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POLICY DEPARTMENT
STRUCTURAL AND COHESION POLICIES **B**

Agriculture and Rural Development

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**Research for
AGRI Committee -
Agriculture in Andalusia**

STUDY



DIRECTORATE-GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES

AGRICULTURE AND RURAL DEVELOPMENT

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STUDY

This document was requested by the European Parliament's Committee on Agriculture and Rural Development for its delegation to Andalusia in May 2016.

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COVER PICTURE

[Flag of the Autonomous Community of Andalusia](#)

DIRECTORATE-GENERAL FOR INTERNAL POLICIES
POLICY DEPARTMENT B: STRUCTURAL AND COHESION POLICIES
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Research for AGRI Committee - Agriculture in Andalusia

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Abstract

This memo was drawn up for the delegation of the European Parliament's Committee on Agriculture and Rural Development to Andalusia (Spain) in May 2016.

It includes: 1) an introduction, setting out the key political, geographical, climatic and demographic data; 2) a chapter entirely devoted to the EU's and Spain's macro-economic framework; 3) a study of the agri-food sector in Andalusia; 4) the region's environmental challenges; and finally 5) concluding comments on the implementation of EU agricultural funds in Andalusia and indications of the new CAP's key regional impacts for the 2014-2020 period, based on the application model adopted by the Spanish authorities.

TABLE OF CONTENTS

INDEX OF TABLES, MAPS AND FIGURES	5
1. INTRODUCTION	9
1.1 Political and administrative framework	9
1.2 Physical geography	10
1.3 Climate	12
1.4 Demography and rural environment	14
2. GENERAL MACROECONOMIC FRAMEWORK	17
2.1 Macroeconomic dimensions of the EU and Spain: comments	17
2.2 Andalusia's economy	19
3. AGRICULTURE AND THE FOOD INDUSTRY IN ANDALUSIA	23
3.1 Agri-rural Andalusia	23
3.2 The strategic role of irrigation	25
3.3 Main types of production	27
3.4 Structural profile and competitiveness	29
3.5 The food industry and retail sector	32
3.6 Quality food schemes	34
3.7 External trade in agri-food products	35
4 THE NATURAL HERITAGE AND THE ENVIRONMENT	37
4.1 Biodiversity and its protection	37
4.2 Challenges for environmental sustainability	39
5 THE CAP AND ANDALUSIA	41
5.1 The Multiannual Financial Framework for 2014-2020 and the CAP	41
5.2 EAGF support for agriculture in Andalusia	43
5.3 EAFRD support for agriculture in Andalusia	46
MAIN STATISTICAL AND DOCUMENTARY REFERENCES	51

INDEX OF TABLES, MAPS AND FIGURES

MAPS

Map 1	
Andalusia in the EU28	7
Map 2	
Map of Andalusia's provinces	9
Map 3	
Andalusia's rivers	11
Map 4	
Physical map	12
Map 5	
Climate zones	13
Map 6	
Population Density in Andalusia (inhabitant/km ²)	15
Map 7	
Andalusia's farming systems	24
Map 8	
energy consumption in the farming sector	26
Map 9	
Average surface area per holding at municipal level S (ha)	29
Map 10	
Employment generated by farming activity at municipal level	31
Map 11	
National and natural park in Andalusia	37
Map 12	
Excess nitrogen (Kg/ha) at municipal level	40

TABLES

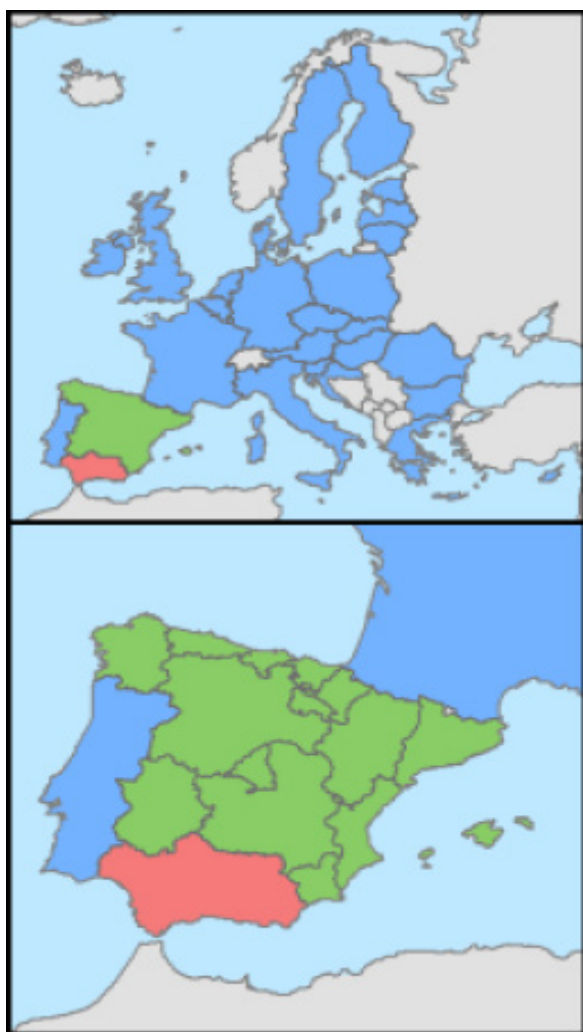
Table 1	
Core indicators for Andalusia, Spain and the euro area/EU28	8
Table 2	
Demographic data by province (2015)	14
Table 3	
Demography and rural environment of Andalusia and Spain (2014)	15
Table 4	
Comparison between the sectoral composition of Andalusia's and Spain's GDP (2013-2014)	21
Table 5	
Structural data for Andalusia's agri-food industry	28

Table 6	
Andalusia's food industry in figures (2013)	33
Table 7	
Agri-food exports for Andalusia and Spain (2014 in EUR thousands)	36
Table 8	
Direct payments initially allocated to Spain: comparison between 2007-2013 and 2014-2020 (in EUR millions at constant prices 2011)	41
Table 9	
European Rural Development Funds initially allocated to Spain: comparison between 2007-2013 and 2014-2020 (in EUR millions at constant prices 2011)	42
Table 10	
European rural development funds initially allocated to Spain following transfers between the two pillars: comparison between 2007-2013 and 2014-2020 (in EUR millions at current prices) (*)	42
Table 11	
Single payment entitlements – financial year 2014	44
Table 12	
Number of potential recipients of direct payments based on applications submitted in 2015	45
Table 13	
EAGF support for Andalusia and Spain (2015)	46
Table 14	
Financial data for Andalusia's Rural Development Programmes for 2007-2013 and 2014-2020	47
Table 15	
Implementation rate for Leader in the 2007-2013 RDP (in EUR millions and cumulative percentage at 31.12.2015)	49
Table 16	
Andalusia's RDP priorities for 2014-2020 (EUR thousands)	50

FIGURES

Figure 1	
Parliament of Andalusia – Distribution of seats 2015	10
Figure 2	
GDP per capita trends in Andalusia and Spain (in euro)	20
Figure 3	
PDO logos Jerez	34
Figure 4	
Annual variation in fire-affected areas	39
Figure 5	
Comparison between Andalusia's Rural Development Programmes for 2007-2013 and 2014-2020 (in EUR millions)	47

Map1: Andalusia in the EU28



Source: [ENRD, 2015](#)

Table 1: Core indicators for Andalusia, Spain and the euro area/EU28

	ANDALUSIA	SPAIN	EURO AREA / EU28
A. SOCIO - DEMOGRAPHY			
Total population (number of inhabitants)	8 399 043 (electoral register 2015)	46 439 864 (electoral register 2015)	338 733 933 (Euro area 2014)
Demographic density (inhabitants/km2)	95.9 (electoral register 2015)	92.4 (electoral register 2015)	123 (Euro area 2014)
Birth rate:	9.80 (2014)	9.14 (2014)	9.71 (Euro area 2013)
Mortality rate:	7.90 (2014)	8.46 (2014)	9.67 (Euro area 2013)
Fertility index	1.39 (2014)	1.32 (2014)	1.55 (Euro area 2013)
Life expectancy (in years)	81.72 (2014)	82.98 (2014)	81.37 (Euro area 2013)
B. MACROECONOMIC DATA			
GDP (in EUR millions at current prices) compared with EU28	139 099 (2014)	1 041 160 (2014)	13 959 739 EU28: 2014%
GDP <i>per capita</i> (EUR at current prices)	16 577	22 412	27 500
GDP (in EUR millions in PPS) compared with EU28	155 377 (2014)	1 163 000 (2014)	13 959 739 (EU28: 2014)
GDP <i>per capita</i> (euro in PPS) % - index EU28 = 100	18 500 67	25 000 91	27 500 100
Public deficit (in EUR millions)	-1 877 (2014)	-61 319 (2014)	-352 683 (Euro area 2012)
Public deficit (% GDP)	-1.35% (2014)	-5.9% (2014)	-3.70% (Euro area 2012)
Public deficit (% GDP)	21.70% (2015)	99.00% 2015: Total Administration	90.60% (Euro area 2012)
Harmonised index of consumer prices (HICP) for the euro area and Spain (general ICPI for Andalusia)	-0.3% CPI January 2016	-0.9% Inter-annual HICP February 2016	-0.2% Inter-annual HICP February 2016
Unemployment rate as % of working population	29.8% (4th quarter 2015)	20.5% (January 2016)	10.3% (EU28, January 2016)
C. TRADE			
Exports (% GDP)	18.71% (2014)	23.49% (2015)	---
Imports (% GDP)	21.75% (2014)	25.78% (2015)	---
Trade balance (% GDP)	-3.05% (2014)	-2.29% (2015)	---

Source: Created by the author, based data from Eurostat and the national statistics institute

1. INTRODUCTION

1.1 Political and administrative framework

The name Andalusia is derived from the Arabic 'Al-Andalus', which refers to all the Iberian territories under Muslim rule, which lasted seven centuries (from 711 until the fall of the Nasrid Kingdom of Granada in 1492).

Andalusia is divided into eight administrative *provinces* (**Map 2**). The largest is Seville (14 036km²), which is also the most populated. It is followed by Córdoba (13 771km²), Jaén (13 496km²), Granada (12 647km²), Huelva (10 128km²), Almería (8 775km²), Cádiz (7 436km²) and finally Málaga (7 309km²), bearing in mind that it is the second most populous region (see 1.4).

Map 2: Map of Andalusia's provinces



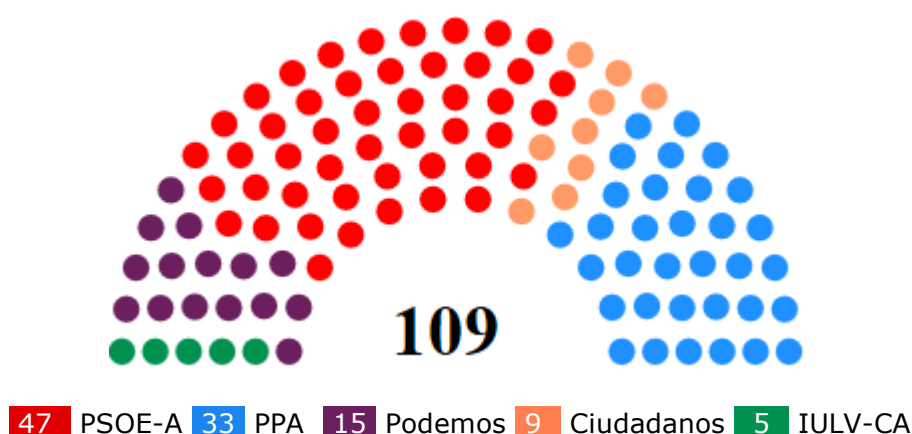
Source: [Google](#)

The Autonomous Community of Andalusia was established in 1980 following a referendum. The current statute of autonomy, which was adopted and ratified in 2007 and substituted the statute of 1981, defines it as a '*historic nationality*' due to its unique identity in Spain.

The regional government of Andalusia (*Junta de Andalucía*) is its main political and administrative body. The current president is Susana Díaz, who belongs to the Spanish socialist workers' party of Andalusia (PSOE-A). Agricultural matters are managed by the *ministry for agriculture, fisheries and rural development*, under the responsibility of María del Carmen Ortiz.

The highest representative body is the *parliament of Andalusia*, which has 109 seats based on provincial constituencies. Reflecting the size of their populations (see 1.4), the provinces with the highest number of seats are Seville (18), Málaga (17) and Cádiz (15). Following the elections of March 2015, the autonomous assembly comprises five groups, two of which were not previously represented in the chamber: 47 members from the socialist party (PSOE - A) (representing 35.4% of votes cast); 33 members from the popular party of Andalusia (PPA) (representing 26.7% of votes cast); 15 members from Podemos (representing 14.8% of votes), 9 members from Ciudadanos (representing 9.2% of votes) and 5 members from the United Left/Greens – Assembly for Andalusia (IULV-CA) (who secured 6.8% of votes cast) (**Figure 1**). The current president of Andalusia's parliament is Juan Pablo Durán Sanchez (PSOE -A).

Figure 1: Parliament of Andalusia – Distribution of seats 2015



Seville is the capital of Andalusia and the *seat of its government and parliament*. However, the higher court of justice is located in Granada.

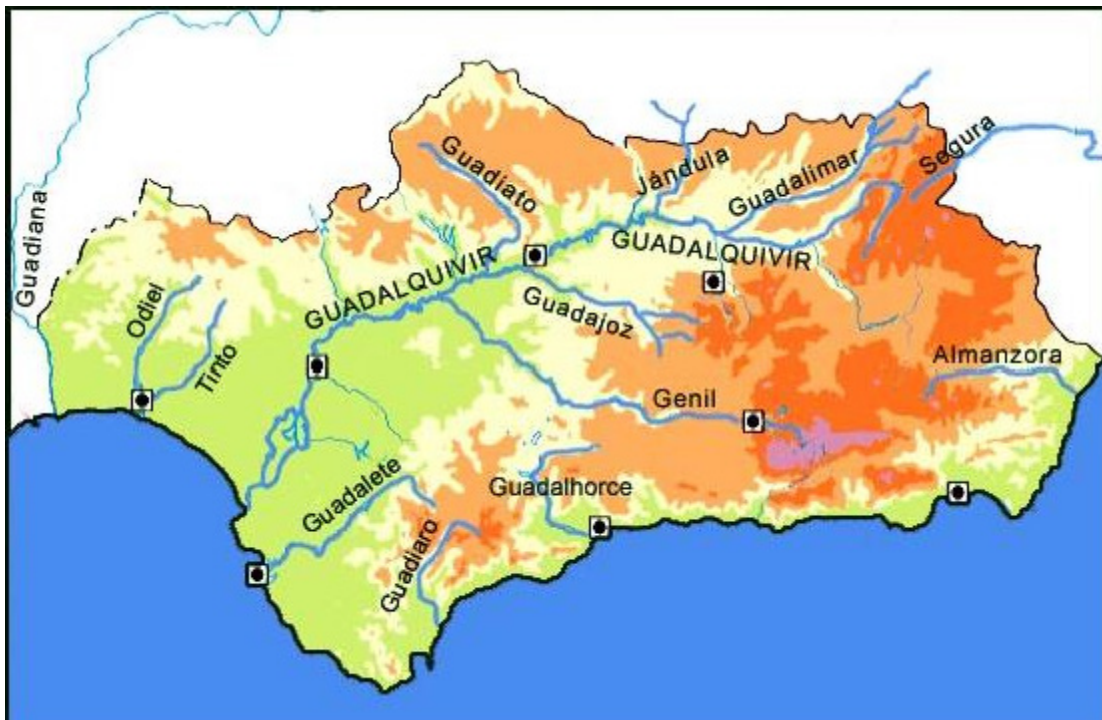
1.2 Physical geography

Andalusia is part of the Iberian peninsula and is the westernmost point of the European continent (**Map 1**). To the south-east and south-west, it is surrounded by the Mediterranean and by the Atlantic Ocean and Portugal, respectively. To the north, it is flanked by the Spanish regions of Extremadura and Castilla-La Mancha and, to the east, by Murcia. It is separated from the African continent (Morocco) by the Straits of Gibraltar, which is 14km wide at its narrowest point (**Map 1**).

Andalusia spans a total area of 87 610km², i.e. 17.4% of Spanish territory (504 755km²), and is the country's second largest region. Moreover, it is the fourth largest region in EU28 and is similar in size to many Member States (such as Austria - 83 879km²; Portugal - 92 212km² or Hungary – 93 024km²). Its size explains its considerably varied orographic and hydrographic features, climate types and biodiversity.

Most of Andalusia's river basins are on the *Atlantic coast*, with long rivers irrigating extensive plains and with estuaries and marshlands teeming with birdlife. These include the river basins of the Guadalquivir (the longest river in Andalusia and the fifth longest in the peninsula at 657km), the Guadiana (which marks the border with Portugal) and the Tinto-Odiel. The rivers feeding the *Mediterranean* are much shorter, more seasonal and much steeper, which limits their value to farming (**Map 3**).

Map 3: Andalusia's rivers



Source: [Google](#)

Its terrain can be divided into *three main areas* (**Map 4**), as set out below.

- The *Sierra Morena* is not very high (Mount Estrella: 1 300m) but constitutes a natural border between the Castilian Meseta and the mountains and farmlands of Andalusia. Its terrain morphology and acid soils are constraints on crop farming (rainfed cereals, marginal olive groves) which is usually combined with livestock farming and forestry.
- The *Baetic System* includes the *Sub-Baetic* and *Peni-Baetic* ranges. The *Sub-Baetic* mountains exceed 2 500m and their discontinuous terrain has resulted in many passes that facilitate communication. The *Peni-Baetic* range includes Sierra Nevada, the highest peak of the Iberian peninsula (Mount Mulhacén: 3 478m; Mount Veleta: 3 392m) and therefore constitutes a formidable natural barrier between the Mediterranean coast and the hinterland. The Baetic Systems present an extremely varied terrain and landscape, which is largely taken up by olive groves.
- Finally, the *Guadalquivir Delta* forms a triangle extending as far as the Gulf of Cádiz. It is mostly a plain, which is suitable for irrigation and has considerable agricultural potential. This is why vast privately owned estates [*latifundia*] are traditionally associated with this geographical setting. Furthermore, its soil and water conditions also explain why this has always been the area with the highest population.

Andalusia's *Atlantic coast* is characterised by its many beaches whereas its *Mediterranean coast* is dominated by cliffs, especially in the provinces of Granada, Málaga and Almería (**Map 2**).

Map 4: Physical map



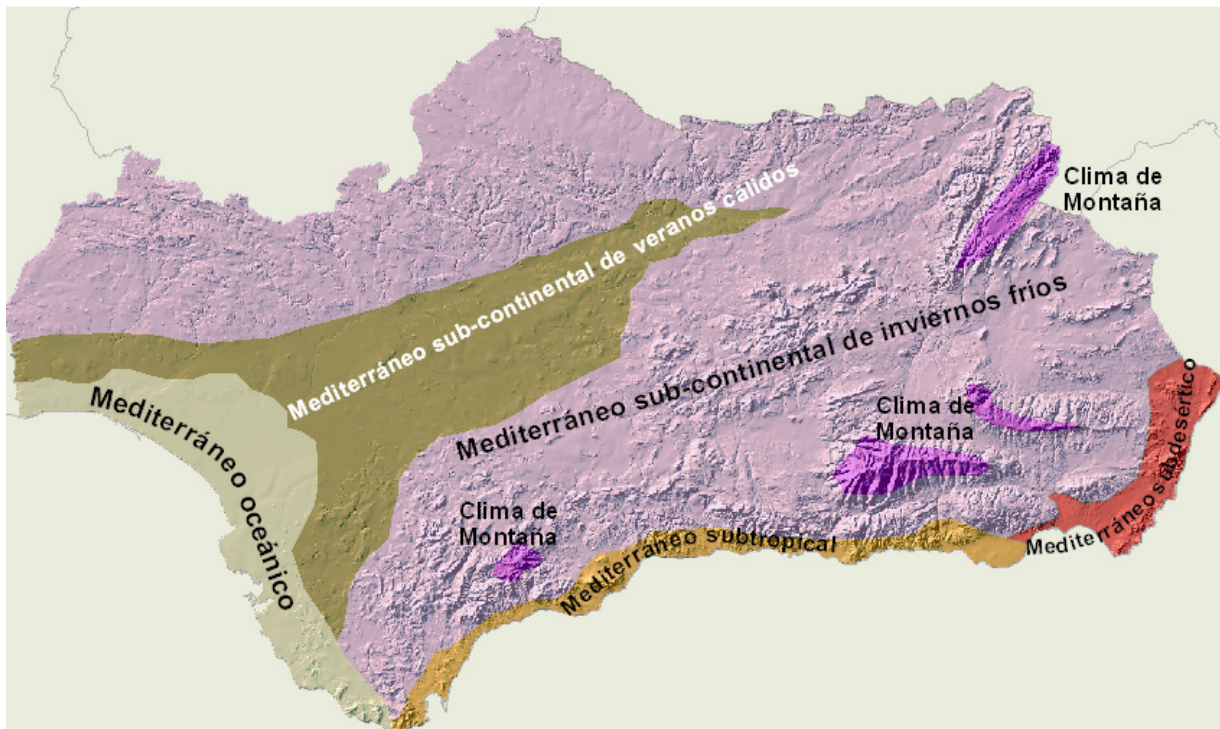
Source: Google

1.3 Climate

Andalusia has a *temperate Mediterranean climate* characterised by mild temperatures (a yearly average of temperatures above 16°C and 300 sunny days a year throughout most of its territory). Its general features are: 1) dry summers with frequent heatwaves (its temperatures are the highest in Europe, the highest temperatures on record being around 47°C in the Guadalquivir valley – Córdoba and Seville); 2) short, mild winters; and 3) sporadic rainfall, generally in autumn, winter and spring, but with potential for torrential rain in winter.

Despite these general features, Andalusia's vast size and terrain, with widely contrasting altitudes and slopes, not to mention its location between a sea and an ocean with very different characteristics, have resulted in climate variations within its territory. The Guadalquivir valley is wetter because of the influence of the Atlantic. As you advance into the hinterland and average altitudes get higher, continental characteristics begin to take over and temperatures become more extreme. Rainfall also diminishes from west to east. The rainiest area in Andalusia and Spain is in the province of Cádiz (Sierra de Grazalema Natural Park) and the driest is in the province of Almería (Cabo de Gata and Tabernas national parks) (**Maps 2 and 3**).

Map 5: Climate zones



Source: [Wikipedia](#)

Six types of bioclimate can be identified (**Map 5**):

- *Oceanic Mediterranean climate*: along the Atlantic coast, with average annual temperatures of 17-19°C and average annual precipitation of 500-700mm;
- *Sub-continental Mediterranean climate with hot summers*: in the Guadalquivir Delta, with average annual temperatures of 17-18°C and precipitation of 500-700mm;
- *Semi-continental Mediterranean winter climate*: spanning most of Andalusia, with temperatures ranging between 13 and 15°C and precipitation of up to 60mm in the driest areas and up to 800mm in the highest altitudes of Sierra Morena, in the north;
- *Mountain climate*: in the Sub-Baetic and Peni-Baetic ranges, with average annual temperatures of 12-15°C and precipitation of 400-1 000mm; Sierra Nevada experiences the lowest temperatures in Andalusia and its peaks are snow-capped for most of the year;
- *Subtropical Mediterranean climate*: the coastal region that coincides today with the Costa del Sol tourist region, with average annual temperatures of 17-19°C and precipitation of 400-900mm; its particular climate and soil conditions (sandy soils) have given rise to subtropical agricultural production; and
- *Sub-desert Mediterranean climate*: the easternmost coast and its inland 'comarcas', with average temperatures of 17-21°C and scant precipitation (under 50 days a year and an average of 300mm); continental Europe's only desert is situated in this region: Tabernas.

1.4 Demography and rural environment

Andalusia is Spain's most populated Autonomous Community, (8 399 043 inhabitants according to the 2015 electoral register, which is 18% of the Spanish population) (**Tables 1 - A and 2**). It is the third most populous region in the EU, coming behind only Ile de France and Lombardy. Its demographic density stands at 95.5 inhabitants/km², *slightly higher than the Spanish average* (92.4 inhabitants/km²) (**Table 2**).

Table 2: Demographic data by province (2015)

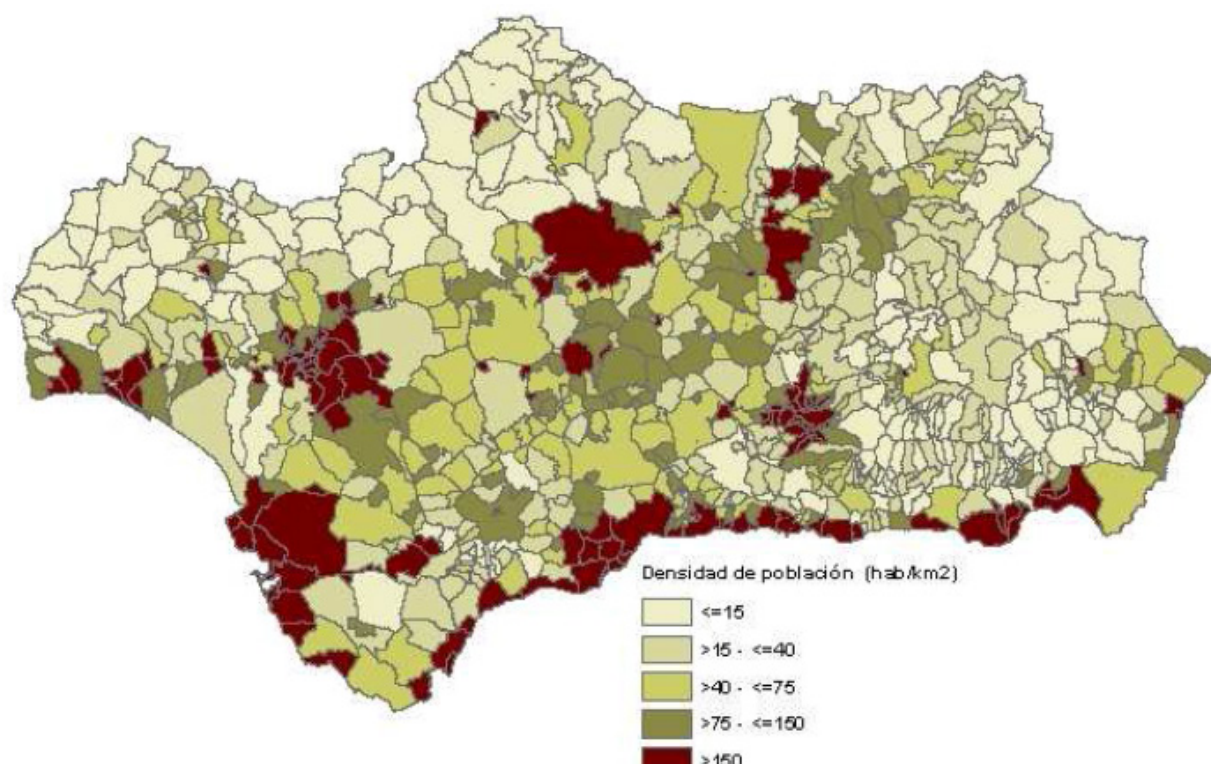
PROVINCE	POPULATION TOTAL	DENSITY POP./KM2	AVERAGE AGE	POPULATION OF THE CAPITAL
Almería	701 211	79.9	39.1	194 203
Cádiz	1 240 284	166.8	40.2	120 468
Córdoba	795 611	57.8	42.1	327 362
Granada	917 297	72.5	41.4.	235 800
Huelva	520 017	51.3	40.5	146 318
Jaén	654 170	48.5	42.1	115 395
Málaga	1 628 973	222.9	40.9	569 130
Seville	1 941 480	138.3	40.9	693 878
TOTAL/ANDALUSIA	8 399 043	95.9	40.7	693 878 (Seville)

Source: [Institute of Statistics and Cartography of Andalusia](#), electoral register 2015, as adapted by the author

The demographic pyramid shows that Andalusia has a *younger population* than Spain or the EU, although without significant differences: around 16.6% of the total population aged under 15 and the average age is 40.7. *Life expectancy* is 81.72, below the Spanish average (82.92) and slightly above the EU average (**Table 1 - A**).

The population is concentrated along the coast, in the Guadalquivir valley and around the eight provincial capitals, where population densities can be as high as 150 inhabitants/km² (**Map 6**, in brown). The lowest densities are in the inland and mountain areas, mainly in the north and east (**Map 6**). Seville, Cádiz and Málaga are the most populated and account for over 57% of the total population. Málaga is the province that has experienced most demographic growth in recent years and now has the highest average density (222.9 inhabitants/km²) (**Table 2**). Seville nevertheless remains the most populated province and its capital is the largest city in Andalusia (693 878 inhabitants) (**Table 2**).

According to the OECD methodology for classifying regions as urban or rural, 67.1% of Andalusia classifies as *intermediate* (where the share of population in rural areas is between 20% and 50% of the total) whereas 32.9% of its territory classifies as *predominantly urban*. This is due to the average size of many of Andalusia's municipalities, which are the focal points of vast pre-eminently rural areas.

Map 6: Population Density in Andalusia (inhabitant/km²)

Source: [2014-2020 RDP for Andalusia – current situation analysis](#) (page 15)

Table 3: Demography and rural environment of Andalusia and Spain (2014)

	A. NUMBER OF MUNICIPALITIES	B. SURFACE AREA (KM ²)	C. POPULATION (NUMBER OF INHABITANTS 2014)	D. DEMOGRAPHIC CHANGE 2014/2008 (%)	E. DENSITY (POP./ KM ² 2014)
1. All municipalities					
SPAIN	8 117	504 734	46 771 341	1.30%	92.7
ANDALUSIA	771	87 590	8 402 305	2.40%	95.9
% AND./SPAIN	(9.5%)	(17.4%)	(18.0%)	--	--
2. Of which, rural municipalities (<30 000 inhabitants and density < 100 inhabitants/km²)					
SPAIN	6 697	426 468	8 032 803	-2.06%	18.8
ANDALUSIA	584	69 800	2 043 391	-0.75%	29.3
% AND./SPAIN	(8.7%)	(16.4%)	(25.4%)	--	--
3. Of which, small rural municipalities (<5 000 inhabitants and density < 100 inhabitants/km²)					
SPAIN	6 348	345 430	4 675 902	-3.37%	13.5
ANDALUSIA	470	41 809	772 450	-3.13%	18.5
% AND./SPAIN	(7.4%)	(12.1%)	(16.5%)	--	--

Source: [Ministry for Agricultural Food and the Environment \(MAGRAMA\) \(2015\): Annual report on indicators: agriculture, food and the environment 2014](#) (Pages 22-28).

However, this methodology conceals the fact that as a whole Andalusia is predominantly rural. Based on national parameters¹, it is considered to be predominantly rural, with 79.7% of its area (69 800km²) taken up by '*rural municipalities*' (under 30 000 inhabitants and population density of less than 100 inhabitants/km²). This accounts for 17.4% of Spain's total area and 16.4% of its rural areas (**Table 3**). Moreover, '*smaller rural municipalities*' (under 5 000 inhabitants and a population density of less than 100 inhabitants/km²) account for 47.7% of Andalusia's territory.

Almost a quarter of its population (24.3%) lives in Andalusia's rural areas, with an average population density of 29.3 inhabitants/km², which drops even further in small rural municipalities (18.5 inhabitants/km²) (**Table 3**).

Between 2008 and 2014, the population of Andalusia's rural municipalities fell (-0.75%), especially in the small municipalities (-3.13%) despite an increase in the region's overall population (+2.40%) (**Table 3**).

¹ In Spain, the methodology for classifying areas as rural is based on Law 45/2007 on sustainable rural development, which establishes the categories of *rural municipalities* (under 30 000 inhabitants and population density of less than 100 inhabitants/km²) and '*small rural municipalities*' (under 5 000 inhabitants and a population density of less than 100 inhabitants/km²).

2. GENERAL MACROECONOMIC FRAMEWORK

2.1 Macroeconomic dimensions of the EU and Spain: comments

2.1.1 A stagnating euro area

According to the most recent Eurostat data, the euro area is still feeling the effects of the crisis and the inter-annual GDP for the *fourth quarter of 2015 rose by a mere 1.5%* (**Table 1 - B**). This was slightly better for EU28, which saw an increase of 1.8 % during the same period.

According to this data, the GDP of the 19 euro area countries is beginning to approach pre-crisis levels (early 2008). However, it is three-tenths below and growing at a slower pace than the United States' GDP (which reached pre-crisis levels in autumn 2011 and has grown by a further 10% since then because its monetary and tax policies are far more expansive than Europe's).

In March 2016, the European Commission warned that many euro area countries were experiencing '*excessive imbalances*': France and Italy (the second and third economies of the euro area), Bulgaria, Croatia and Portugal. It also identified macroeconomic imbalances, albeit to a lesser degree, in Germany, Slovenia, Spain, Finland, Ireland, the Netherlands and Sweden.

Neither plunging energy prices nor the falling value of the euro as a consequence of the European Central Bank's action has improved the macroeconomic data, which remain poor (**Table 1 - B**): in *February 2016 inflation in the euro area was -0.2%* (two-tenths down on the previous month) due to the collapse in oil prices, presenting a clear risk of further deflation; *inflation in the food, alcohol and tobacco sector is slightly better but has nevertheless fallen in the last two months (0.7 in February 2016; 1% in January 2016)*; *unemployment is still over 10% on average (and as high as 20% in Spain and Greece), as opposed to 4.9% in the United States)*; and, finally, recovery in EU28 is fragile and uneven.

Inter-annual GDP growth during the last quarter of 2015 was above 3.5% in only seven Member States of relative economic dimensions (Poland, 3.6%; Romania, 3.8%; Sweden, 3.9%; Slovakia, 4.0%; Czech Republic, 4.5%; Luxembourg, 5.4%; and Malta, 5.6%) whereas it was negative in Finland and Greece (-0.2% and -1.9% respectively). Above all, the growth powerhouses, with their synchronised cycles, recorded very lacklustre growth (United Kingdom, 1.9%; Germany and France, 1.3%; and Italy, 1%). It is significant that spending on construction is at a record low in some of the major European economies and business investment is falling.

Under these circumstances, *growth forecasts for the immediate future remain modest (1.4% for 2016, 1.7% for 2017 and 1.8% for 2018)*. This applies equally to *inflation projections, which are too low (0.1% for 2016, 1.3% for 2017 and 1.6% for 2017)* and indicate that the European economy is on the brink of deflation.

Thus the European economy is recovering very slowly while a whole range of risks are looming closer: deceleration in China and the BRIC economies in general (with the exception of India); the crisis facing exporters of raw materials (with negative capital flows); the loss of global liquidity (confirmed by the Bank for International Settlements (BIS) last March); plunging stock markets since the beginning of 2016, which have

reawakened doubts about the strength of the European bank and debt developments; or, finally, possible changes in North American monetary policy. Together, these factors could compromise Europe's return to growth and job creation if left unchecked.

Oil prices seem to have reached their lowest ebb, having fallen steadily for over 18 months, and are expected to rise gradually to reach EUR 60.50 per barrel (Brent) in 2017 (as compared to EUR 48.30 per barrel in 2015). However, the International Energy Agency (IEA) does not exclude further imbalances if uncertainty about the global economy persists and oil producing countries are unable to match global supply to demand.

The *European Central Bank* (ECB) strategy involving large-scale debt buybacks – the European version of quantitative easing (QE) – did not succeed in boosting the euro area's economy. The *decision taken by the ECB on 10 March 2016* deploys practically every single monetary policy measure in the book: 0% interest rates; negative interest rates for bank funds deposited with the ECB (-0.4) and monthly debt buybacks (public and private) amounting to EUR 80 billion. If these measures fail to have the desired effect, namely to prevent deflation and restore growth, the only alternative left will be to resort to fiscal stimulus, as repeatedly advocated by the G20, the ECB, the IMF and the OECD, and to improve the coordination of economic strategies at EU level. There are growing calls for a European investment plan that is more ambitious and better designed than the Juncker Plan in order to emerge from a slump which has gone on for far too long.

2.1.2 The Spanish economy: imbalanced growth

The abovementioned report, published by the Commission in March 2016, describes Spain as experiencing strong *macroeconomic imbalances, especially large stock imbalances* in the form of external and internal debt, both public and private, and high unemployment.

The figures relating to the recession's harsh legacy are clear (**Table 1 - B**): the *fiscal hole* shrank from 9.6% of GDP in 2011 to 5.9% in 2014 (and to 4.5% in 2015 according to recent provisional data from the Spanish government). However, the EU's deficit targets have yet to be met, which will require major adjustments during the coming months unless deadlines are relaxed; *private debt* has fallen by over 40% in recent years whereas *public debt* (consolidated for all authorities) has not fallen below 99% of GDP (2015 data); and finally, unemployment remains extremely high (20.5% of the working population in January 2016), this is almost twice the European average (10.3%), not to mention that 45% of the unemployed are aged under 25.

In this context, the main question is to consolidate sustained growth. The Spanish economic authorities have repeatedly argued that *growth of around 3%* could create jobs and meet the deficit and debt targets.

Spain's *inter-annual GDP variation* was 3.2% in 2015 compared with 2014 (3.5% if you consider the fourth quarter)². Growth in Spain was therefore twice as high than in the euro area (1.1% in 2015) and EU28 (1.5% in 2015). The Spanish economy has therefore experienced growth over ten consecutive quarters and at a significantly higher pace than its partners in the euro area. This would indicate that things are going according to the Spanish authorities' plans.

² However, agricultural GDP growth in 2015 was below global GDP: 1.9% for the year and 2.7% in the last quarter.

Nevertheless, as is the case for the rest of the euro area, private investment figures still do not invite optimism: corporate investment is still 50% below 2007 levels; the investment/sales ratio has fallen to 1995 levels and construction, which accounted for 15% of total sales, now barely reaches 2%.

The return to pre-crisis levels will demand a sustained long-term effort from the authorities and from businesses. Spain still needs to recover the 40% of GDP it lost, whereas, as will be explained, the euro area has virtually already achieved this (see 2.2.1). This difference is even starker in the case of employment: the Spanish economy has only recovered 24% of employment losses.

2.2 Andalusia's economy

2.2.1 Core indicators

According to Eurostat, *GDP per capita* in 2014 at current prices in Andalusia reached EUR 16 577 (**Table 1 - B**). If the EU28 per capita average is taken as a reference, measured in Purchasing Power Parity (PPP) (27 500 = 100), Andalusia, with EUR 18 500, is 33 points below EU *GDP per capita* (67%) and 24 points below the Spanish average (91%) (**Table 1 - B**).

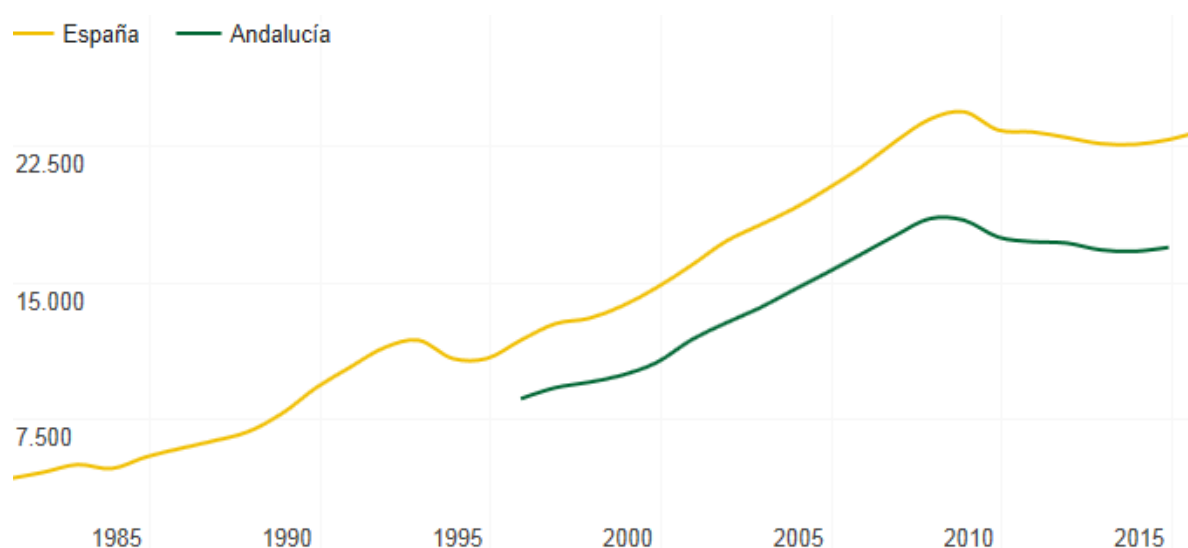
Of all the Autonomous Communities of Spain, only Extremadura had a worse index in 2014 (63%) whereas four were above the EU average: Madrid (125%), the Basque Country (119%), Navarre (113%) and Catalonia (108%). It should be stressed that in the previous year, 2013, six Spanish regions were above the average, which gives an idea of the deterioration caused by the crisis.

As is the case for the rest of the Spanish economy, the recession has had a harsh impact (**Figure 2**). In 1995, GDP per capita in Andalusia was 69% of the EU15 average and in 2010 it was 75% of EU27's. The reversal in the convergence process has been substantial.

If we restrict ourselves to just the internal situation, between 2008 and 2013, Andalusia's *GDP fell by -10.1%*, which is worse than the national average (-8,6%) but better than in another three Autonomous Communities: Asturias (-13.2%), Cantabria (12.7%) and the Community of Valencia (-12.4%). The differences between regional economic reversals are due to the considerable differences in their sectoral structures. Andalusia was affected by the collapse of the property bubble, especially in specific provinces, as well as by the overall economic slowdown. However, their impact was partially mitigated by external tourism and the primary sector's greater share of Andalusia's economy (see 2.2.2), which acted as a sponge for workers, soaking up a proportion of unemployment in the construction sector.

In 2014, Andalusia's economy began to recover, but at one of the slowest paces among the Autonomous Communities (1%) and *below the national average* (1.4%).

Furthermore, *unemployment*, which had risen to 34.6% in 2012, remained extremely high: in the fourth quarter of 2015 it stood at 29.8% of the working population even though the unemployment figure had fallen by 197 000 (**Table 1 - B**).

Figure 2: GDP per capita trends in Andalusia and Spain (in euro)Source: [Expansión](#)

2.2.2 Sectoral composition of Andalusia's GDP

As is traditional in developed economies, the *service sector* leads the way in Andalusia's economy, and accounts for 70% of its GDP, which is slightly less than for Spain as a whole (about 68%) (**Table 4**).

The most important feature of Andalusia's economy is the marked role played by the *primary sector*, which despite the fluctuations that characterise agricultural markets, accounts for a much higher percentage of its GDP (5.2% in 2013 and 4.5% in 2014) than in Spain (2.3% in 2013) or the EU (1.7% in 2013 in EU28). At the same time, the weight of the industrial sector is significantly lower than in Spain (**Table 4**).

The importance of the agricultural, forestry and fisheries sector is growing in terms of *employment*: 242 244 people (AWUs or *Annual Work Units*) are employed in the primary sectors (**Tables 5 and 6**), representing almost 30% of the national total (813 551).

In contrast with usual trends in developed economies, since 2010, there has been a gradual increase in the relative weight of *agricultural employment* since this sector has absorbed workers previously employed in sectors affected by the crisis (especially construction).

This last sector, as is the case for the rest of Spain, is experiencing a prolonged slowdown, currently representing 5.7% of regional GVA (**Table 4**).

Table 4: Comparison between the sectoral composition of Andalusia's and Spain's GDP (2013-2014)

2013 AND 2014 DATA (*)		ANDALUSIA		SPAIN		% ANDALUSIA / SPAIN 2014
		2013 (P)	2014 (A)	2103 (P)	2014 (A)	
GDP at market prices (in EUR millions)		138 585	139 099	1 031 272	1 041 160	13.4%
GDP per capita (EUR)		16 523	16 577	22 134	22 412	74.0%
GVA for agriculture, forestry, livestock farming and fisheries (primary sector) (in EUR millions)		7 140.4	6 296.1	26 560	23 903	26.3%
Sectoral share (%) of GDP	Primary sector %	5.2%	4.5%	2.6%	2.3%	---
	Industrial sector %	11.3%	11.1%	15.6%	15.5%	---
	Construction sector %	5.6%	5.4%	5.1%	4.9%	---
	Service sector %	69.3%	70.0%	68.0%	68.4%	---

(*) Data for sectoral composition of GDP calculated on the basis of each sector's contribution to total GVA. Data for 2013: provisional (P). Data for 2014: Advance (A).

Source: Spanish National Statistics Institute (INE) - Spanish Regional Accounts Base 2010 (GDP data updated on 23 December 2015 and GVA data for 3 July 2015).

3. AGRICULTURE AND THE FOOD INDUSTRY IN ANDALUSIA

3.1 Agri-rural Andalusia

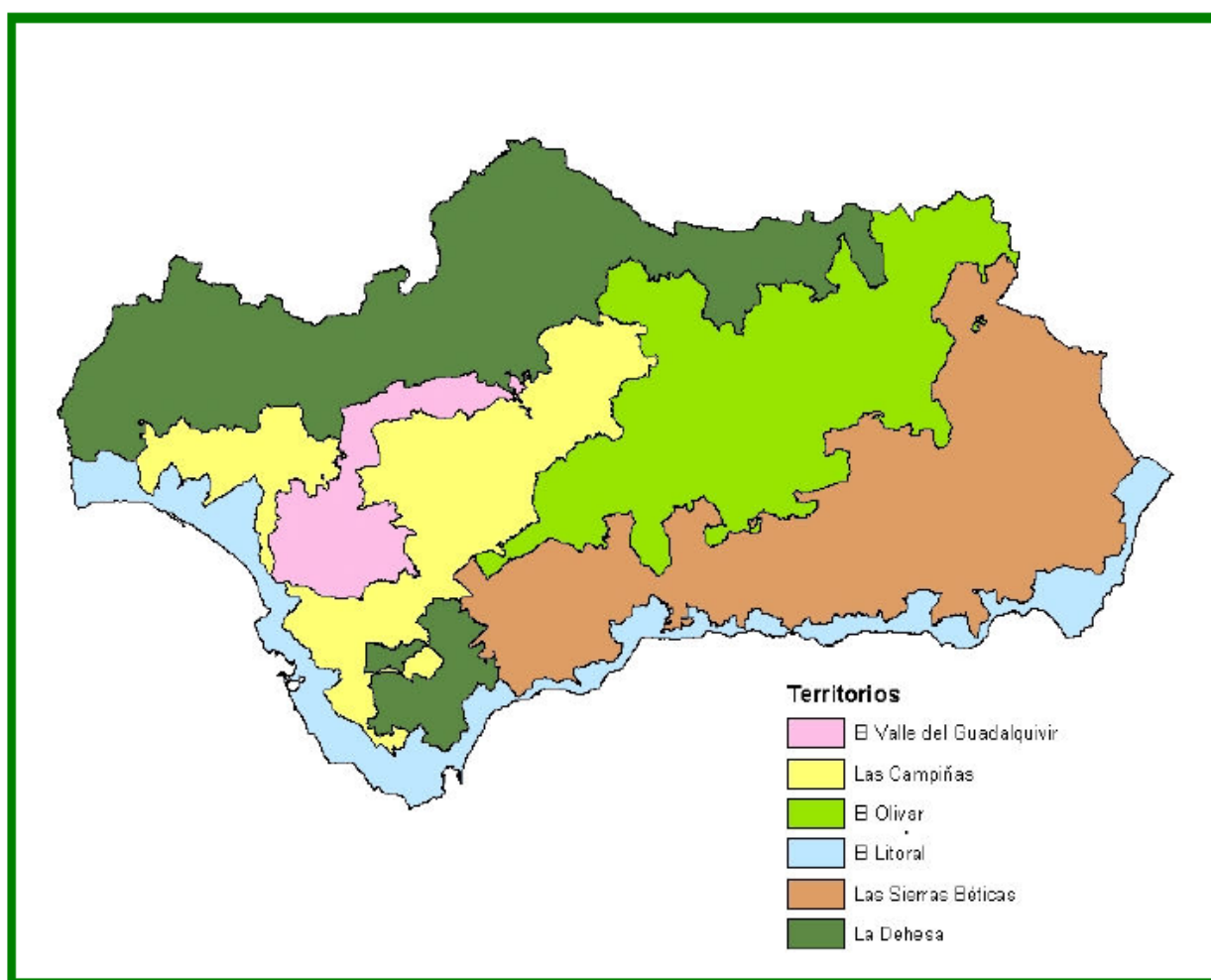
Andalusia's rural spaces can be divided into large relatively homogeneous areas according to their soil, landscape and climate, with dominant production and structures which, in turn, call for the priority application of specific CAP measures. Traditionally, six types of bioclimate can be identified (**Map 7**):

- *The Guadalquivir valley* (**Map 7**, in pink). This is a relatively small farming system (6.4% of Andalusia's Utilised Agricultural Area or UAA) is located at the beginning of the Guadalquivir Delta (**Map 3**) and accounts for barely 3.9% of all farm holdings. Its farmland benefits from a mild climate, very fertile soils and access to water, which is conducive to extensive and semi-extensive irrigation and extremely varied, high-yield production. Cereals (corn) predominate and fruit (citrus and stone fruit) are typically present. Traditionally, it has also been specialised in the cultivation of industrial crops such as sugar beet and cotton. In the waterlogged marshlands, the landscape is defined by rice fields.

- *The Campiñas farmlands* (**Map 7**, in yellow). Two agricultural areas can be distinguished: the first surrounds the Guadalquivir Delta and the second, further to the west, is in Huelva. Each of these areas can be subdivided into smaller units according to the level of specialisation in arable or permanent crops (vineyards, olive groves). The *Guadalquivir area* encompasses the farmlands of Córdoba and Seville. It constitutes a vast area for the cultivation of rainfed cereal crops, which is traditionally given over to wheat-sunflower crop rotation. From a structural point of view, it is characterised by the vast size of its holdings (latitudinal). Vines are also grown in the region, close to the centres of Jerez and Montilla-Moriles and, through direct support under the CAP, olive groves are gradually gaining importance. *The Huelva farmlands* are a transitional area between the *dehesa* woodland pastures in the north of this province (see below), with their typically extensive farming, and the more distant areas close to the coast, where production is more intensive. Vineyards and olive groves are also found in this area.

- *The Olive Groves* (**Map 7**, in green). This is the largest farming system, accounting for 25% of Andalusia's total UAA and 42.6% of holdings in the region. It is totally dependent on the cultivation of olives, which has a decisive impact on the economy of its municipalities, resulting in a social and labour market model that is marked by rural seasonal employment and underemployment. It comprises most of the land given over to this type of production in Andalusia (a total of over 1.5 million hectares), which is why it has become known as the *eje del olivar* (olive grove axis), with Jaén at its centre. This highly specialised production system spans a vast area, which allows for a considerable variety of situations ranging from *olive groves with very high yields* (with access to irrigation, intensive use of inputs and highly mechanised) and *low-yield or marginal olive groves*, with significant physical and structural constraints (lack of water, poor soils, steep slopes etc.).

Map 7: Andalusia's farming systems



Source: [2014-2020 RDP for Andalusia – current situation analysis](#) (page 61)

- *The Coast* (**Map 7**, in light blue). Its excellent climate, with mild temperatures and low hail risk, is suitable for small-scale intensive horticulture, as well as for the production of strawberries and cut flowers. These types of production make extensive use of greenhouses and continue throughout the season, providing a steady flow of exports to other European countries. In the subtropical Mediterranean area (**Map 5**), there is also shrub-based production such as the cultivation of avocados or custard apples. It is worth noting that direct CAP support has had little influence over agricultural development in this area, which is markedly capital intensive, totally market-oriented and underpinned by its farmers' and organisations' innovation and growth (in productive and commercial terms). However, it is highly exposed to climate change and water scarcity is a key constraint, especially in the areas that are most dependent on overexploited aquifers in marked decline.

- *The Baetic ranges* (**Map 7**, in brown). This system is marked by its vast size (21% of UAA) and structural uniformity (22.4% of Andalusia's holdings). This is due to its diverse terrain, with contrasting temperatures due to the presence of high land and areas with very low rainfall since the mountains form a barrier that intercepts rainy fronts. However, its soils are unsuited to farming and prone to erosion. In

agricultural terms, extending as far as the north-east, in the Sub-Baetic mountains (**Map 3**), there is a transitional agricultural area connecting with the Guadalquivir valley, where there are olive groves. In the gaps between the mountains, the climate is milder and there are areas of low-yield cereal production, mixed rainfed and irrigated farming and typical rainfed areas, where olive groves predominate. In addition to agricultural production, extensive livestock production, mainly sheep farming, is fairly important, with a good proportion of land given over to pasture. Due to the mountainous terrain, there is little forest industry but hunting and tourism are becoming increasingly important (sometimes with strong links to the vast protected sites – **Map 11**).

- *The Dehesa (Mediterranean woodland pastures)* (**Map 7**, in dark green). This is a typically Mediterranean agrosilvopastoral ecosystem. It mainly centres round Sierra Morena and the surrounding valleys, in the north, and the slopes of the confluence of the provinces of Seville, Cádiz and Málaga (**Map 2**). It occupies 20.9% of total UAA, similar in size to the Baetic system, but with fewer holdings (9.3% of the total in Andalusia). Extensive livestock farming predominates: there are approximately 6 500 holdings on the dehesa with livestock populations of 972 000 sheep and goats, 381 000 pigs and 223 000 head of cattle. The soil is not very suitable for agriculture, which is why, in general, agriculture only plays a complementary role, similar to forestry and hunting. As a result, the dehesa rural economy is a distinctly multifunctional system, where livestock breeding is combined with the exploitation of timber (from holm oak) and cork (from cork oak), mushroom harvesting, game hunting or rural tourism. UNESCO has classified 35.3% of the total dehesa area as a Biosphere Reserve and it is also part of the Natura 2000 network of protected areas. The greatest constraints on this ecosystem stem from the lack of woodland regeneration, soil deterioration due to lack of fertilisation and, in some cases, the intensification of livestock breeding.

Andalusia's entire territory resembles a patchwork because of the vast '*empty spaces*' with marginal or low agricultural productivity, interspersed with dynamic centres which, like poles of competitiveness, link up their immediate agri-rural surroundings (such as the area watered by the Guadalquivir, the farmlands of Seville and Córdoba, high-yield olive groves, certain wine-growing areas, or the intensive farming areas along the coast lines of Almería and Huelva).

From a central European perspective, this is a unique phenomenon and confirms the important role that the agri-food industry plays in Andalusia's economic development and regional structure.

3.2 The strategic role of irrigation

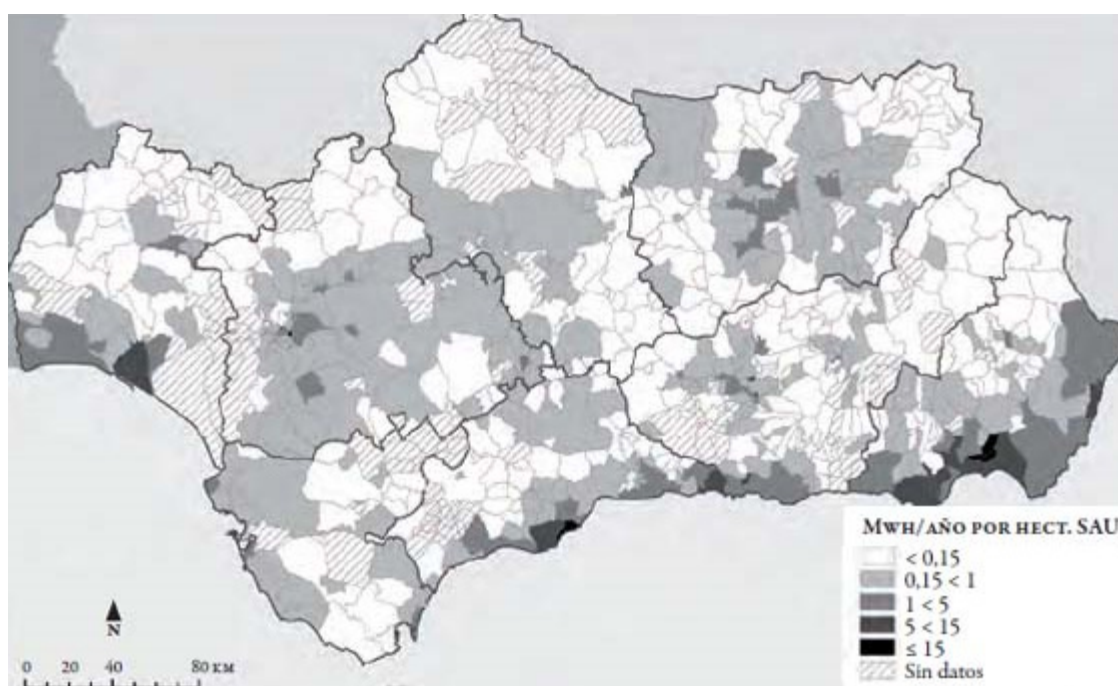
Access to water is a decisive factor in the regional distribution of agricultural production in Andalusia. Irrigation plays a strategic role in the region's agricultural sector and Andalusia's economy in general.

Andalusia has a total territory of 8.76 million hectares. Only half of this is Utilised Agricultural Area (UAA) or suitable for cultivation, which includes *one million hectares of irrigated land* (equivalent to a quarter of UAA in Andalusia and 29.3% of irrigated land in Spain).

While the regional aspect of irrigation is inherently important, its *socio-economic relevance* is, if anything, even more important. More than 64% of Andalusia's agricultural production is derived from irrigation, generates 67% of farm income and accounts for 63% of the agricultural employment. This makes efficient water use crucial to the sustainability of rural areas.

Since 1995, over 350 thousand hectares of irrigation networks (43% of the existing network at that time) have been modernised, resulting in average water savings of 720 m³/Ha. Furthermore, based on data ensuing from on-site inspections carried out by Andalusia's ministry of agriculture, estimated investment support for modernisation under the last Rural Development Programme (2007-2013) has made it possible to reduce water consumption per hectare by 9.4%.

Map 8: Energy consumption in the farming sector
(Megawatts / Time / Year / Utilised Agricultural Area in hectares)



Source: [Multifuncionalidad agraria y territorio. Algunas reflexiones y propuestas \(EURE, Vol. 36, No 109, December 2010\)](#)

There are different types of irrigated farmland in Andalusia: *traditional orchards*, frequently irrigated with groundwater and situated close to villages and usually geared to the farmers' own consumption or local markets; *irrigated plains and coastal areas* (the Granada plain, subtropical coast and greenhouses), where surface water and groundwater are mixed; and the *new Baetic irrigation systems*, linked to the Guadalquivir Basin, which mostly date back 50 years and are used to ensure a regular and adequate water supply to farmers. The last group includes, inter alia, the rice fields and marshlands and the vast agricultural estates of the *Campiñas* (**Map 7**).

Since irrigation is energy-intensive, one way of measuring irrigation roll-out and intensity is to establish the number of megawatts (MW) used per hectare of UAA. **Map 8** shows that energy consumption is highest along the coast. It is no surprise that the highest gross margins for each area in Andalusia are to be found in this area (intensive irrigation in Almería and along the Atlantic coast, citrus and subtropical production along the coast of

Cádiz, Málaga and Granada), which enables its farmers to cope with growing water and energy costs.

3.3 Main types of production

Andalusia has 4 368 998 hectares of *Utilised Agricultural Area* (UAA), representing 18.7% of national UAA (23 300 221 hectares - data for 2013). It also has over 1.5 million *livestock units* (LSU) (calculated by applying a coefficient to each species), amounting to 10.9% of total livestock in Spain (**Table 5 – I.C**).

This agricultural area is shared among 244 566 *farm holdings*, making up 25.3% of the total for Spain (965 002 hectares) (**Table 5 – I.A**). Ownership is the most common form of tenure (87% of holdings); much higher than leasing or share farming.

Crops have a higher value than livestock: at EUR 8 738.7 million in 2014 (82% of final production – FP in 2014) as opposed to 1 597 million for livestock (15% of FP).

Some forms of agricultural production can fluctuate considerably from one year to the next for climatic (drought) or botanical reasons (*alternate or biennial bearing* in olive trees). Besides this aspect, the highest contributing sub-sectors to Andalusia's FP in 2014 were: *olive oil* (EUR 2 301 million, significantly higher than the previous year's EUR 788 million); *vegetables* in general (EUR 2 878 million); *table olives* and for pressing (EUR 620 million in 2014, a bad harvest if compared to 2013 harvest, at EUR 913 million); *citrus fruit* (566 million); and *cereals* (EUR 543 million).

It is worth highlighting that the economic value of these crops does not always correspond to the amount of land used for their cultivation. *Five crops* take up most cultivated land and are an indication of the particular regional specialisation of Andalusia's rainfed, Mediterranean agriculture. (**Table 5 - II**): mainly *olives*, generally for oil (taking up 1.5 million hectares and 58.7% of the national total); followed by *industrial crops*, especially *cotton* (391 375 ha); then *wheat* (313 377 ha), and *sunflowers* (296 848 ha) and *almonds* (152 621 ha).

The categories of *livestock production* with the highest number of animal units are: *poultry* farming, mainly for meat, with 13 million chickens); *sheep and goats* (milk and meat), with 3.3 million animal units (leads at national level in terms of production and number of holdings); *pig* farming, with 12.5 thousand holdings and almost 2.2 million which are exemplary (7.8% of the national total) and cattle, with 10 328 holdings and 547 573 animal units (**Table 5 - III**). *Beekeeping* is also very important, representing 22% of all bee houses in the country.

Since the livestock sector is relatively smaller than crop farming sector, in terms of *intermediate consumption*, the most substantial input for Andalusia's holdings is, by far, *feed* (30% of total expenditure), due to the intensive structure of many holdings and the steady rise in raw materials.

Table 5: Structural data for Andalusia's agri-food industry

I. HOLDINGS (Survey on structures 2013)	(A) Total No/holdings	(B) UAA average (ha) by holding	(C) Livestock Units (LSU)	(D) Average AWU by holding	(E) Average TSO by holding (EUR)	(F) Total AWU
	244 566	18.12	1 580 548	1.0	33 178	242 244
II. CULTIVATED SURFACE AREA (in ha) (Survey on surface areas 2015)	Olives	Industrial crops	Wheat	Sunflowers	Almonds	Oranges
	1 497 233	391 375	313 377	296 848	152 621	60 471
III. LIVESTOCK FARMING (Animal units) (SITRAN report, July 2015)	Meat chickens	Sheep	Egg laying chickens	Pigs	Goats	Cattle (beef and dairy)
	11 624 779	2 299 890	2 256 611	2 186 279	1 028 082	547 573
IV. FOOD INDUSTRY, DRINKS AND TOBACCO (Industrial survey 2013)	Total employment	% employed/total industrial sector	Added value (in EUR thousands)	% added value of Andalusia's total industrial sector	Turnover (in EUR thousands)	% of turnover of the industrial total
	47 118	23.8%	2 250 285	17.0%	13 870 113	19.7%

Abbreviations: **UAA:** Utilised Agricultural Area (arable and permanent crops); **AWU:** Average Work Unit; **LSU:** Livestock Unit (calculated for each species using coefficients); **TSO:** Total Standard Output of the holding (monetary value/EUR). (See definitions in footnotes 3 and 4).

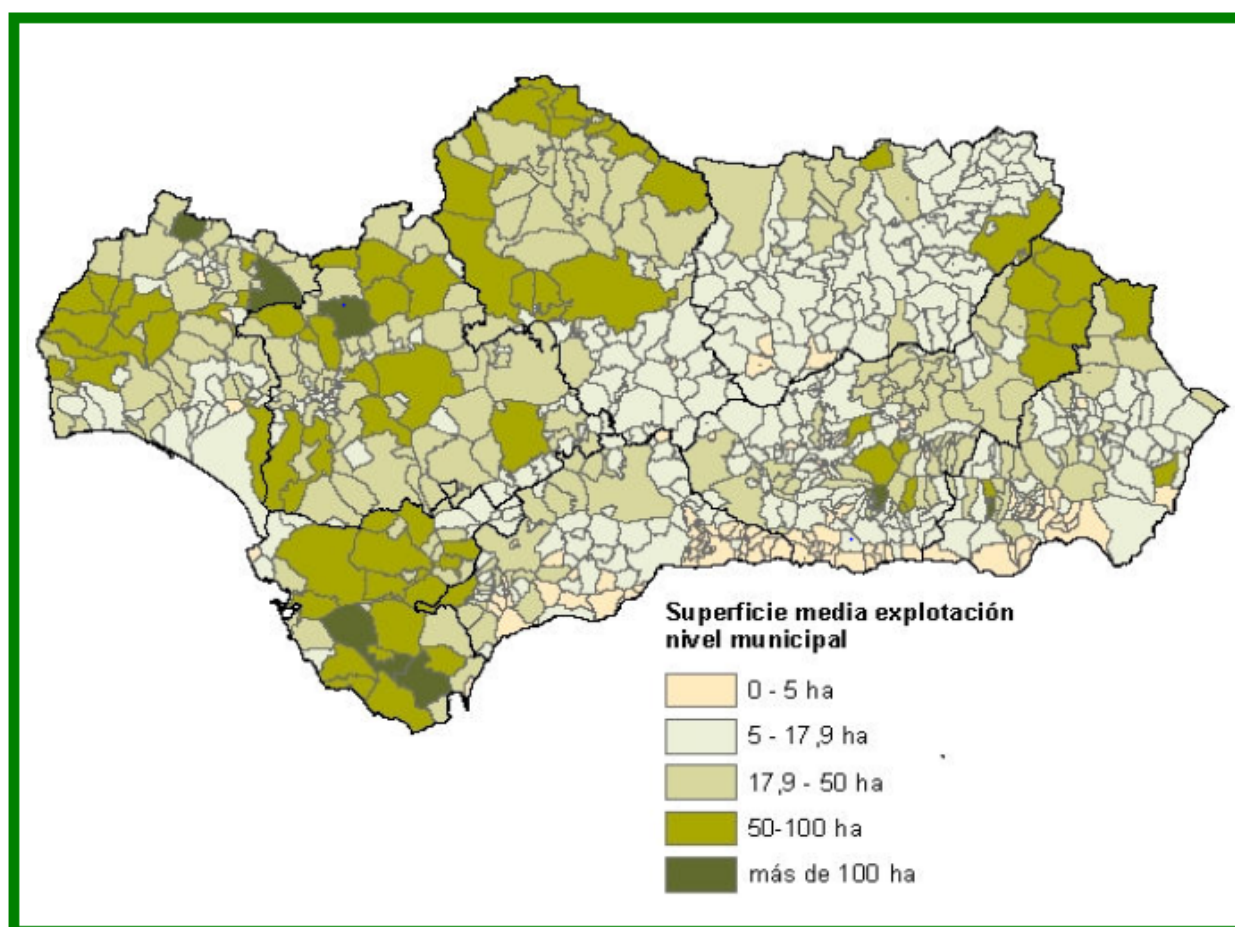
Source: Ministry for Agriculture, Food and the Environment (MAGRAMA: Regional dossier on the Autonomous Community of Andalusia, January 2016) as adapted by the author.

3.4 Structural profile and competitiveness

As is the case with the farming sectors of all developed countries, the structural adjustment of Andalusia's agricultural sector is unavoidable and the number of holdings is falling steadily: 272 755 in 1999 as opposed to 244 566 at present (see 3.3). However, this decline in the number of holdings has had a slight impact on the size of the average holding (19.25 ha in 1999; 18.12 ha in 2013) (**Table 5 – I.A** and **I.B**). This is because the UAA has also fallen significantly (4 928 766 ha in 1999; 4 368 998 ha in 2013).

The average UAA per holding is currently lower, at 24.7 ha, than the national average and above the EU28 average of 14.3 ha (**Table 5 – I.B**).

Map 9: Average surface area per holding at municipal level S (ha)



Source: [2014-2020 RDP for Andalusia – current situation analysis](#) (page 65)

Fifty-six percent of holdings have less than five hectares of UAA (which occupy only 7.1% of the total surface area). At the other extreme, barely 3.5% of holdings have over 100 hectares of UAA, but these hold 50.8% of total UAA in Andalusia.

Smaller holdings are situated in municipalities where intensive horticulture, tropical fruit, cotton, fruit (except the citrus variety) and olive farming predominate. The most extensive holdings are usually engaged in livestock or extensive rainfed crop farming (**Map 9**).

With regard to *agricultural systems* (see 3.1 – **Map 7**), the largest holdings are located in the *dehesa* system, and cover areas exceeding 40 hectares. *Coastal* holdings, on the other hand, are the smallest (about 9.6 hectares on average) (**Map 9**).

In terms of structural and competitiveness, Andalusia's agriculture is marked by its dual nature: farms operating with little capital and run mainly by family members on a part-time basis, employing little outside labour, and facing serious structural constraints on their modernisation coexist alongside capitalised intensive farm holdings that employ labour and can incorporate the changes (technological and commercial) required by increasingly open and dynamic markets.

It should be emphasised that *physical* size (hectarage) is not always the main difference between these types of farms. The most important is *economic* size, which, moreover, depends on the type of production and regional setting (access to water, terrain, proximity to populated centres or consumer markets, available services and infrastructure, degree of cooperative organisation, etc.). This context illustrates that there are *a range of opportunities for structural development* which make it possible to achieve the economic size needed to be able to ensure competitiveness: economic diversification (several activities); low-cost farming; increased size and economies of scale; specialisation in niche markets (quality schemes), intensification, etc.

The *average economic* size of a holding in Andalusia (measured as *Total Standard Output or TSO*) ⁽³⁾ is EUR 33 178, somewhat below the national average of EUR 37 284 (**Table 5 – I.E**). The Standard Output of 70% of holdings is below EUR 15 000. The Standard Output of about a quarter is between EUR 15 000 and EUR 100 000. Only 6% of holdings have a TSO exceeding EUR 100 000.

The holdings with the highest SO, which are therefore the most competitive, are engaged in greenhouse production (vegetables, strawberries and flowers) and livestock farming (broiler chickens, dairy cows, pig fattening and breeding). Holdings with a lower SO focus on extensive rainfed crops: nuts (almonds) and low-yield olive groves.

The agricultural system with the best results in terms of SO is the *coastal system* despite the small size of its holdings: half of them have an SO between EUR 15 000 and EUR 100 000 and 15% have an SO exceeding EUR 100 000. This is because they are highly specialised in intensive farming (vegetables, fruit and flowers) (see 3.1 – **Map 7**).

The holdings with the smallest economic size are to be found in the *olive farming* system due to the significant presence of marginal or low-yield olive groves (see 3.1 – **Map 7**): almost half of them have an SO below EUR 15 000 and 33% have an SO between EUR 15 000 and EUR 100 000.

It should be remembered that a holding's *job-creation capacity* falls in proportion to its diminishing economic size. In terms of employment, Andalusia has 242 244 AWUs⁴, which means that the average holding employs 1 AWU on average, which is above the average for the Spanish agricultural sector as a whole (0.8 AWU per holding) (**Table 5 – I.D**).

³ *TSO: Total Standard Output*. Total monetary value of production corresponding to the average for a given regions for each type of holding. The values are calculated by multiplying production per unit by the farm-gate price (excluding VAT, taxes on products and direct payments).

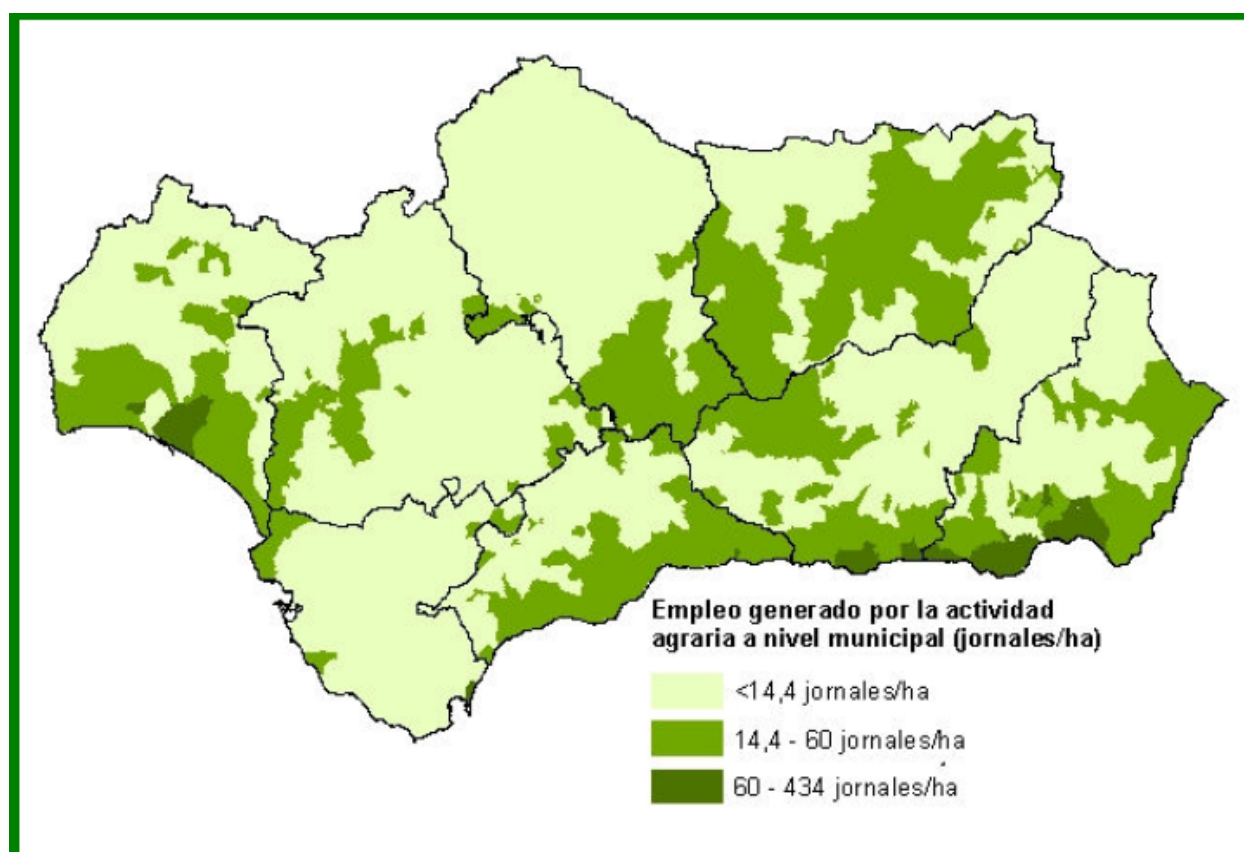
⁴ *AWU: Annual Work Units*. An AWU corresponds to the work performed by one person working on a holding on a full-time basis throughout the year (1 826 hours).

The UAA-AWU ratio improved slightly from 19.25 in 1999 to 18.0 in 2013. This means that Andalusia's agricultural sector has evolved from requiring 19.25 hectares per AWU in 1999 to requiring 18 hectares per AWU in 2013. This improvement occurred despite the previously mentioned fall in registered total UAA and basically because employment (number of AWUs) did not change as much (256 089 AWUs in 1999; 242 244 in 2013).

Nevertheless, about 73% of Andalusia's *holdings generate less than one AWU*. In these cases the work is carried out by family members (owners or contributors) which in Andalusia's case accounts for about 50% of total AWUs.

It is no coincidence that the holdings with the highest number of family members providing the owner with farm labour are generally the ones with the lowest SO: nuts, low-yield olive groves, and for livestock, goats. This type of work consists in providing help as and when needed and, with regard to crops, is very seasonal (collecting olives or almonds). At the other extreme, the holdings that create most employment (days or AWUs) per hectare, usually for a wage, are located in the irrigation areas: greenhouses on the Atlantic coast, citrus and subtropical farming on the Mediterranean coast, the greenhouses of Almería, and the vast inland estates given over to citrus fruit and to high-yield olive groves (**Map 10**).

Map 10: Employment generated by farming activity at municipal level (by day per hectare)



Source: [2014-2020 RDP for Andalusia – current situation analysis](#) (page 69)

Furthermore, family farming in Andalusia is affected by the problem of *generational renewal*, just as it is in the rest of Europe. The steadily ageing farming population and declining uptake among young people is a widespread phenomenon throughout the region

and across all types of production, with two significant exceptions: *intensive coastal farming* and the *olive growing 'comarcas' of Jaén and Córdoba*.

The main difference between these cases is that the intensive farming along the coast mainly concerns privately owned and independent holdings, whereas the strong expansion of olive cultivation in the areas mentioned has been bolstered and promoted by direct support under the CAP. This *dependence on public support*, combined with the widespread growth in the supply of oil (of many different qualities), has put Andalusia's olive industry as a whole on a dangerous path if, as it would seem, payments per hectare are to be gradually harmonised downwards. The most at risk are the small-scale, low-intensity olive groves, which do not have the competitive advantages of larger, more modern and more productive holdings.

On the other hand, *intensive coastal farming* will have to step up the ongoing restructuring of its greenhouses since the infrastructure is sometimes over 25 years old and, logically, they are not achieving the same yield per square metre as their competitors outside the EU.

3.5 The food industry and retail sector

Andalusia's food industry mainly consists in primary processing, which depends directly on farming activities that are tied and therefore strictly linked to the region. Its role is therefore crucial to the economic and social structure in rural areas.

Andalusia's agricultural sector serves a food industry that employs 23.8% of workers in this part of the region. This makes the agri-food industry Andalusia's leading industrial sub-sector in terms of generating employment. The agri-food industry also accounts for 19.7% of *general industrial turnover*, 17% of Industrial Added Value in Andalusia and almost a *quarter of the jobs created* (**Table 5 - IV**).

It is nevertheless important to emphasise the impact of the crisis on this sector: in 2008 agri-industrial GVA was EUR 3 171 million, significantly higher than the EUR 2 250 million mentioned in the 2013 industrial survey (**Table 5 - IV**). In terms of employment, Andalusia's agri-food industry held out somewhat better than the other economic sectors and lost comparatively fewer jobs: the number of people it employed fell from 52 500 in 2006-2008 to slightly above 47 000 in 2013 (**Table 5 - IV**).

The agri-food industry's vulnerability to the crisis was undoubtedly accentuated by its excessive fragmentation, which still prevails: 83% of its 5 400 agri-industrial establishments employ under ten workers, which leads to lower productivity, which undermines their competitiveness (innovation) and negotiating power vis-à-vis retail distribution.

In *economic terms*, the main food sub-sector is fats and oils, both in terms of turnover (EUR 5 292 million) and value added (EUR 662 million) (**Table 6**). It is followed, in descending order of turnover by the meat industry, fruit and vegetable preserves, alcoholic beverages (excluding wine), the sub-sector comprising bread, bakery, and pastry products, water and non-alcoholic beverages, grain mill products and animal feed (**Table 6**). This classification does not apply in *employment terms*: the bread-making, baking and pastry industry is by far the biggest employer (13 610 workers), followed by the meat; the fats and oils; and fruit and vegetable preserve industries (**Table 6**).

In light of its economic and social importance, Andalusia's rural development plans (RDP) traditionally incorporate measures to modernise the agri-industrial sector (see 5.3).

Table 6: Andalusia's food industry in figures (2013)

SUB-SECTORS (By turnover)	Turnover (in EUR 1000)	%	Added Value (in EUR 1000)	%	Workers employed	%
Fats and oils	5 292 440	38.1	662 023	29.5	7 127	15.1
Meat industries	1 712 641	12.3	239 582	10.6	7 232	15.4
Vegetable preserves	1 219 459	8.8	190 358	8.5	4 582	9.7
Alcoholic beverages (excluding wines)	875 894	6.3	202 774	9.0	1 743	3.7
Bread, bakery and pastry products	777 523	5.6	295 715	13.1	13 610	28.9
Water and non- alcoholic beverages	761 704	5.5	180 299	8.0	1 597	3.4
Grain mill products	671 654	4.8	86 146	3.8	1 076	2.3
Animal feed	655 753	4.7	48 979	2.2	779	1.7
Dairy products	573 060	4.1	78 166	3.5	1 856	4.0
Miscellaneous products	423 044	3.1	41 186	1.8	2 301	4.9
Fish processing	371 457	2.8	79 663	3.5	1 918	4.0
Wines	304 587	2.2	73 128	3.3	1 574	3.3
Sugar, chocolate y confectionery	230 897	1.7	72 266	3.2	1 723	3.6
FOOD INDUSTRY TOTAL	13 870 113	100	2 250 285	100	47 118	100
ANDALUSIA'S INDUSTRY TOTAL	70 273 485	--	13 236 793	--	197 658	--

Source: INE, Industrial Survey of Enterprises 2013.

It is also important not to lose sight of the vital role played by cooperatives in certain agri-industrial sub-sectors. The recent *national law on the promotion of cooperative integration* could boost inter-regional projects that give agri-industrial cooperatives (Spanish in general and Andalusian in particular) greater capacity to change and better negotiating power vis-à-vis large-scale retailers. Although the specific objective is to promote the merger of cooperatives in different Autonomous Communities, a number of Andalusia's cooperatives have played a prominent role in some of the most recent mergers: 'DCoop' ('Hojiblanca') for examples has become Spain's largest oil and wine operator; and 'Ovispain' has become the main marketing company for lamb.

The national cooperative integration plan accompanying the 2013 law also receives support from the European Agricultural Fund for Rural Development (EAFRD) under the 2014-2020 RDP, to be added to Andalusia's RDP (see 5.3).

The fragmentation of the agricultural sector (244 566 holdings) and the food industry (5 400 businesses) is faced with a highly concentrated *food retail industry*, as is usual in developed economies. In 2015 the market share of the three main retail firms was 43%: *Mercadona* (20.6%), *DIA* (13.6%) and *Covirán* (9.1%). This percentage is undoubtedly high but significantly below those in other Autonomous Communities. For instance, the three main operators control 68.9% of retail supply in the Basque Country, 63.2% in Asturias, 61.8% in La Rioja and 61.2% in the Balearic Islands.

3.6 Quality food schemes

In Andalusia, there are many regional specialities which are covered by food quality schemes: *Protected Designation of Origin* (PDO), *Protected Geographical Indication* (PGI) *Geographical Indication* (GI), *Traditional Speciality Guaranteed* (TSG) and various classifications (e.g. *Vinos de la Tierra* or *Vinos de Calidad*). Examples of protected specialities include cured ham from Huelva, oil from Priego de Córdoba, wine from Manzanilla-Sanlúcar de Barrameda, brandy, wine and vinegar from Jerez (Xérès -Sherry) (**Figure 3**), Mantecado cakes from Estepa or Andalusian mackerel.

Figure 3: PDO logos Jerez



Source: Consejo Regulador or regulating board responsible for the Jerez – Xérès - Sherry PDO

The sectors with most designations are olive oil (12 PDOs) and viticulture (6 PDOs for wine, 3 DPOs for vinegar 1 PGI and 5 GIs for spirit drinks, 16 for *Vinos de la Tierra* and 2 for *Vinos de Calidad*). Hams and cured pork shoulders account for 2 PDOs, 1 PGI and 1 TSG. Fruit and vegetables have 1 PDO and 2 PGIs.

In addition to labels for regional specialities there are also *organic or integrated farming* labels, namely Andalusia's *certified quality* label (covering 2 500 products that can demonstrate that they apply specific quality controls) the *natural parks label* (to facilitate the marketing of the products and services of national parks) (see 4.1 - **Map 11**).

Organic production has experienced rapid growth in recent years. In 2013 there were 10 081 operators (mostly farmers), almost twice as many as in 2005. This is about a third of organic operators registered in Spain and makes Andalusia the region with the highest number of businesses in this segment of the food supply chain.

A total area of 786 000 hectares is classified as organic, practically half the area in Spain. Furthermore, there are 3 794 livestock farms or 60.60% of the total number in Spain. The organic farming industries are mainly concerned with fresh fruit and vegetables and the bottling of olive oil.

Despite these figures, organic production in Andalusia is still very dispersed, mainly in the hands of small businesses (in many cases craft businesses), volumes are generally small and its position is weak in terms of sales and distribution. As a result, there is considerable scope for improving supply and the its production and marketing structures. The two pillars of the CAP can contribute to meeting these objectives through its measures for promoting organic production, which were strengthened following the 2014 reform.

3.7 External trade in agri-food products

A good proportion of agri-food production in Andalusia is exported. This amounted to a value of EUR 8 636 million in 2014, equivalent to 21.22% of total Spanish exports (**Table 7 - I**). There are years when it is ahead of other Autonomous Communities in terms of agri-food exports, or in second place, as occurred in 2014. In 2009 trade fell sharply as a result of the global economic downturn, but subsequently recovered. Traditionally, the most common exports are fresh produce (fruit and vegetables) or primary processing products (oils, wines and preserves).

On the other hand, Andalusia uses its trade position on the markets to import a wide range of products, either for processing and distribution throughout the peninsula or for its own consumption.

Its *agri-food trade balance* is unequivocally positive (a total of EUR 5 567 million in 2014), making a decisive contribution to Spain's net agricultural export balance (**Table 7 - III**).

The main destinations for these *agri-food exports* are the markets of the European Union. Nevertheless, since 2009, in order to mitigate the impact of the recession in traditional consumer markets, the search for new markets was stepped up and exports to third countries have gradually diversified.

As the global market leader for olive oil, its main exports come under the *fats and oils* heading, to the point that it accounts for over a quarter of foreign sales (**Table 7 - I**). The other two main headings are *vegetables*, with a percentage weight that compares with fats, and *fresh fruit* (**Table 7 - I**). These three headings (fats, fruit and vegetables) account for 70% of total agri-food exports. Other important headings, in descending order, are beverages, meat products, fisheries products (fish, crustaceans and molluscs) and cereals (**Table 7 - I**).

With regard to import flows, *fisheries products* stand out and, once again, *fats and oils*, due to its strong processing industry which in this way, takes advantage of its consolidated marketing channels (**Table 7 - II**).

Table 7: Agri-food exports for Andalusia and Spain (2014 in EUR thousands)

TRADE TARIFF HEADING (*)	ANDALUSIA	%	SPAIN	% ANDALUSIA/SPAIN
I. TOTAL AGRI-FOOD EXPORTS, of which, in descending order:	8 636 822.13	100.00	40 709 164.51	21.22%
15. Fats and oils	2 288 400.70	26.5%	3 677 708.96	62.22%
07. Vegetables	2 230 013.54	25.8%	4 768 167.68	46.77%
08. Fruit	1 591 599.10	18.4%	6 980 360.73	22.80%
20. Vegetable preserves and juices	630 468.44	7.30%	2 579 973.68	24.44%
22. Alcoholic beverages (excluding wines)	272 538.59	3.2%	3 749 611.04	7.27%
02. Meat products	252 534.64	3.0%	4 217 178.00	5.99%
03. Fisheries products	215 136.89	2.5%	2 256 778.99	9.53%
21. Prepared foodstuffs	193 259.32	2.2%	1 346 932.71	14.35%
10. Cereals	140 133.91	1.6%	400 009.75	35.03%
04. Dairy products	90 866.92	1.1%	1 180 758.07	7.70%
Other headings (*)	2 731 870.08	31.6%	9 551 684.90	---
II. TOTAL AGRI-FOOD IMPORTS, of which, in descending order:	3 089 713.22	100.00	30 981 635.78	9.97%
03. Fisheries products	455 408.65	14.7%	4 449 050.69	10.24%
15. Fats and oils	446 060.04	14.4%	1 717 471.58	25.97%
23. Residues from the food industries	272 789.51	8.8%	1 677 224.94	16.26%
08. Fruit	271 245.54	8.8%	2 045 580.46	13.26%
22. Alcoholic beverages (excluding wines)	257 972.09	8.3%	1 709 995.39	15.09%
10. Cereals	245 059.36	7.9%	2 362 395.76	10.37%
17. Sugars and sugar confectionery	228 042.68	7.4%	891 362.95	25.58%
12. Oilseeds	180 643.88	5.9%	2 123 872.12	8.51%
02. Meat products	58 715.48	1.9%	1 138 903.17	5.16%
Other headings (*)	673 775.99	21.8%	12 865 778.72	---
III. AGRI-FOOD TRADE BALANCE (I-II)	5 547 108.91	---	9 727 528.73	---

(*) Agriculture and fisheries trade: Chapters 01 to 24 of the Trade tariff classification

Source: [DATACOMEX](#) (Ministry for the Economy and Competitiveness) as adapted by the author

4 THE NATURAL HERITAGE AND THE ENVIRONMENT

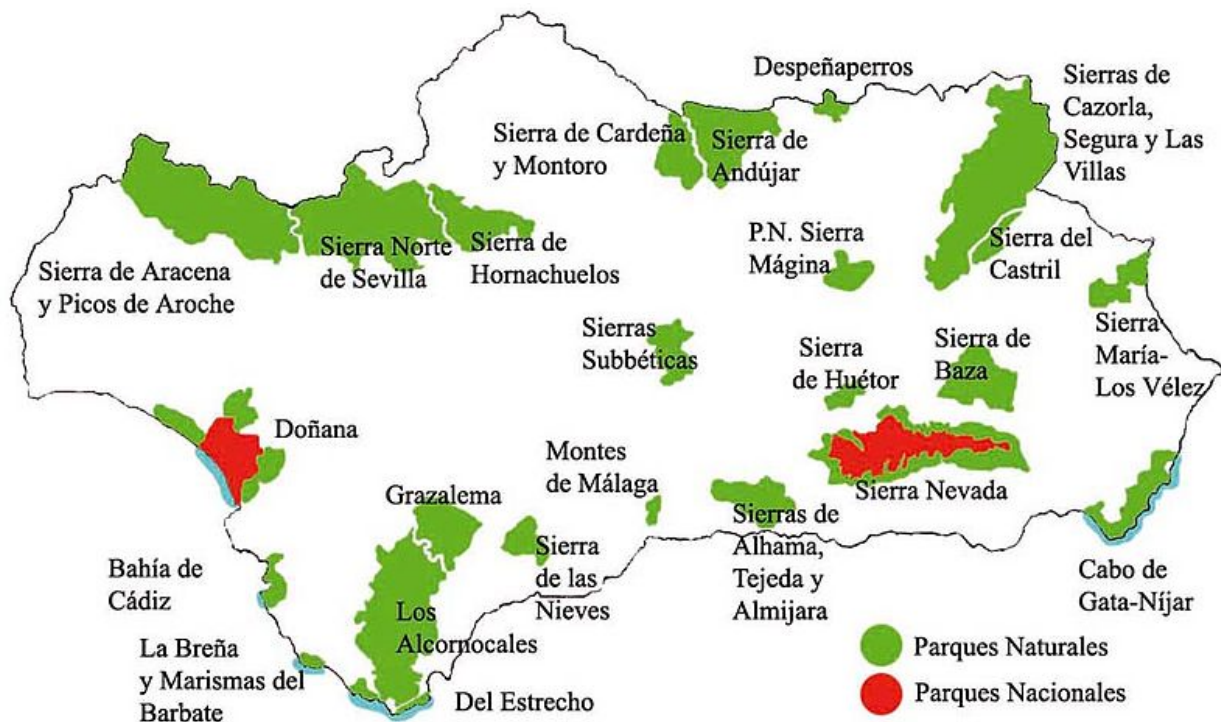
4.1 Biodiversity and its protection

Andalusia's landscape is the outcome of a long history of human occupation and the ploughing of the best land at the expense of forests. Despite intense human occupation, Andalusia has retained considerable biodiversity of flora and fauna and has many protected natural areas.

With regard to flora, Mediterranean woodlands predominate and are characterised by evergreens and xerophytes, which are adapted to summer droughts. *Holm oaks* are the most common trees in these types of forest, but cork oaks and pines also abound. Olive and almond trees are the most commonly cultivated species. In the wetter areas with acid soils, the oak can also be found and commonly cultivated species include the eucalyptus and, in the Vega de Granada, the poplar.

With regard to fauna, over 400 of Spain's 650 vertebrate species are to be found in Andalusia. The large indigenous herbivores include red deer, fallow deer, roe deer and the mouflon. The smaller herbivores include the hare and the rabbit which constitute the bulk of the diet of most carnivorous species in Mediterranean woodlands.

Map 11: National and natural park in Andalusia



Source: [Wiki media](#)

The large carnivores like the wolf and the Iberian lynx are now restricted to the national parks of Doñana, in the south-east, and Sierra Morena and Despeñaperros, in the north (**Map 11**). The smaller carnivores (such as the otter, fox, badger, amongst many others) are to be found in much larger numbers and different conservation situations, depending on the area. Wild boar populations are growing fast and are increasingly important for hunting.

Its strategic position between the Mediterranean basin, the Atlantic Ocean and the Straits of Gibraltar places Andalusia on a natural flyway used by thousands of birds migrating between Europe and Africa. As a result, Andalusia's wetlands are rich in birdlife, with African species (like flamingos) mingling with species from northern Europe (like geese). Its birds of prey include the Spanish imperial eagle, the griffon vulture and the kite.

In order to protect its biodiversity, Andalusia has a wide variety of protected areas which are part of *Andalusia's network of protected areas* (RENPA): a total of 163 areas, spanning a total of 1 702 393 hectares (20% of Andalusia's territory) are under some form of national or regional protection.

Areas classified as *national parks* receive the highest level of protection. They are located in ecosystems representing plant life, habitats or geological settings that are exceptionally rich in flora, fauna and/or scenic interest. They are also largely untouched by human activities. Two of the 14 parks incorporated in *Spain's network of national parks* (RPNE) are located in Andalusia (**Map 11**, in red):

The *Sierra Nevada National Park* (Granada) is the largest in the RPNE (total area of 86 206 hectares and 22.6% of the RPNE) and is typical of Mediterranean middle-altitude mountain ranges, featuring traces of glaciers and Alpine pastures; and

The *Doñana wetlands* (Cádiz) comprises 54 251 hectares of coastal marshlands, shifting dunes and typical vegetation of pines and cork oaks, rich fauna (Iberian lynx, red deer, flamingos, ducks etc.).

Another form of protection concerns *natural parks*, which seeks to combine the conservation of areas with special flora, fauna or landscapes with the controlled use of their resources. Andalusia has more natural parks (24 in total) in its eight provinces (**Map 11**, in green) than any other region in Spain. The largest in Andalusia and in Spain is the Sierra de Cazorla, Segura y las Villas Natural Park in the north-east. Others worth mentioning include the Cabo de Gata-Níjar Natural Park and the Tabernas sub-desert, which are both in the province of Almería, in the south-east.

There are also regional parks, which are entirely specific to the region, and concern virtually unaltered ecosystems that are worth protecting for their natural or tourism value in the context of the region's natural environment.

These internal biodiversity protection arrangements complement those of the Natura 2000 network at EU level.

It should be stressed that Spain is the Member State with the highest proportion of land covered by this network (13 783 613 hectares), much of which is in Andalusia. Andalusia's Natura 2000 sites include 195 *Sites of Community Importance (SCIs)*, 63 *Special Protection Areas (SPAs) for birds* and 30 *Special Conservation Areas (SACs)*. In total, they span over 2 657 358 hectares, including 2.588.588 hectares on land (18.8% of Spanish total) and 68 770 hectares of marine areas (0.9%). This therefore accounts for 29% of Andalusia's territory (and 11% of UAA, including 285 000 hectares of arable land and 135 000 hectares of olive groves).

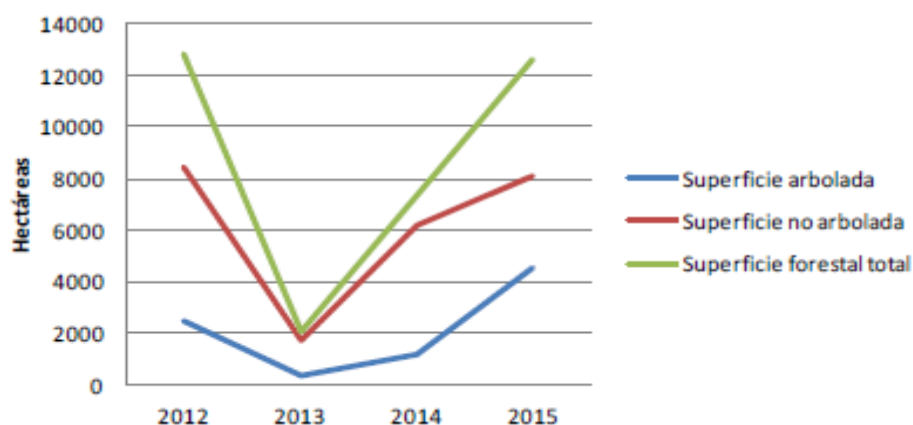
4.2 Challenges for environmental sustainability

Despite the numerous forms of biodiversity protection, certain environmental problems persist.

Environmental organisations, for instance, claim that bird populations, a good indicator of environmental quality, have declined by 34% since 1998. Andalusia's *catalogue of threatened species* list 570 cases (taxa) of land vertebrates (mainly birds) and higher plants. There are recovery plans for each species. The Iberian lynx, for example, is native to Andalusia and has two isolated populations in Doñana and Sierra Morena of only 95 individuals in 2002. It is now no longer considered to be '*critically endangered*', but only '*endangered*', with a wild population of about 400 individuals, thanks to a captive breeding programme.

Forest fires present a real challenge while their frequency and the surface area affected can vary considerably from year to year, depending on the weather conditions (**Table 4**). In 2015, for example, 12 650 hectares of forest area caught fire (13.5% of the total affected area in Spain for the same period). Between 150 and 200 fires each year have been reported in Andalusia in recent years. This is precisely why forest restoration is standard agricultural policy in Andalusia: in the last 20 years 291 768 hectares have been reforested.

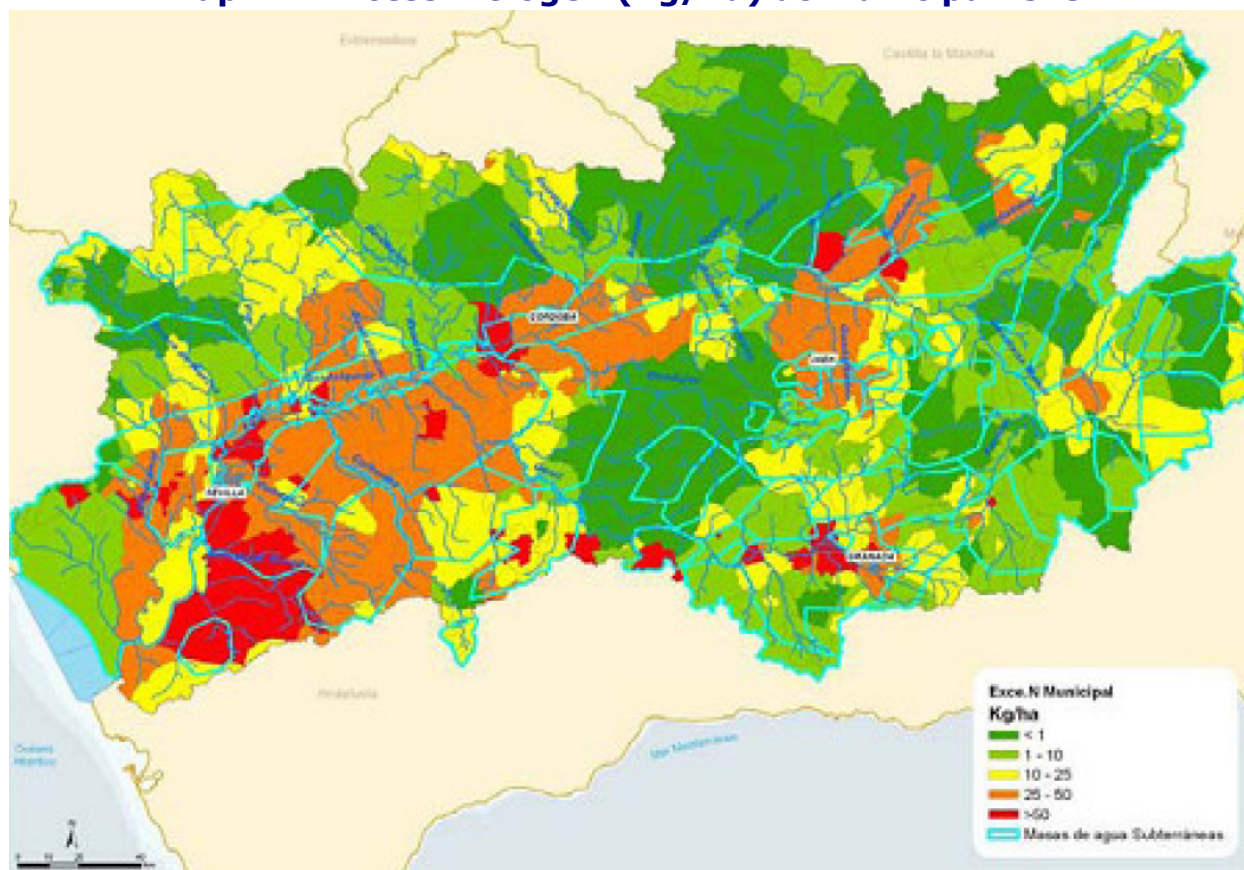
**Figure 4: Annual variation in fire-affected areas
(in hectares – 2012 – 2015)**



Source: [MAGRAMA, 2016](#)

Forest fires aggravate advanced *soil erosion and desertification* processes affecting many areas. Some 42.4% of Andalusia's territory experiences moderate (10-25t/ha per year) to severe (over 25t/ha) soil losses. The average annual rate of soil erosion is around 5.9 t/ha, much higher than the average for Spain (3.5 t/ha) and the EU (2.8 t/ha for EU27).

Access to *water* is also a problem. Some 47.3% of total water resources come from aquifers, which are far too often overexploited. Water pollution caused by run-off from crop or livestock farming is also quite significant, especially along the lower Guadalquivir (**Map 12**). The areas designated as *Nitrate Vulnerable Zones* comprise 1.6 million hectares, i.e. 18.3% of Andalusia's territory.

Map 12: Excess nitrogen (Kg/ha) at municipal level

Source: [2014-2020 RDP for Andalusia](#)

Andalusia's geographical location makes it particularly vulnerable to climate change. Overall, the region's *total greenhouse gas emissions* have fallen in recent years (53 762 kt of CO₂ equivalent in 2011, 14.8% of the national total), mainly due to the economic recession. Furthermore, emissions from agricultural sources (including livestock farming) are not particularly high (5 773.3 kt of CO₂ equivalent, 10% of total for Andalusia, in line with average figures for Spain and the EU). Nevertheless, projections confirm that the impact of climate change on Andalusia's natural environment and agricultural sector is set to get worse in the future. The irregular spatio-temporal distribution of rainfall, which is already substantial, will be exacerbated and have a direct impact on available water for agriculture (which currently consumes 81.2% of water resources) and the quality and extent of the wetlands. The risk of forest fires will rise which will accelerate erosion processes.

Ongoing efforts to mitigate climate change must be stepped up in the future. Andalusia's agri-environmental policies will have to give more importance to promoting the carbon sequestration potential of farming and forestry; adapting farming practices to protect the soil; improving energy savings on farms; exploiting the vast biomass potential (estimated at 3 958 ktoe in 2013) or using of irrigation water more efficiently.

The considerable heritage value of Andalusia's rural environment and the economic activities relating to its conservation and protection constitute sources for green employment that offer many future and highly interesting opportunities for bringing down rural unemployment rates. Recent years have witnessed the growing development of business initiatives aimed at waste management, recycling and depollution, eco-friendly products, and sustainable forestry activities.

Significantly, Andalusia's RDP for 2014-2020 prioritises a number of agri-environmental measures. This does not alter the fact that in absolute terms, its budget is lower than it was for the 2007-2013 period (see 5.3).

5 THE CAP AND ANDALUSIA

5.1 The Multiannual Financial Framework for 2014-2020 and the CAP

For the first time in the Union's history, the 2014-2020 Multiannual Financial Framework (MFF) has resulted in a *reduction in the EU budget*. This has had a direct impact on the first policy in terms of expenditure, which had the side-effect of reducing funds allocated to Spain *at constant prices*.

With regard to direct payments, Spain slightly reduced the total amount with respect to the previous period (-2.3%) because of the smaller CAP budget, external convergence between States (in favour of the Baltic countries and Portugal) and Croatia's accession. However, this was below the EU average (-2.8%) and Spain maintained its percentage for total direct payments (11.9%), placing it in third place after France (18%) and Germany (12%) (**Table 8**). This data refers to initial allocations, prior to transfers between the two CAP pillars (which vary considerably between States) and the application of annual reductions resulting from financial discipline to secure resources for the crisis reserve.

Table 8: Direct payments initially allocated to Spain: comparison between 2007-2013 and 2014-2020 (in EUR millions at constant prices 2011) (*)

	A. 2007-2013	% EU27	B. 2014-2020	% EU28	VAR. % B/A
SPAIN	32 472	11.9%	31 725.	11.9%	-2.3%
EU27	272 775.	100	--	--	-2.8%
EU28	--	--	265 127	100	--

(*) Data for 2007-2013 has been harmonised for the purposes of comparison. Including funds concerning POSEI, cotton and transfers concerning wine-producing regions to the first pillar.

Source: EP, Policy Department B "European Council Conclusions on the Multiannual Financial Framework 2014-2020 and the CAP", PE 495.846, July 2013, p. 44.

With regard to *rural development, at constant prices*, Spain has lost 9.7% of its funds with respect to the previous period. At EU level, this reduction is somewhat higher -(11.1%). Nevertheless, Spain's share of total EU rural development funds has improved slightly from 8.5% to 8.7% (**Table 9**).

The situation changes once *transfers between the pillars* are applied and calculations are made *at current prices*. The transfer between the two CAP pillars carried out by Member States constitutes a *net result* that benefits rural development policy by EUR 4 billion for the entire 2014-2020 period. The total amount available for EU28 rises from EUR 95 338.10 billion (initial allocation in the MFF) to EUR 99 343.26 billion (**Table 10 - B**).

Table 9: European Rural Development Funds initially allocated to Spain: comparison between 2007-2013 and 2014-2020 (in EUR millions at constant prices 2011) (*)

	A. 2007-2013	% EU27	B. PERIOD 2014-2020	% EU28	VAR. % B/A
SPAIN	8 161.8	8.5	7 368.3	8.7	-9.7%
EU27 EU28	95 545.4 ---	100 --	--- 84 936.0	100 --	-11.1% --

(*) Data harmonised for the purposes of comparison, including technical assistance and specific compensation granted to each State (EUR 500 million for Spain) and compulsory modulation applied in 2007-2013.

Source: EP, Policy Department B "European Council Conclusions on the Multiannual Financial Framework 2014-2020 and the CAP", PE 495.846, July 2013, p. 45 and 58.

Table 10: European rural development funds initially allocated to Spain following transfers between the two pillars: comparison between 2007-2013 and 2014-2020 (in EUR millions at current prices) (*)

	A. 2007-2013			B. 2014-2020			VAR. % B/A
	2007	2013	Total 2007- 2013 (A)	2014	2020	Total 2014-2020 (B)	
SPAIN	286.65	1 284.26	8 053.07	0.0	1 183.39	8 297.38	+3.0%
EU27 EU28	10 873.9 --	14 788.9 --	96 244.1 --	-- 5 264.72	-- 14 299.18	-- 99 343.26	+3.2%
% SPAIN/ EU	2.6%	8.7%	8.36%	--	8.27%	8.35%	--

Source: European Commission. Updated in February 2016

Spain decided not to reduce direct payments in order to increase funds under the second pillar in 2014-2020. Nevertheless, the final budget for rural development increases slightly due to other sectoral transfers to a total of EUR 8 297.38 millions (**Table 10 - B**). Unlike the situation at constant prices (**Table 9**), *at current prices there is a 3% improvement in the budget with respect to 2007-2013 (Table 10)*. Nevertheless, if you compare the *two final years of each financial period* (2013 and 2020), its percentage within the total for rural development policy is reduced (from 8.7% in 2013 to 8.27% in 2020) (**Table 10**).

Spain remains the *fifth largest recipient of rural development funds*, despite changes to the ranking of beneficiaries. In 2007-2013, the main recipient was Poland (13.9% of the total), followed by Germany (9.4%), Italy (9.3%), Romania (8.4%), Spain (8.36%) and France

(7.9%). In 2014-2020, the ranking of the main beneficiaries of the EAFRD is significantly different: France moves to the top (11.4%), followed by Italy (10.5%), Germany (9.5%), Poland (8.7%), Spain (8.27%) and Romania (8.1%).

5.2 EAGF support for agriculture in Andalusia

5.2.1 The new Spanish model for the application of direct payments

The new Spanish model for the application of direct payments for 2014-2020 is of a very particular nature. Its main objective is undoubtedly to *minimise redistribution* among farmers and Autonomous Communities. The Spanish authorities themselves estimated, when adopting new system, that the reallocation of rights would affect less than 1% of 2013 beneficiaries.

In order to minimise the reallocation, they made the following decisions.

- No supplementary conditions are added to the definition of an '*active farmer*' and the list of entities barred from receiving support is not extended. The *minimum threshold* for receiving payments is set at *EUR 300* (in 2017).
- *No funds are transferred from the first pillar* (direct payments) to the second pillar (rural development).
- *The surface area required to be eligible for payments is set below its potential threshold.*
- The new system does not include payments for producers and areas involved in the cultivation of *vines, fruit and vegetables* which did not receive support in 2001/2012.
- The *greening payment* is calculated individually for each holding (as a percentage of total basic payments received). The three arrangements for receiving the greening payment are not complemented by '*equivalent measures*'. Permanent crops (such as olives) are not subject to the conditions for the greening payment.
- The *additional payment for the first hectares* of each holding ('*redistributive payment*') are not applied, nor are the optional payments for areas with natural constraints.
- Only the options available under the *small farmers scheme* are to be applied, at payments below *EUR 1 250* (354 000 recipients, 42% of the total, which will be excluded from internal convergence) and *payments coupled to production* (for a total of 12.08% of the national payments).
- The minimum criteria for reducing payments and *capping* are to be applied. The *maximum threshold for farm income payments* is set at *EUR 300 000* (excluding the greening payment), deducting labour costs and accommodating the characteristics of farm co-ops (cooperatives). Amounts are to be reduced by 5% starting from *EUR 150 000*.
- Finally, a *uniform model for the application of direct payments* across the State has been adopted, with arrangements that are quite different from any others in the EU. In order to attenuate internal convergence between holdings, it was decided to *regionalise the basic payment* on the basis of over 300 '*comarcas*'⁵ and four different types of land areas (irrigated land, rainfed land, permanent cropland and pastures). To minimise the substantial differences in the amounts, identical amounts per hectare

⁵ '*Comarcas*' are fairly homogeneous agronomic areas already used for the regionalisation of direct payments in 1992.

are attributed to the areas that have similar amounts so that in the end there are only slightly more than 30 categories or levels of support. This means that each beneficiary may hold up to 4 different types of entitlement per agricultural 'comarca' (depending on the type of land), with different amounts per hectare. The *internal convergence of payments per hectare among holdings until 2019* begins when the individual allocations of entitlements are made to each holding. Nevertheless, a preventative measure has been established to ensure that current recipients of very high amounts do not lose more than 30%. Those receiving amounts that are below average will see a minimum increase of up to 60% of the unit amount for their Autonomous Community. Those situated between 60% and 90% of the average will see an increase of one third of the difference up to 90% of the average unit amount.

Andalusia opted for a similar application model to the one adopted by the Spanish government for fear of lowering the values of its entitlements (higher than the Spanish average) and being obliged to transfer part of its direct payments to other Autonomous Communities. When the new model for the internal application of payments was being negotiated, its priority objective was to ensure that it remained the top-ranking Spanish region as a recipient of the *European Agricultural Guarantee Fund (EAGF)*.

Judging from the outcome, it is likely that in 2014-2020, Andalusia will receive a similar total amount in direct payments as in 2007-2013. Although it is impossible to exclude changes in certain holdings and territories, these will be isolated cases and will not significantly alter overall figures up to 2020.

Data available for financial year 2015 corroborate this assessment.

5.2.2 Direct payments and agriculture in Andalusia

We are currently in the middle of a transition from a single payment scheme (SPS) to a direct payment scheme of a multifunctional nature. This means that the data from the *European Agricultural Guarantee Fund (EAGF)* combines payments under the pre-reform schemes with others, which have been rolled out gradually this year.

In any case, and as will be explained, the volume of EAGF payments to Andalusia do not present major fluctuations. Generally speaking, Andalusia receives almost one third of the payments granted to Spain under the first pillar of the CAP.

Table 11: Single payment entitlements – financial year 2014

SINGLE PAYMENT ENTITLEMENTS IN 2014	ANDALUSIA	SPAIN	% ANDALUSIA /SPAIN
Total amount of entitlements (in EUR millions)	1 411.75	4 473.87	31.56%
Number of beneficiaries	270 358	865 649	31.23%
Number of entitlements	3 485 539	17 120 911	20.36%
Average value/beneficiary (EUR)	5 222	5 168	---
Average value/entitlement (EUR)	405.03	261.31	---

Source: Spanish agricultural guarantee fund (FEGA), June 2015.

Single payment entitlements – the main form of EAGF support under the pre-reform CAP – for Andalusia in 2014, accounted for 31.5% of the total amounts received by Spain (**Table 11**). The number of beneficiaries (31.2%) is of a similar magnitude. It should be pointed out that Andalusia's average values in terms of payment entitlements is far higher than the Spanish average (EUR 405 compared with EUR 261), due to the higher historical references for some of its crops (corn and olives) (**Table 11**).

According to the applications submitted under new payment scheme, the number of potential beneficiaries in Andalusia is slightly lower (266 346) than in 2014 (270 358), albeit less so than for Spain as a whole (**Table 12 - A**). Nevertheless, its national ranking remains unchanged (31.6% of the Spanish total). Some 43% of beneficiaries are '*small farmers*' (114 215) (**Table 12 - B**).

Table 12: Number of potential recipients of direct payments based on applications submitted in 2015

	(A) NUMBER OF APPLICATIONS SUBMITTED	(B) ESTIMATED BENEFICIARIES UNDER THE SMALL FARMERS SCHEME	(C) % SMALL FARMERS OUT OF THE TOTAL NUMBER OF BENEFICIARIES (% B/A)
SPAIN	842 353	354 074	42.0%
ANDALUSIA	266 346	114 215	42.8%
% ANDALUSIA/ SPAIN	31.6%	32.2%	---

Source: Spanish agricultural guarantee fund (FEGA).

Based on the data for 2015 concerning total EAGF payments received in from January to December, Andalusia received 28.2% of transfers to Spain (**Table 13**). In terms of financial weight, the most noteworthy are *decoupled payments* (**Table 13 - 1**): the new scheme established in 2015 represents 71% of the total, to which the remaining single payments under the pre-reform CAP (2.8%) should be added. The new direct payments account for a third of the total received by Spain (32.4%).

Other important aspects for the Autonomous Community are the different payment schemes for the *fruit and vegetable* sector (5.8%) area-based support and support for the *restructuring of the cotton sector* (5%).

Table 13: EAGF support for Andalusia and Spain (2015)

EAGF PAYMENTS IN 2015 (*) (CALENDAR YEAR IN EUR THOUSANDS)	ANDALUSIA	SPAIN	% ANDALUSIA / SPAIN
TOTAL EAGF EXPENDITURE, of which,	1 275 152.32	4 520 487.09	28.2%
1) NEW DECOUPLED PAYMENTS, including,	1 042 269.70	3 212 583.61	32.4%
<i>Basic payment</i>	645 208.33	2 207 587.24	
<i>Greening payment</i>	336 716.41	1 029 579.54	
<i>Payment for young farmers</i>	237.81	3 488.02	
<i>Payment for small farmers</i>	60 107.15	151 928.81	
2) SINGLE PAYMENT (DECOUPLED) (residue from the pre-reform CAP)	35 988.56	122 950.01	29.3%
3) SUPPORT/ARTICLE 68 (pre-reform CAP)	18 208.60	111 170.92	16.4%
4) FRUIT AND VEGETABLES including, inter alia, <i>PO operational funds</i>	73 924.31	229 628.76	32.1%
	63 021.91	195 047.84	
5) COTTON	64 816.37	64 901.10	99.8%
6) WINE AND ALCOHOL including, inter alia, <i>Restructuring and conversion of vineyards</i> <i>Promotion in third countries</i>	6 038.86	211 182.16	2.8%
	3 124.49	80 199.68	
	1 954.84	45 020.84	
7) PREMIUM FOR SUCKLER COWS	2 864.85	115 145.75	2.5%
8) PRIVATE PIGMEAT STORAGE	226.08	3 673.30.	6.1%
9) FINANCIAL DISCIPLINE REFUND	30 506.19	74 733.19	40.8%
10) OTHERS (**)	308.80	374 518.29	0.1%

(*) Payments made during calendar year 2015 (January to December): since this is the first year that the new CAP is applied, support from the two schemes overlap in 2014 and 2015.

(**) "Other regionalised payments" including the total for recoveries and expenditure (minus sign) and other payments (plus sign).

Source: Spanish agricultural guarantee fund (FEGA), Support received in 2015.

5.3 EAFRD support for agriculture in Andalusia

5.3.1 RDP financial framework for 2007-2013 and 2014-2020

The sectoral conference for agriculture (which brings together national and regional authorities responsible for agri-rural policies) decided on the distribution of EAFRD support among the Autonomous Communities in 2014.

Andalusia was the only Spanish region to see a reduction in its EU contribution to its Rural Development Fund (RDP) for 2014-2020 compared with the budget allocated for 2007-

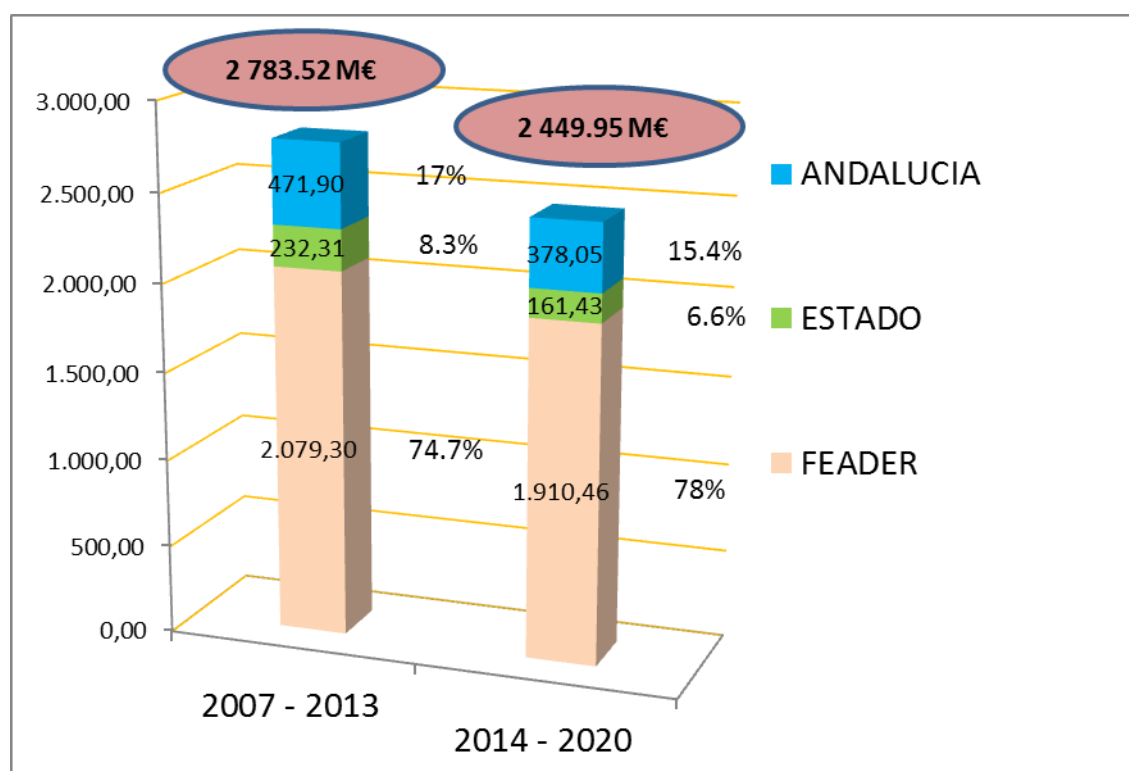
2013 (around EUR 200 million). Despite this reduction, Andalusia remains by far the best-funded Spanish region in terms of RDP (with almost 24% of total EAFRD support for Spain).

Table 14: Financial data for Andalusia's Rural Development Programmes for 2007-2013 and 2014-2020

RURAL DEVELOPMENT PROGRAMME	Public contribution (in euro at current prices)			
	Total public expenditure (I+II+III)	EAFRD	II. National general administration	III. Regional government of Andalusia
(A) RDP 2007-2013	2 783 524.727 Of which: - co-financed expenditure: 2 713 820 967 Additional regional funding: 69 703 760	2 079 305 289 (74.7%)	232 314 006 (8.3%)	471 905 432 (17.0%)
(B) RDP 2014-2013	2 499 957 176 Of which: - co-financed expenditure: 2 449 957 176 Additional regional funding: 0 0	1 910 461 300 (78%)	161 435 948. (6.6%)	378 059 929 (15.4%)

Source: Adapted by the author from RDP financial statements for 2007-2013 (version of 11 September 2015) and 2014-2020 (version approved by the Commission)

Figure 5: Comparison between Andalusia's Rural Development Programmes for 2007-2013 and 2014-2020 (in EUR millions)



Source: Created by the author, based on data in Table 14.

Total public expenditure for *RDP 2014-2020* (EAFRD + national co-financing amounted to EUR 2 783.5 million, of which almost 75% comes from the EAFRD (**Table 14 and Figure 5**). The overall reduction in the RDP budget compared with 2007-2013⁶ should be noted.

The previously mentioned reduction in EAFRD support allocated by the sectoral conference to Andalusia combine with strong budgetary restrictions affecting the authorities (national and regional). The final outcome is a reduction of EUR 283.5 million in public expenditure compared with 2007-2013 (**Table 14**).

5.3.2 Andalusia's RDP priorities for 2007-2013 and implementation rate

Andalusia's 2007-2013 RDP, still under implementation, is subdivided into five strands. The first strand consists of measures for improving the *competitiveness of the agricultural and forestry sector*. The second strand is geared to *improving the environment and countryside*. The third strand focuses on the *quality of life in rural areas and the diversification of the rural economy*. The fourth strand covers the *EU Leader initiative*. Finally, the fifth strand includes technical assistance.

The priority strand of Andalusia's RDP for 2007-2013 is the second (*the environment*), which accounts for over half of RDP public expenditure (EUR 1 484.27 million, 54.6% of the total). It relies on the two key RDP measures in financial terms: *agri-environmental measures* (EUR 713.8 million) and *prevention and restoration of forests following natural disasters* (EUR 400.7 million).

The second strand (*competitiveness*) is the second RDP priority, accounting for 31% of total public spending (EUR 842.7 million). The most important measures in this strand from a budgetary perspective are *investment in infrastructure* (EUR 364.5 million), measures to promote the added value of farm and forestry products (EUR 175.2 million) and the modernisation of farm holdings (137.6 million).

Emphasis should be placed on the importance of the fourth strand (Leader), aimed at promoting local development strategies, which accounts for 11.3% of total public spending (EUR 307 million).

The third strand, which seeks to promote *quality of life in rural areas and economic diversification*, barely accounts for 1.6% of total expenditure (EUR 44.7 million) and focuses mainly on the conservation and improvement of the cultural heritage.

The possibility of using Leader funds for 2007-2013 RDPs came to an end on 31 December 2015. According to the most recent financial data available, the implementation rate for Andalusia's RDP is 95% of the total budget (EUR 1 974 million). This implementation rate is below the national average. It will be necessary to wait for the next statements to verify whether there has been a loss of funds. According to data (provisional) from December 2015, there is a risk of losing EUR 105 million Leader funds (**Table 15**).

The best implementation rates concern the first and second strands and the worst concern the third strand (*quality of life in rural areas and economic diversification*).

⁶ The comparison is based on the latest version of the 2007-2013 RDP (September 2015), which includes all the additional funds from the 2009 CAP Health Check, the CMO for wine, as well as the adjustments to contributions from the State and the government of Andalusia to the initial financial planning. See **Table 15** for details.

Table 15: Implementation rate for Leader in the 2007-2013 RDP (in EUR millions and cumulative percentage at 31.12.2015)

Initial allocation	(b) New funds 2009	(c) Transfer from national RDP	(d) Decommitt ments	(e) Current RDP (a+b+c-d)	(f) Expenditure declared at 31.12.15	Unused funds at 31.12.2015 (e – f)	% of unused funds (g/e)
1 881.74	216.32	19.74	38.5	2 079.3	1 974.18	105.13	5%

Source: European Commission.

5.3.3 RDP priorities in Andalusia for 2014-2020

The 2014-2020 RDP has only just got under way. The strands of the previous RDP have been replaced with *priorities*.

The main priority for Andalusia in budgetary terms is the fourth (*Restoration, conservation and improvement of ecosystems linked to farming and forestry*). Total public expenditure amounted to EUR 921.87 million (equivalent to 37.7% of the total available amount). Agri-environmental measures are the best funded (with a total budget of EUR 328 million – 13.4%), action against soil erosion (EUR 201.5 million – 8.2%) and water management (EUR 166 million – 6.8%) (**Table 16**).

The second priority (*Improving the viability and competitiveness of holdings*) occupies the second place on the Autonomous Community's list of objectives, with a total amount of public expenditure of EUR 524.36 million, of which 434.4 million are Leader funds. The principle measures concern investment in the modernisation of holdings (EUR 283.7 million, equivalent to 11.6% of total public expenditure) and support for young farmers setting up holdings (EUR 130.2 million) (**Table 16**).

The next priority in financial terms is the fifth (*Promoting the efficiency of resources and support for the transition to a low-carbon and climate-resistant economy*), with public expenditure amounting to EUR 344.9 million (14% of the RDP total). The most important measures concern conservation and carbon sequestration (EUR 219.2 million) and investments in improving irrigation (EUR 112.5 million) (**Table 16**).

The sixth priority (Promoting social inclusion, reducing poverty and developing rural economies) accounts for public spending amounting to EUR 330.9 million (13.5% of the total), with Leader playing a significant role (with EUR 258 million) (**Table 16**).

The last priority in terms of expenditure is the *third* (*Promoting the organisation of the food supply chain, including the processing and marketing of products and agricultural risk management*). This accounts for EUR 254.8 million (10.4% of total expenditure). Investments in improving competitiveness are by far the key measure (EUR 203 million) (**Table 16**).

The first priority (*Transfer of knowledge and innovation in agriculture*) does not have a specific budget and its measures are included among the other priorities.

**Table 16: Andalusia's RDP priorities for 2014-2020
(EUR thousands)**

PRIORITY	Total public expenditure	% of total	EAFRD support envisaged	Principle measures by priority and % of total expenditure
4. Conservation and improvement of ecosystems	921 876.6	37.7	714 414.3	Agri-environment 13.4% Soil erosion 8.2% Water management 6.8%
2. Viability of holdings	524 369.2	21.4	434,406.4	Investment in modernisation: 11.6% Young farmers 5.3%
5. Resource efficiency and climate change	344 978.4	14.0	266 550.3	Carbon conservation 9.0% Water efficiency (irrigation) 4.6%
6. Social inclusion and rural development	330 909.8	13.5	296 144.4	Leader initiative 10.5%
3. Food supply chain	254 858.0	10.4	198 945.8	Agri-industrial investment: 8.3%
Other cross-cutting expenditure	72 965.1	3.0	Already included in the priorities	---
TOTAL	2 449 957.1	100	1 910.4	---

Source: ENRD, [Spain – Andalusia - 2014-2020 Rural Development Programme: Key Facts & Figures](#)

Brussels, March 2016

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