%), followed by the "coastline", representing 24.8% of total number of jobs created (259,754 AWU).

By agricultural systems

Standard production per unit area is higher in the "the coastline" agricultural system with a value that is four times the Andalusian value. It is followed by the "Valle del Guadalquivir" agricultural system which has a value slightly higher than the Andalusian average. All other agricultural systems have values of standard production per hectare below the Andalusian average, being "la dehesa" the system with the lowest value.

In "Valle del Guadalquivir", 71.1% of the total number of jobs are represented by staff, followed by "las Campiñas", accounting for 69.3% of total number of jobs.

In "Sierras Béticas", hardly 32.6% of the jobs is represented by staff.
**Fuel**: the high increase in fuel price since 2010 has no correlation with the trend of fertilizers prices, which were maintained from 2010 to 2014.

In 2014, from July to December, fuel prices fell due to increasing world fuel production and the loss of demand as a result of the present general economic situation. However, since January 2015 fuel prices started to grow again.

Source: Spanish Ministry of Agriculture and Rural and Marine Areas
Feed: slightly increase of prices in 2010, in accordance with the increase of grain prices. In 2011, this increasing trend changed in July, when feed prices stalled regardless the decrease of grain prices. This situation continued until after the first quarter of 2012 when prices increased again.

In general, prices declined during the first quarter of 2013, but later they stopped their descent. However some products continued to lose value from the second quarter of 2013 to the end of that year. During 2014 the high increase in some cereal prices did not affect the prices of straight feedingstuffs, which showed a stable trend.
The primary and secondary sectors have lost importance in the Andalusian economy. However, the services sector has increased.

In Andalusia, the agricultural sector is the sector that contributes most to the GVA (5%), compared to the other sectors analysed.
Economic importance of the Andalusian agricultural sector

Value of the agricultural production in 2013

In 2013, the Production of the Agricultural Sector of Spain, worth 44,271 million €, represented 10.7% of the PAS of the EU-28.

In 2013, the PAS of Andalusia, worth 9,831 million €, represented 2.4% of the PAS of the EU-28 and 22.2% of Spain.

According the Report of the Statistics yearbook 2013 of the Spanish Ministry for Agriculture, Food and Environment, the value of the Spanish PAS of 2013 rose to 44,271 million €, what represented an increase of 2.6% compared to the value of the Spanish PAS of 2012.

The evolution of the Andalusian agricultural economic indicators predicted that the Andalusian PAS for 2013 would be about 9,831 million €, what meant an increase of 0.6% compared to the PAS of 2012 (9,769 million €).
In 2004, the PAS reached its maximum value at 11,356 million €. The Production of the Crops sub-sector rose to 9,640 million €, while the Production of the Animal sub-sector reached 1,387 million €.

An upward trend of the PAS can be observed since 2000.

In 2014, the Andalusian PAS reached 10,939 million €, which was 11.5% higher than the previous year and 24.9% higher than the value reached in 2000.

Crop Production value in 2014 represented 82.7% of PAS. Furthermore, the Animal Production value was 14.8% of PAS, in the same year.

Crop Production value in 2014 was 14.2% higher than it was in 2013, due to the increase of olive oil harvest which represents an important part of Crop Production value in Andalusia. Furthermore, Livestock Production value was 0.4% higher than it was in 2013, due to the positive performance of prices.

Note about the Methodology: The reform of the CAP in terms of subsidies led to a partial decoupling between subsidies and productions in 2006 so that farmers receive part of the grants as a “SINGLE PAYMENT”, what means, new concept. This means that such amounts can not be attributed to any particular product, so part of the Subsidies granted to Products that were included in the value of the production in 2005, are part of the amount included in the “SINGLE PAYMENT” in 2006 and beyond and, count, therefore, as “Other Grants”.

Source: Agricultural economic indicators of Andalusia. Regional Ministry of Agriculture, Fisheries and Rural Development.
The Fruits, Vegetables and Olive oil sub-sectors represented 70% of the average production of the Andalusian agriculture sector between 2010 and 2014 and 85% of the Crop Production.

The Vegetables, seddings, flowers and plantations sector in 2014 reached 3,527 mill €, which represented an increase of 3.7% compared to the previous year (3,402 mill €).

Olive oil sector reached 2,196 mill € in 2014, which represents an increase of 160.6% compared to 2013.

The Spanish Farm Income, worth 24,321 mill €, represented 16.8% of the EU-28 Farm Income in 2013.

The Farm Income of Andalusia, worth 7,201 mill €, represented 5.0% of the Farm Income of the EU-28 and 29.6% of Spain in 2013.

According to the Report of the Statistics yearbook 2013 of the Spanish Ministry for Agriculture, Food and Environment, the Spanish Farm Income of 2013 increased by 7.0% compared to the Spanish Farm Income of 2012.

According to the Evolution of the agricultural economic indicators of Andalusia in 2013, the Andalusian Farm Income of 2013 reached 7,201 mill €, which represented a slight increase of 0.4% compared to the Andalusian Farm Income of 2012.
In the period 2000-2010, the Andalusian Farm Income increased by 23.2%, from 6,452 mill € in 2000 to 7,951 mill € in 2010, close to the values registered in 2005 at 8,184 mill €.

In 2012, the value of the farm income decreased by 2.0% compared to 2011. Furthermore, in 2014 the Andalusian Farm Income reached a value of 7,996 mill €, which was 11.5% higher than it was in 2013.

Andalusian Farm Income has increased by 24.9% since 2000.

In 2007 the Andalusian Farm Income reached its maximum value (8,577 mill €) in the last 15 years.
Regarding the evolution of the farm income by AWU in Andalusia between 2000 and 2014 and considering it in current terms, it has experienced a growth of 53.3%. However, if we analyse it in constant terms, it has remained almost at a standstill because it has slightly decreased in the period considered of 2.9%.

Therefore, the disposable income to pay agricultural jobs has remained virtually unchanged, making the sector less attractive to job seekers.

The farm income by AWU in Spain, in current terms, has experienced a growth of 69.8% in the period 2000-2014, while if it is analysed in constant terms, it has slightly grown in the period considered (1.9%).

Source: Economic indicators of Andalusia (SEC-95 Methodology). Regional Ministry for Agriculture, Fisheries and Rural Development of Andalusia
Spain has become the EU-28 country with the largest Organic Farming area. In 2012, the Spanish share of Organic Farming was 18.2%.

The area for Organic Farming in Spain has increased continuously. In fact, the area cultivated in 2009 was six times larger than it was in 1998.

In 2011, Spain reached the highest surface cultivated in Organic Farming. However, it fell by 2.8% in 2012, and by 8.3 in 2013 compared to the previous year.

Source: Eurostat and Spanish Ministry for Agriculture, Food and Environment
In 2013 Andalusia was the Spanish region with the highest organic farming surface (806,726 hectares), representing 50.1% of the national organic farming surface.

Source: Eurostat and Spanish Ministry for Agriculture, Food and Environment
Organic farming

Provincial distribution. Organic Farming Area 2014

- Almería: 5%
- Cádiz: 15%
- Córdoba: 13%
- Granada: 13%
- Huelva: 19%
- Jaén: 17%
- Málaga: 4%
- Sevilla: 14%

Distribution by crops of the Andalusian Organic Farming Area. 2014

- Grazing land, meadows, and fodder: 60.4%
- Forest and wild: 16.0%
- Crops: 18.9%
- Fallow land and green cover: 4.7%
- Other crops: 0.02%

Evolution of the Organic Farming Area in Andalusia

Source: Regional Ministry of Agriculture, Fisheries and Rural Development
**Provincial distribution of Organic livestock farms. 2014**

- Huelva: 21%
- Córdoba: 18%
- Málaga: 4%
- Sevilla: 13%
- Almería: 2%
- Cádiz: 23%
- Granada: 8%
- Jaén: 11%

**Distribution by type of Organic livestock farms. 2014**

- Beef cattle: 49.4%
- Sheep for meat: 32.1%
- Dairy sheep: 0.1%
- Goat for meat: 8.2%
- Dairy goat: 2.7%
- Pigs: 1.8%
- Poultry: 0.1%
- Eggs: 1.0%
- Apiculture: 1.6%
- Others: 3.0%

**Difference in the number of heads of stocks / beehives Organic stockbreeding in Andalusia**

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>Variation (%) 13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beef cattle</td>
<td>57,322</td>
<td>63,961</td>
<td>75,016</td>
<td>105,322</td>
<td>95,234</td>
<td>83,116</td>
<td>93,062</td>
<td>12.0%</td>
</tr>
<tr>
<td>Sheep for meat</td>
<td>199,427</td>
<td>248,717</td>
<td>254,209</td>
<td>351,168</td>
<td>334,363</td>
<td>284,688</td>
<td>315,652</td>
<td>10.9%</td>
</tr>
<tr>
<td>Dairy sheep</td>
<td>16,873</td>
<td>1,967</td>
<td>1,605</td>
<td>577</td>
<td>1,285</td>
<td>1,280</td>
<td>1,230</td>
<td>-3.9%</td>
</tr>
<tr>
<td>Goat for meat</td>
<td>15,104</td>
<td>22,199</td>
<td>21,724</td>
<td>32,538</td>
<td>18,966</td>
<td>15,595</td>
<td>16,944</td>
<td>8.7%</td>
</tr>
<tr>
<td>Dairy goat</td>
<td>6,573</td>
<td>4,488</td>
<td>6,444</td>
<td>4,954</td>
<td>16,005</td>
<td>14,448</td>
<td>15,436</td>
<td>6.8%</td>
</tr>
<tr>
<td>Pigs</td>
<td>3,740</td>
<td>2,529</td>
<td>1,732</td>
<td>2,994</td>
<td>1,755</td>
<td>1,951</td>
<td>1,447</td>
<td>-25.8%</td>
</tr>
<tr>
<td>Poultry</td>
<td>8,085</td>
<td>200</td>
<td>15,826</td>
<td>4,177</td>
<td>5,279</td>
<td>1,377</td>
<td>-73.9%</td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>17,750</td>
<td>17,666</td>
<td>13,174</td>
<td>26,681</td>
<td>16,740</td>
<td>28,939</td>
<td>34,918</td>
<td>20.7%</td>
</tr>
<tr>
<td>Beehives</td>
<td>30,954</td>
<td>22,937</td>
<td>21,434</td>
<td>21,462</td>
<td>22,949</td>
<td>20,590</td>
<td>20,338</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Others</td>
<td>2,035</td>
<td>1,404</td>
<td>1,042</td>
<td>810</td>
<td>447</td>
<td>406</td>
<td>456</td>
<td>12.3%</td>
</tr>
</tbody>
</table>

**Evolution of the number of stockbreeding farms**

Source: Regional Ministry of Agriculture, Fisheries and Rural Development
**Provincial distribution of Eco-Industries 2014**

- **Sevilla**: 19%
- **Cádiz**: 14%
- **Granada**: 16%
- **Córdoba**: 8%
- **Almería**: 11%
- **Málaga**: 19%
- **Jaén**: 8%
- **Huelva**: 5%

**Evolution of number of traders**

- **Sevilla**: 2008 - 5,043, 2014 - 10,612
- **Cádiz**: 2008 - 7,585, 2014 - 10,180
- **Granada**: 2008 - 8,444, 2014 - 8,401
- **Jaén**: 2008 - 8,125, 2014 - 10,203
- **Huelva**: 2008 - 6,510, 2014 - 10,081

**Difference in the number of Eco-Industries in Andalusia**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Olive oil mill and/or bottling plant</td>
<td>97</td>
<td>110</td>
<td>127</td>
<td>150</td>
<td>188</td>
<td>210</td>
<td>209</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Wineries and bottling plants of wine</td>
<td>21</td>
<td>31</td>
<td>43</td>
<td>32</td>
<td>62</td>
<td>62</td>
<td>57</td>
<td>-8.1%</td>
</tr>
<tr>
<td>Fresh vegetables and fruits handling and packing</td>
<td>97</td>
<td>122</td>
<td>143</td>
<td>174</td>
<td>210</td>
<td>213</td>
<td>212</td>
<td>-0.5%</td>
</tr>
<tr>
<td>Preserves and semi-preserved products and vegetables juices</td>
<td>20</td>
<td>39</td>
<td>73</td>
<td>76</td>
<td>102</td>
<td>108</td>
<td>103</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Preparation of spices and aromatic and medicinal plants</td>
<td>46</td>
<td>33</td>
<td>28</td>
<td>43</td>
<td>41</td>
<td>48</td>
<td>43</td>
<td>-10.4%</td>
</tr>
<tr>
<td>Bread and pasta making</td>
<td>4</td>
<td>48</td>
<td>62</td>
<td>20</td>
<td>55</td>
<td>52</td>
<td>52</td>
<td>0.0%</td>
</tr>
<tr>
<td>Cookies and cakes</td>
<td>9</td>
<td>12</td>
<td>24</td>
<td>32</td>
<td>25</td>
<td>27</td>
<td>26</td>
<td>-3.7%</td>
</tr>
<tr>
<td>Nutshandling and packing</td>
<td>18</td>
<td>21</td>
<td>31</td>
<td>39</td>
<td>51</td>
<td>57</td>
<td>56</td>
<td>-1.8%</td>
</tr>
<tr>
<td>Fain handling and packing</td>
<td>5</td>
<td>8</td>
<td>15</td>
<td>24</td>
<td>24</td>
<td>32</td>
<td>36</td>
<td>12.5%</td>
</tr>
<tr>
<td>Food preparation</td>
<td>4</td>
<td>32</td>
<td>35</td>
<td>36</td>
<td>44</td>
<td>52</td>
<td>44</td>
<td>-15.4%</td>
</tr>
<tr>
<td>Slaughterhouses and cutting plants</td>
<td>20</td>
<td>15</td>
<td>34</td>
<td>41</td>
<td>51</td>
<td>38</td>
<td>29</td>
<td>-23.7%</td>
</tr>
<tr>
<td>Cold meat and salted meat</td>
<td>8</td>
<td>20</td>
<td>27</td>
<td>28</td>
<td>30</td>
<td>22</td>
<td>22</td>
<td>-26.7%</td>
</tr>
<tr>
<td>Milk, cheese and dairy products</td>
<td>7</td>
<td>13</td>
<td>18</td>
<td>22</td>
<td>33</td>
<td>26</td>
<td>27</td>
<td>3.8%</td>
</tr>
<tr>
<td>Meat</td>
<td>7</td>
<td>26</td>
<td>14</td>
<td>17</td>
<td>16</td>
<td>14</td>
<td>11</td>
<td>-21.4%</td>
</tr>
<tr>
<td>Eggs</td>
<td>9</td>
<td>14</td>
<td>11</td>
<td>27</td>
<td>26</td>
<td>16</td>
<td>14</td>
<td>-12.5%</td>
</tr>
<tr>
<td>Honey</td>
<td>14</td>
<td>46</td>
<td>14</td>
<td>70</td>
<td>73</td>
<td>29</td>
<td>28</td>
<td>-3.4%</td>
</tr>
<tr>
<td>Feedingstuffs</td>
<td>62</td>
<td>8</td>
<td>7</td>
<td>4</td>
<td>13</td>
<td>14</td>
<td>10</td>
<td>-28.6%</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>49</td>
<td>88</td>
<td>132</td>
<td>208</td>
<td>210</td>
<td>202</td>
<td>-3.8%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>453</td>
<td>647</td>
<td>794</td>
<td>967</td>
<td>1,250</td>
<td>1,238</td>
<td>1,181</td>
<td>-4.6%</td>
</tr>
</tbody>
</table>

Source: Regional Ministry of Agriculture, Fisheries and Rural Development
The value of organic production showed a strong growth between 2008 and 2011.

The value of the Andalusian organic production corresponding to 2012 amounted to 400 millions €, figure that represents 17.6% more than the value of the previous year.

Andalusia represented 45.0% of the value of the Spanish organic crop production.

Andalusia represented 27.4% of the value of the Spanish organic livestock production.

The value of the Andalusian organic production represented 41.8% of the Spanish organic production in 2011.
At end of 2012, the Andalusian Parliament adopted the Non-legislative proposal for the creation of the Third Organic Farming Scheme of Andalusia 2014-2020 (III-PAAE)

This Scheme met the demands of the industry, registered in the Intermediate Evaluation of the II-PAAE 2010

It consolidated the sector and became a tool to address the challenges of sustainability, food security, rural development and climate change in Andalusia

Sectoral and provincial meetings with the sector was carried out. They provided guidelines and orientations for the III-PAAE

In order to expand and know the opinion of the rest of the organic production sector and citizenship, in general, a survey was carried out so as to define the limitations of the broad lines, aspects and measures of the III-PAAE

Source: Regional Ministry of Agriculture, Fisheries and Rural Development
In 2013, Spain accounted for a total of 831,702 hectares under Integrated Production conditions, 3.5% more than the previous year.

In 2013, Andalusia accounted for 62% of the Spanish total cultivated area under Integrated Production conditions, becoming the leading region in Spain of this type of agriculture, followed by Extremadura that represented 13% and Aragon that represented 7% of the Spanish area under Integrated Production conditions.

Between 2003-2013 the area cultivated under Integrated Production increased sixfold in Andalusia.

In 2014 Andalusia had 554,399 hectares under Integrated Production conditions, 6.5% more than the previous year. Sevilla, with 209,453, was the Andalusian province with the greatest area, followed by Jaen with 95,348 hectares and Granada with 91,529 hectares.

Source: Spanish Ministry for Agriculture, Food and Environment., Survey on Integrate Production to the Spanish regions and the Regional Ministry of Agriculture, Fisheries and Rural Development.
Olive groves represented 72% of the total area under Integrated Production conditions in Andalusia in 2014. 28% of Ansalusian olive groves are cultivated under Integrated Production conditions.

Cotton represents 9% of the area cultivated under Integrated Production conditions. 82% of the cotton cultivated in Andalusia in 2014 was grown under Integrated Production conditions.

Rice represents 7% of the area cultivated under Integrated Production conditions. 94% of the rice cultivated in Andalusia in 2014 was grown under Integrated Production conditions.

70% of strawberries grown in Andalusia in 2014 were grown under Integrated Production conditions.

The area cultivated under conservation techniques in Andalusia has increased by 9.9% between 2006 and 2010. The area under “vegetation cover” technique has increased by 51.8% in the period considered, while the area under the “minimum tillage” technique has decreased by 8.3% between 2006 and 2010.

The 82.4% of the area cultivated under conservation techniques in Andalusia in 2010 was of olive groves, followed by fruits that represented 11.6%. Olive groves represented 89.0% of the area cultivated under “vegetation crops”. However, olive groves are usually cultivated under “minimum tillage” technique, representing 54.8% of the olive groves cultivated under conservation techniques.

Source: prepared by the author on the basis of information from the Spanish Ministry of Agriculture, Food and Environment (2006-2010)
**Olive growing**

- **1.5 million hectares** (more than 578,000 hectares are irrigated)
- **2,400 million € is the value of production** (2,150 M€ corresponds to olive oil and 250 M€ to table olives)
- 24% of the value of agricultural production corresponds to olive growing
- There are more than 800 olive mills and 200 seasoning plants
- It is the main activity of more than 300 towns and 250,000 households

1,200,000 tons of olive oil... ...almost 40% of total world production

380,000 tons of table olives ... ...almost 20% of total world production

28% of the Andalusian agri-food exports:

- 1,200 million € of olive oil (21%)
- 420 million € of table olives (7%)

**Law for olive growing of Andalusia to promote and improve the sector**
In 2012 the area dedicated to cultivate fruit trees in Andalusia was 123,903 hectares (without counting 162,861 hectares of almond trees), which represented 15% of the Spanish area (almond trees included) and 2% of the European Union area cultivated under these crops.

In 2012 the production of fruits in Andalusia was 2.37 Million tonnes, with a value of 1,823 Million €, which represented 30% of the value of the Spanish production of fruits in the same year.

The value of the production of fruits in Andalusia in 2013 was 2,459 Million €, 35% higher than the previous year (1.823 Million €).

In 2013 Huelva was leader by value of production.
Vegetables

In 2013 Almería was leader by value and production

The area of vegetables in Andalusia in 2012 amounted to 115,191 hectares, what represents about 53% of the Spanish area and 5% of the Community area in which these crops are cultivated.

Vegetables produced in Andalusia in 2012: 5.18 million tons, with a value of 2,743 million €, that accounted for 37.4% of the value of the Spanish production of vegetables in 2012.

The value of the production of vegetables in Andalusia in 2013 was 2,933 Million €, 7% higher than the previous year (2,743 Million €).

Sources:
- Agricultural economic indicators of Andalusia, 2012-2013.
- Spanish Office for National Statistics.
- FAO.
Fruits and vegetables

⇒ Great diversity of productions:
  ⇒ Outdoors: Citrus, Stone fruits, Tropical fruits, Vegetables...
  ⇒ In Glasshouses: Vegetables and Strawberries (Almería and Huelva)
⇒ Andalusia is the main area that supplies the European Union:

High value of the exports of products grown in greenhouse:
- Tomato 2014: 659 M€, -1.4% 2013
- Pepper 2014: 358 M€, -3.7% 2013
- Cucumber 2014: 535 M€, +7.3% 2013
- Strawberry 2014: 417 M€, -10.6% 2013

The importance of irrigation in Andalusia

- **Cultivated area**: 3,183,567 ha
  - Dry farming: 22%
  - Irrigation farming: 75%
  - Stockbreeding: 3%

- **Usable agricultural area**: 4,402,760 ha
  - Dry farming: 74%
  - Irrigation farming: 24%
  - Stockbreeding: 2%

- **Crops production 2013**: 7,948 mill €
  - Dry farming: 26%
  - Irrigation farming: 74%
  - Stockbreeding: 2%

- **Final agricultural production 2013**: 9,831 mill €
  - Dry farming: 40%
  - Irrigation farming: 55%
  - Stockbreeding: 5%

- **Jobs**
  - 260,000 AWU
  - 63% Dry farming
  - 36% Irrigation farming
  - 1% Stockbreeding

- **CAP aid 2014**: 1,593 mill €
  - 40% Dry farming
  - 55% Irrigation farming
  - 5% Stockbreeding

The importance of irrigation in Andalusia

Irrigation systems have evolved in recent years and there has been a shift from surface irrigation, which years ago was the most used, to **drip irrigation**, which has doubled the area under this system from 304,106 has in 1997 to 708,059 in 2008. However, surface irrigation remains the most widely used in the irrigation of rice and the lower area of the river Guadalquivir in the province of Seville, in the lowlands of the province of Jaen and in those traditional irrigated areas of Granada and Almeria. **Sprinkler irrigation** occupies a considerable area in the province of Cadiz and in those irrigated areas associated to the river Genil in the provinces of Cordoba and Seville. **Drip irrigation** is particularly used to irrigate olive groves and more intensive crops such as strawberries, citrus, fruits, vegetables and greenhouses.

Between 2009 and 2011, 150,363 hectares of irrigated land have been **modernised** and, according to the Agenda for Irrigation H-2015, between 2011 and 2015, another 246,093 hectares are expected to be modernised. By doing this, Andalusian irrigation will reach 1,106,394 hectares, with a saving average of 889 m³/ha a year and an average increase of production of 408 euros per year per hectare. This will result in a 160 million euro annual increase in modernised areas.

The largest increase of the irrigated area has occurred in the last two decades, with an increase of 65%, concentrated in the most dynamic areas of the Andalusian agriculture: greenhouses in Almeria, the area of Huelva in which strawberries and citrus are cultivated and olive groves in the province of Jaen.

The oldest irrigated areas are located in the province of Granada. More than 50% of the irrigated area is over 50 years old while the most recent areas, post-1990, are in the province of Jaen and are focussed on olive growing.

As shown in the picture, **Andalusia currently has eight types of irrigation systems**: a classification carried out on the basis of geographical proximity, productive orientation and economic importance criteria.

Of these eight systems, those ones that make greater use of water are intensive systems such as greenhouses and vegetables production, crops that need between 5,000 and 7,000 m³/ha, and those crops cultivated in the Valle del Guadalquivir associated to rice, which need approximately 14,000 m³/ha. It is exactly the same case that extensive crops such as maize, cotton and sugar beet, which use between 5,000 and 8,000 m³/ha.
The current situation of Fisheries in Andalusia

- **25 computerized fish markets**

- **32 ports**

- **43 fish processing companies registered**

- **5 centres for research and training**

- **112 aquaculture businesses**

- **22,583 jobs**
  - 35% of direct employment

Source: System of Socioeconomic indicators of the Fisheries sector of Andalusia, 2010. Regional Ministry for Agriculture, Fisheries and Rural Development of Andalusia
The Spanish agri-food sector has decreased its share in the Gross Value Added contributed by EU28 agri-food sector during the period 2001-2014, although it showed some fluctuations.

The Spanish agri-food industry is the third leading industry by importance in the EU28, being France and Italy the leading countries.
In 2013, with regard to Operating Incomes, the agri-food sector is the second industrial leading sector in Andalusia, representing 19.7%. The leading industrial sector is the oil, energy and water extractive sector, that represents 47% of the total operating incomes.

The Andalusian agri-food industry is the second leading sector, being the Catalonian the leading one. However, the Andalusian agri-food industry has a greater potential due to its outstanding primary sector

Two activities accounted for 43% of production value in 2013:

- Oil and fat industry (27.8%)
- Meat processing industry (10.2%)

- Investment of 68.78 million € in innovation (7.68% of the budget for the Strategic Plan for the Andalusian agri-food industry, Horizon 2013. 2008-2013)
- Increase of 96.9% of the value of the agri-food trade balance in the period 2000-2013 (Andalusia-worldwide)

Source: Spanish Office for National Statistics and Andalusian Institute for Statistics
In Andalusia, the agri-food industry was(*) the first industrial sector. Concerning the value of the marketed production, it grew progressively at an average rate of 13.7% every year (2003-2005), what represents more than the double of the Spanish agri-food sector (6.2%). Since 2006, the inter-annual growth significantly decreased to values around 4.5%. In 2008, the growth hardly reached 0.8% compared to 2007. In 2009, the value of the agri-food production decreased at national and Andalusian levels for the first time. In 2010, the value of the agri-food production recovered, being higher at Spanish level than at Andalusian level.

<table>
<thead>
<tr>
<th>Year</th>
<th>Value of agri-food production (thousands of €)</th>
<th>Share in the total Andalusian industry sector (%)</th>
<th>Value of agri-food production (thousands of €)</th>
<th>Share in the total Spanish industry sector (%)</th>
<th>Share of the Andalusian agri-food sector at national level (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>7,718,623</td>
<td>29.5%</td>
<td>54,258,846</td>
<td>18.3%</td>
<td>14.2%</td>
</tr>
<tr>
<td>2002</td>
<td>8,398,603</td>
<td>30.2%</td>
<td>56,774,978</td>
<td>18.1%</td>
<td>14.8%</td>
</tr>
<tr>
<td>2003</td>
<td>8,732,858</td>
<td>28.8%</td>
<td>60,139,616</td>
<td>18.3%</td>
<td>14.5%</td>
</tr>
<tr>
<td>2004</td>
<td>10,305,841</td>
<td>29.9%</td>
<td>65,420,845</td>
<td>18.5%</td>
<td>15.8%</td>
</tr>
<tr>
<td>2005</td>
<td>11,266,645</td>
<td>27.0%</td>
<td>67,750,635</td>
<td>17.8%</td>
<td>16.6%</td>
</tr>
<tr>
<td>2006</td>
<td>11,796,462</td>
<td>25.2%</td>
<td>71,147,482</td>
<td>17.6%</td>
<td>16.6%</td>
</tr>
<tr>
<td>2007</td>
<td>12,315,522</td>
<td>25.3%</td>
<td>75,877,155</td>
<td>17.1%</td>
<td>16.2%</td>
</tr>
<tr>
<td>2008</td>
<td>12,413,456</td>
<td>25.9%</td>
<td>78,961,960</td>
<td>18.3%</td>
<td>15.7%</td>
</tr>
<tr>
<td>2009</td>
<td>11,092,008</td>
<td>29.7%</td>
<td>72,985,273</td>
<td>21.7%</td>
<td>15.2%</td>
</tr>
<tr>
<td>2010</td>
<td>11,581,013</td>
<td>28.0%</td>
<td>74,989,075</td>
<td>20.8%</td>
<td>15.4%</td>
</tr>
<tr>
<td>2011</td>
<td>11,785,850</td>
<td>25.2%</td>
<td>78,638,162</td>
<td>20.6%</td>
<td>15.0%</td>
</tr>
<tr>
<td>2012</td>
<td>12,171,075</td>
<td>25.2%</td>
<td>81,505,495</td>
<td>21.6%</td>
<td>14.9%</td>
</tr>
<tr>
<td>2013</td>
<td>10,909,224</td>
<td>24.5%</td>
<td>81,816,857</td>
<td>22.1%</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

The Andalusian agri-food sector increased its share in the national sector during the period 2001-2007. Since 2008, a slightly decrease was registered.

In 2013 in Andalusia, the agri-food sector was the second Industrial Sector concerning the value of the production marketed.

Source: Andalusian Institute of Statistics. Industrial survey of products. Results for Andalusia
Importance of the Andalusian Agri-food sector

According to the Industrial survey of the Spanish Office for National Statistics, the Andalusian agri-food sector accounts for about 22.7% of industrial incomes.

The Andalusian agri-food sector created about 21% of industrial jobs in the period 2000-2008 (it created more than 50,000 jobs) and about 23% between 2009 and 2013.

In 2009, the number of jobs in the Andalusian agri-food sector decreased by 6.7% compared to 2008.

In 2010, a recovery of 0.9% was registered. In 2011, the number of jobs of this sector decreased by 4.4%, and in 2012 it returned to fall again by 5.0%.

In 2013, the Andalusian agri-food had lost 10.2% of jobs in comparison to 2008.

Source: Spanish Office for National Statistics
The gross value added generated by the Andalusian industry decreased by 5.5% in 2010 compared to 2008, although in 2011, there was a recovery in which the Andalusian GVA of the industry grew by 5.6% compared to the GVA of the previous year. In 2013 the GVA was 1.2% lower than it was in 2012.

However, the GVA of the Andalusian agrifood industry grew by 1.9% in the period 2008-2011.

The GVA of the Andalusian agrifood industry accounted for 19.0% of the total GVA of the Andalusian industry in 2008, slightly increasing in subsequent years.

The GVA of the Andalusian agrifood industry represented about 12.4% of the Spanish agrifood GVA in 2011. In addition, the GVA of the Andalusian industry represented about 9.9% of the GVA of the Spanish industry in 2013.

Source: Spanish Office for National Regional accountability of Spain. Results of Andalusia.
The number of Andalusian agri-food industries, including those for vegetables handling, slightly decreased between 2004-2006. Since then, an increase can be observed.

Olive oil and meat businesses together with horticultural centres, including those for vegetables handling, predominate by number, among the Andalusian Agri-food sector.

Seville is the province in which there is a greater number of food processing industries, in which canning and seasoning industries stand out, as they represent 18% of the facilities.

Source: Register of Agri-food industries
In 2013 Andalusia was the Spanish region with a higher number of agri-food companies, followed by Catalonia.

Source: MERCASA
Quality designations

**EXTRA VIRGIN OLIVE OIL**
- 12 PDO

**WINES**
- 6 PDO
- 2 Quality wines
- 16 wines of the region

**VINEGARS**
- 3 PDO

**SPIRITS**
- 1 PGI
- 5 GI

**HAMS AND SHOULDERS**
- 2 PDO
- 2 PGI
- 1 GTE

**FRUITS AND VEGETABLES**
- 1 PDO
- 2 PGI

**OTHER PRODUCTS**
- 3 PDO
- 4 PGI
- 2 GTE

PDO: Protected Designation of Origin
PGI: Protected Geographical Indication
GTE: Guaranteed Traditional Specialty
GI: Geographical Indication

Source: Regional Ministry of Agriculture, Fisheries and Rural Development
The Agri-food sector in Andalusia. Quality Designations

EXTRA VIRGIN OLIVE OIL

Area registered under extra virgin olive oil PDO. 2012

462,553 hectares

Production of extra virgin olive oil covered under PDO. 2012

144,673 tonnes

Production of extra virgin olive oil marketed under PDO. 2012

37,239 tonnes

Markets

70% Spain
26% European Union
4% Other countries

Value of the production of extra virgin olive oil marketed under PDO. 2012

113.76 million €

Markets

71% Spain
24% European Union
5% Other countries

Source: Regional Ministry of Agriculture, Fisheries and Environment of Andalusia.
The Agri-food sector in Andalusia. Quality Designations

**WINES Under PDO**

- **Area registered under PDO wines. 2011-2012**
  - 17,291 hectares

- **Production of wine covered under PDO. 2011-2012**
  - 581,152 hectolitres

- **Production of wine marketed under PDO. 2011-2012**
  - 723,293 hectolitres
    - 55% Spanish market
    - 45% Exports

- **Value of the production of wine marketed under PDO. 2011-2012**
  - 82.5 mill € (sales in Spain)
  - 92.5 mill € (sales abroad)

Source: Regional Ministry for Agriculture, Fisheries and Rural Development of Andalusia and Source: Regulatory board of the Andalusian PDO of wines
The Agri-food sector in Andalusia. Quality Designations

**WINES under PGI**

<table>
<thead>
<tr>
<th>Area registered under PGI wines. 2011-2012</th>
<th>648 hectares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production of wine covered under PGI. 2011-2012</td>
<td>20,467 hectolitres</td>
</tr>
<tr>
<td>Production of wine marketed under PGI. 2011-2012</td>
<td>14,147 hectolitres</td>
</tr>
<tr>
<td>Value of the production of wine marketed under PGI. 2011-2012</td>
<td>4.5 million €</td>
</tr>
</tbody>
</table>

- **85% Spanish market**
- **15% Exports**

- **80% Spanish market**
- **20% Exports**

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia and Regulatory boards of the Andalusian PDO of wines
15(*) Wineries that produce vinegars under PDO. 2012

Production of 54,851 hectolitres of vinegar covered under PDO. 2012

Production of vinegar marketed under PDO. 2012

72,750 hectolitres

- 69% Spanish market
- 28% European union
- 3% Other countries

(*) Wineries belonging to PDO Montilla-Moriles were not taken into account, because they had not any production in 2012.

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia and Regulatory boards of the Andalusian PDO of vinegars
The Agri-food sector in Andalusia. Quality Designations

1,643 farms registered in the PDO for hams and shoulders 2012

96,374 hams 2012
96,418 shoulders 2012

Units marketed by PDO and PGI for hams and shoulders. 2012
182,690 hams
49,031 shoulders

Value of the hams and shoulders marketed under the PDO and PGI. 2012
Hams: 21.8 million €
Shoulders: 3.1 million €

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia and Regulatory boards of the Andalusian PDO and PGI of Hams and Shoulders
### FRUITS AND VEGETABLES

#### Area registered. 2012
- 43 hectares under PIG Espárrago de Huétor-Tájar (Asparagus)
- 993 hectares under PIG. Tomate de la Cañada-Níjar (Tomato)
- 14,00 hectares PDO Chirimoya Costa Tropical de Granada-Málaga (cherimoya)
- 1,800 hectares under PDO Pasas de Málaga (raisins)

#### Industries registered. 2012
- 1 factory under PGI Espárrago de Huétor-Tájar (Asparagus)
- 7 factories under PGI Tomate de la Cañada-Níjar (Tomato)
- 4 factories under PDO Chirimoya Costa Tropical de Granada-Málaga (cherimoya)
- 7 factories under PDO. Pasas de Málaga (raisins)

#### Protected production. 2012
- 36 tonnes under PGI Espárrago de Huétor-Tájar (Asparagus)
- 23,832 tonnes under PGI Tomate de la Cañada-Níjar (Tomato)
- 1,358 tonnes under PDO Chirimoya Costa Tropical Granada-Málaga (cherimoya)
- 350 tons under PDO Pasas de Málaga (raisins)

#### Protected products marketed. 2012
- 50 tonnes under PGI Espárrago de Huétor-Tájar (Asparagus)
- 9,350 tonnes under PGI Tomate de la Cañada-Níjar (Tomato)
- 1,358 tonnes under PDO Chirimoya de la Costa Tropical Granada-Málaga (cherimoya)
- 245 tonnes under PDO Pasas de Málaga (raisins)

#### Value of the products marketed. 2012
- 0.34 million € under PGI Espárrago de Huétor-Tájar (Asparagus)
- 6.36 million € under PGI Tomate de la Cañada-Níjar (Tomato)
- 2.39 million € under PDO Chirimoya de la Costa Tropical Granada-Málaga (cherimoya)
- 1.14 million € under PDO Pasas de Málaga (raisins)

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Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia and Regulatory boards of the Andalusian PDO and PIG for fruits and vegetables.
OTHER PRODUCTS: PDO
Miel de Granada (Honey)

13,295 beehives registered under PDO. 2012

51 producers and 5 packing plants registered under PDO. 2012

199,425 kg of honey marketed under PDO. 2012
Spanish market

Value of the honey marketed under the PDO. 2012
2.08 million €
Spanish market

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalucia and Regulatory boards of the Andalucian PDO
OTHER PRODUCTS: PGI Caballa de Andalucía and Melva de Andalucía (Mackerel and frigate tuna, respectively)

4 industries registered under PGI.

1,255 tonnes of mackerels registered and marketed under PGI. 2012
- 64% Spanish market
- 31% European Union
- 5% Other countries

630 tons of frigate tuna registered and marketed under PGI. 2012
- 63% Spanish market
- 29% European Union
- 7% Other countries

12.55 million € of mackerels marketed under PGI. 2012
- 64% Spanish market
- 31% European Union
- 5% Other countries

9.32 million € of frigate tunas marketed under PGI. 2012
- 63% Spanish market
- 29% European Union
- 7% Other countries

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia and Regulatory boards of the Andalusian PDO for mackerel and frigate tuna
OTHER PRODUCTS: PDO
Aceituna Aloreña de Málaga (olives)

Area registered under PDO. 2012
25,000 hectares

Production of olives covered under PDO, 1,400 tonnes 2012

9 industries registered as producers of products covered under PDO. 2012

Production of olives marketed under PDO, 1,400 tonnes in 2011, 90% for the Spanish market, 8% for the UE and 2% for the other countries

Value of the production of olives marketed under PDO. 2012
7.0 million €

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia and Regulatory boards of the Andalusian PDO
The Agri-food sector in Andalusia. Quality Designations

OTHER PRODUCTS

PGI Alfajor de Medina Sidonia (traditional pastry)
PGI Mantecados de Estepa (traditional pastry)
PGI Cordero de las Sierras de Segura y La Sagra (lamb)

Source: Regional Ministry of Agriculture, Fisheries and Rural Development of Andalusia
The Andalusian Agri-food balance of trade showed a positive value, higher than the Spanish balance of trade in the period 2000-2010.

However, from 2011 on, this trend changed and the agri-food balance of trade of Spain became 64% higher than the Andalusian one in 2014.
In 2014, the maximum value of agricultural exports (8,343 mill €) was reached. The value of the balance of trade increased 22.7% compared to the previous year.

In 2009, the exports carried out by Andalusia decreased, although they recovered in 2010. The imports carried out by Andalusia decreased in 2009 although they rose to 3,248 mill € in 2011. In 2014, it decreased by 2.7% compared to 2013.

In both cases, exports and imports followed an upward trend in the period 2000-2014.
The fresh vegetables sub-sector had the most favourable balance of trade, settled at about 1,500 million € in the period 2003-2007. In 2013, it registered its maximum at 2,106 million € and in 2014 it reached 2,088 million €.

The olive oil sub-sector showed fluctuations in the value of its balance through the period. However, it has always had an upward trend; in 2014 it rose to 1,842 million €.

The fresh fruits balance of trade rose by 113% in the period 2000-2014, reaching its maximum in 2014 at 1,321 million €.

The processed vegetables balance of trade grew by 75% in the period 2000-2014, registering its highest value in 2014 at 573 million €.
Agri-food exports

Andalusia is a net exporting region of agri-food products

- The Andalusian Agri-food balance is always positive.

- The Andalusian Agri-food balance, compared to the world balance, increased by 114.6% in the period 2000-2014, reaching 5,312 million € in 2014, 22.7% more than the previous year.

- Olive oil is the agri-food product that stands out in Andalusian trading relations. It had a balance of trade of 1,949 million € in 2014, 63.2% higher than the previous year. Due to the importance reached by Andalusian olive oil in the international markets, this product has increased the Andalusian balance trade 90.2% in the last decade and 254.8% since 2000.

**Exports 2014**

8,343 M€

Most important products:
- Olive oil
- Fruits and vegetables
- Olives

**Imports 2014**

3,031 M€

Most important products:
- Fish and sea food
- Fats, animal or vegetable oil
- Grain
- Sugar and confectionery products

Source: DATACOMEX
Andalusian agri-food exports

The EU is the main destination of the Andalusian exports and the main supplier of agri-food imports carried out by Andalusia

- Andalusian exports to the EU, in 2014:
  - Italy (20.9%)
  - Germany (19.4%)
  - France (15.8%)
  - Portugal (11.6%)
  - United Kingdom (10.6%)
  - The Netherlands (8.1%)

- The EU was also the main agri-food supplier of Andalusia in 2014:
  - Portugal (21.7%)
  - France (18.0%)
  - United Kingdom (11.6%)
  - Germany (7.5%)
  - Italy (6.5%)

EEUU (6.0%), Japan (1.4%), China (1.2%), Switzerland (1.1%), and Brazil (0.8%) are important destinations for Andalusian exports outside the EU

The most important Andalusian imports come from Morocco (12.0%), Indonesia (7.3%), Ukraine (3.8%), United States (3.2%), and Peru (2.9%)

Source: Data 2012 (provisional). Value of the exports and imports carried out by Andalucia (millions of €). DATACOMEX.
At national level, the number of beneficiaries of direct aid decreased by 7.0% in 2012 compared to 2010; the number of male beneficiaries of such aid has decreased the most (7.2%), compared to female that decreased by 6.7% in the period under study.

In the period 2010-2012, 64.5% of the beneficiaries of direct aid were men.

At national level, the total amount payable by way of direct aid decreased by 4.3% in 2012 compared to 2010.

In the period 2010-2012, 73.3% of the amount payable by way of direct aid was received by men.

Source: FEGA (The Spanish Paying Agency)
Characterization of the beneficiaries of direct aids at national level (according to their legal status). 2012

Andalusians received 8.7% less than the amount received on average in Spain

Average amount of direct aids. 2012

Source: FEGA (The Spanish Paying Agency)
29.0% of the beneficiaries of the direct aid received by Spain in 2012 were from Andalusia.

27.6% of the beneficiaries of direct aid greater than or equal to 65 years were Andalusians.

40.6% of the beneficiaries of direct aid at national level were greater than or equal to 65 years.

Source: FEGA (The Spanish Paying Agency)
26.4% of the amount payable by way of direct aid for 2012 received by Spain was allocated in Andalusia.

The total amount received by the Andalusians greater than or equal to 65 years accounts for 37.1% of the total amount received by this region.

The total amount received at national level by those citizens greater than or equal to 65 years accounts for 29.1% of the total amount received by Spain.

Source: FEGA
The Andalusian public administration paid over 1,500 mill € in annual payments from the EAGF fund between 2000 and 2014. In 2009, the highest value of the period studied was registered at 1,862 mill €.

Since the Single payment scheme came into force, the most important amount of aid is allocated to farmers decoupled to the productive activity. Due to this, it is not possible to know in which sectors this aid is allocated.

### EAGF financial years

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<td>EAGF</td>
<td>1,598</td>
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<td>1,817</td>
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<td>1,671</td>
<td>1,636</td>
<td>1,597</td>
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</table>

### Distribution of support. EAGF 2014

- **Single Payment**: 87%
- **Rest of EAGF Funds**: 13%
- **Cotton**: 32%
- **Others**: 18%
- **Beef**: 17%
- **Fruits and Vegetables**: 33%

Source: FEGA (The Spanish Paying Agency)
In the financial year 2014, the EAFRD allocated 264.78 million Euro

**Axis 2**: Improving the Environment and Diversification of the Rural Economy, represented 52% of the amount allocated in that financial year. Among this axis, it is necessary to highlight the Environmental Support which represented 52% of the total EAFRD amount for this Axis in 2014.

**Axis 1**: Improving the competitiveness of the agricultural and forestry sector, accounted for 41% of the amount allocated in this financial year. Among this axis, it is necessary to highlight the support to Aids and infrastructures, that represented 60% of the amount allocated to Axis 1 by the EAFRD in 2014.
2,590,008.9 hectares of the Andalusian area are included in the Natura 2000 Network (about 30% of the total of the region)

The Andalusian area included in the Natura 2000 Network is selected from the Network of Protected areas of Andalusia, made up of 150 Protected Areas with an area of 1,694,849 hectares
Andalusian forest areas occupy 4.8 million hectares (55% of the total area of Andalusia)

- 54.1% are grove areas (among them, 70.7% are leafy, where oaks and cork oaks stand out),
- 31.9% are bush areas,
- 14% are herbs and other forest areas

About 1.2 million hectares of these forest areas are also used for extensive agricultural purposes (dehesas)

These forest areas capture, every year, more than 2.1 million tons of carbon. In addition to this capture, we can also include the capture carried out by agricultural crops (permanent woody crops), estimated on average at 0.42 tons per hectare and year
• Only 16% of the total Andalusian forest groves are damaged (with defoliation over 25%). These damages are greater in leafy areas (where the percentage of damaged trees rise to 21%) than in conifer areas (just 5% of damaged trees)

• The Andalusian flora has more than 4,000 taxons, 60% of the Iberian flora. Among them, 484 taxons are Andalusian endemic and 466 are Iberian endemic or beticus-Mauritanian

• The storage capacity of the water resources of Andalusia is over 10,000 hm³. The available resources are about 5,500 hm³

• Andalusia has an average annual soil loss of 5.5 tons per hectare. In the past 10 years, the areas with greater losses (more than 100 tons/hectare/year) have been reduced by more than 50%
The Agricultural and Fisheries sector in Andalusia