

# **The Evolution of Agricultural Employment in Greece**

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## **Abstract**

Agriculture is considered one of the most important economic sectors in the European Union as it accounts for a large percentage (about 44%) of the EU budget, but also due to the fact that a large part of its population and areas are affected by agricultural activities. In Greece, the agricultural sector is the main district of the economy with an irreplaceable and crucial role as an important employer for a large workforce, thus ensuring social cohesion and regional development. Following Greece's accession to the EU, Greek agriculture is defined by the rules of European agriculture through the Common Agricultural Policy (CAP). In general, the role of agriculture in Greece is proved by the fact that it occupies a large percentage of its land (about 30%) and employs 82% of rural population compared to 43% of urban population. Rural population in Greece is higher than that of the rest EU member states. The agricultural sector contributes to the country's GDP directly about 4% of the gross value added of the Greek economy and despite the problems it faces, it has demonstrated relative resilience to adverse economic conditions of recent years. In the present work, statistics concerning the agricultural employment in Greece are given and the main structural problems of Greek Agriculture are mentioned. In terms of agricultural employment, the absolute number of people has decreased significantly over time. The ratio employees in agricultural sector to the total number of employees decreased from 24% in 1989 to 15.2% in 2000 and 10.6% in

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2017 but still remains significantly higher than the average of 4.4 % in 2017 in the European Union. Thus, in 2017 in Greece, 453,440 thousand people worked in agriculture. In connection with the outbreak of the Coronavirus Pandemic, especially in Greece, it was found that there is a lack of labor in the countryside and that the orientation of the economy should be directed to the agricultural sector to avoid possible food shortages and most importantly that this sector may lead to the stabilization of the Greek economy.

**Keywords:** Agricultural holdings, People employed.

## **1. Introduction**

Agriculture is considered one of the most important economic sectors of the European Union as it accounts for a large percentage (about 44%) of the EU budget, but also because a large part of its population and areas are affected by agricultural activities, Especially for our country, Agriculture plays an irreplaceable and crucial role as an important employer for a large workforce, thus ensuring social cohesion and regional development. Greek agricultural economy and the rural world as a whole from the 19th century until today was based - and still is on the small and mainly the medium agricultural holding, which constituted, for a century and a half, the elementary cell of Greek society. After the accession of our country to the EU, Greek agriculture is determined by the rules of European agriculture through the Common Agricultural Policy (CAP). In the present work statistics concerning the agricultural employment in Greece are given and the main structural problems of the Greek agriculture are mentioned,

## **2. Materials and methods**

During the drafting of the article, several scientific research methods were applied such as the study of domestic and foreign scientific literature, the regulatory framework for the research topic, the generalization of the received information, the economic and statistical analysis of the Hellenic Statistical Authority as well as the analytical and comparative method.

## **3. Results and Discussion**

In general, the importance of agriculture in Greece is proved by the fact that it occupies a large percentage of its land (about 30%) and employs 82% of rural population compared to 43% of urban population (Paschalidis. Ch. at al., 2020). The historical movement of agricultural economy and production had already passed from the phase of partial self-sufficiency to the phase of production for the market. Nowadays, it still remains in the phase of integration into a fully commercialized, national, international and global market that tends to be characterized by mechanization, prospecting for its organic connection with other sectors of the economy (processing, financial sector) within a modern "agricultural complex". To

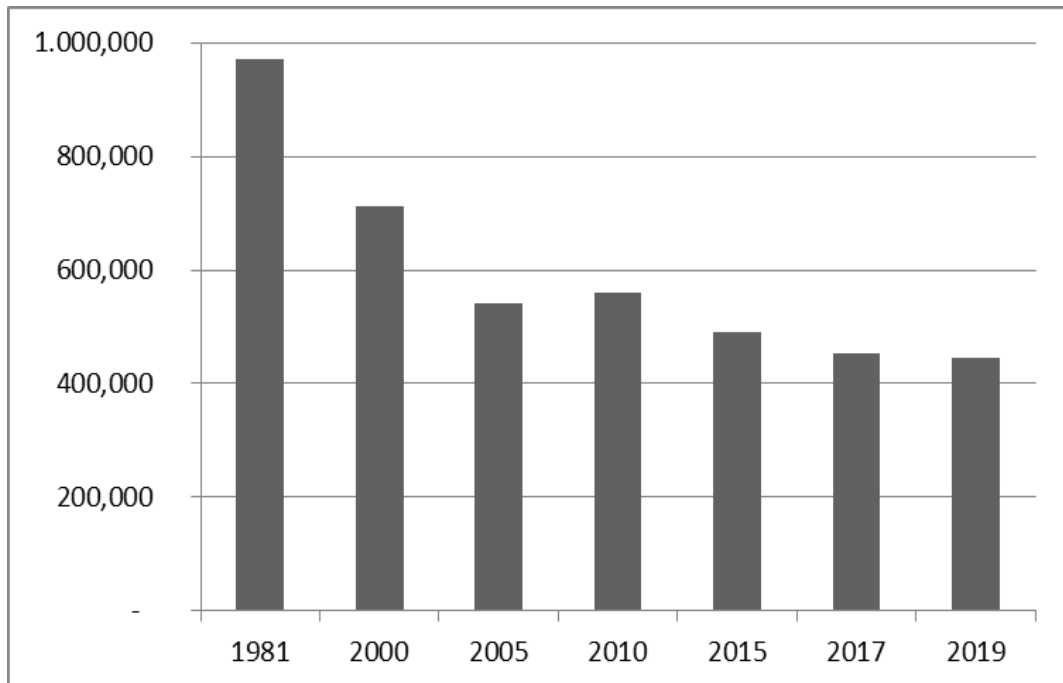
give an aspect of employment in agricultural production, it might be useful to first mention some data of structural characteristics of Agriculture in Greece. Structural characteristics of Greek agriculture are those factors that create the specifications and conditions for further development. These mainly consist of a very large number of small and fragmented agricultural holdings, a low percentage of irrigated agricultural land, a high percentage of economically active people employed in agriculture even in elder years (about 60% are over 55 years old and in the busy employment of farmers (Petropoulos, D., 2020). Statistics show that there is a fragmentation of property and businesses/farms that still dominates Greek agricultural production, which is crucial for the composition and distribution of employment in this sector. While the average utilized agricultural area was 48.5 hectares in 2009. From 2009 to 2016 the number of holdings shows a decrease of 38,105 holdings or 5.3%. Rural population in Greece is the highest among the states of the European Union (EU). Specifically, after a sharp decrease in the rural population in the period 1971-91, there is a decrease in the rate of population weakening in rural areas (Table 1). (Kaditi, E., Nitsi, E., 2010).

**Table 1: Percentage distribution of the population of Greece based on place of residence.**

<b>Year</b>	<b>Urban population %</b>	<b>Rural population %</b>
1971	64.8	35.2
1981	69.7	30.3
1991	71.6	28.4
2001	72.7	27.2

Source: EL.STAT Hellenic Statistical Authority

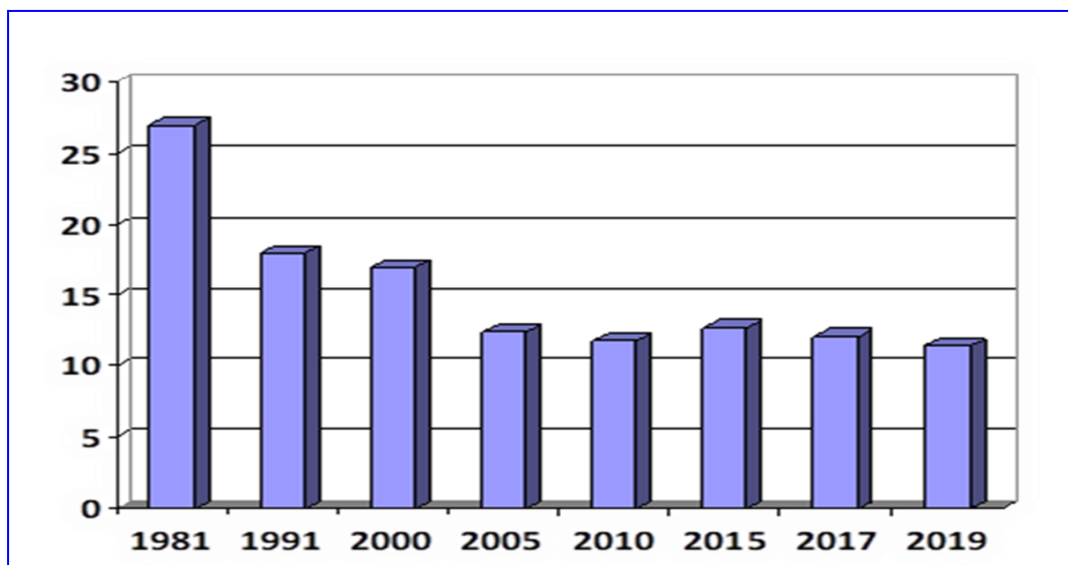
The rural population in Greece is the highest among the States of the European Union. The emergence and consolidation of non-agricultural forms of employment since the mid-1980s has led to the stabilization and possible recovery of rural areas, although employment in the agricultural sector is directly linked to the maintenance of population in rural areas, especially in mountainous disadvantaged and rural areas. areas. (Kaditi, E. and Nitsi, E., 2010). Thus, in Greece, in 1981, before the country's accession to the E.O.C. and now in the EU, the number of people employed in the agricultural sector was 972,000. In a decade, in 2000 it was decreased by 200,000 and was 713,000, while in 2005 it reached 542,001, in 2017 453,400 and in 2019 444,600, (Figure 1).



Source: EL.STAT Hellenic Statistical Authority

**Figure 1: Number of employees (in thousands) in the agricultural sector**

The absolute number of people employed in this field has decreased significantly over time.



Source: EL.STAT Hellenic Statistical Authority

**Figure 2: Percentage (%) participation of employees in the agricultural sector**

The ratio of employment in the agricultural sector to the total number of employment in the economy decreased from 27% in 1981 to 24% in 1989, to 17% in 2000, 12.4% in 2005, 12.1% in 2017 and finally 11.4 in 2019 but remains significantly higher than the average of 4.4% of the European Union in 2017, (Figure 2). In terms of the ratio of employment in the agricultural sector as a whole, it is declining, but shows a downward trend after 2004. In recent decades, Greece's integration into the EU, demographic change, and globalization trends have reshaped the economic landscape. The country's human resources have been adapted accordingly, so that it can meet the needs of today's economy, which is based on services and knowledge (Kaditi, E., and Nitsi, E., 2010). Examining the percentage structure of employment by sector of economic activity, we can observe a great decline in the primary sector in recent decades. In 2019, employment in the primary sector was 11.4%, while in the tertiary sector, which holds 73.2% of all employment. The secondary sector remains stable at around 15.4% (Table 2).

**Table 2: Percentage distribution of employees in Greece by sector of economic activity**

Year	Employees in the primary sector %	Employees in the secondary sector %	Employees in the tertiary sector %	Total number of employees (thousands of people in the primary sector)
1998	18.8	23.3	58.7	972
1999	17.9	22.9	59.2	671
2000	17.3	22.8	60.0	713
2001	16.1	23.0	60.9	661
2002	15.6	22.8	61.6	648
2003	15.4	22.6	62.0	656
2004	12.6	22.4	65.0	546
2005	12.4	22.4	65.2	542
2006	12.0	22.1	65.9	533
2007	11.5	22.5	66.0	519
2008	11.3	22.3	66.4	516
2009	11.9	21.2	66.9	536
2019	11.4	15.4	73.2	444

Source: EL.STAT Hellenic Statistical Authority, 2020.

It is noted that from 1996 to 2007 Greece recorded quite high rates of economic growth, which, however, were not accompanied by a corresponding increase in employment.

**Table 3: Ratio (%) of employees at Regional level (2007).**

Region	Percentage %	Region	Percentage %
Peloponnese	29.4	Central Greece	18.5
Eastern Macedonia-Thrace	25.1	Western Macedonia	16.3
Thessaly	19.9	Central Macedonia	11.2
Western Greece	24.2	Northern Aegean	6.4
Crete	16.9	Southern Aegean	15.9
Epirus	19.2	Attica	0.7
Ionian Islands	11.4		

Source: EL.STAT Hellenic Statistical Authority

At regional level in 2007, employment in the agricultural sector is not evenly distributed, (Table 3). There are regions with a high percentage of employees in the agricultural sector, such as those of the Peloponnese (29.4%), Eastern Macedonia and Thrace (25.1%) and Thessaly (22.6%). In contrast, in Attica only 0.7% is employed in the agricultural sector. A significant decrease in the percentage of employment is presented in Thessaly, the Ionian Islands and Crete, while an increase in the percentage is presented in Central Greece, the South Aegean and Epirus (Kediti, E., and Nitsi, E. 2010). From 2009, when we had a decrease of 3.1% in GDP, the employment situation has deteriorated since the outbreak of the economic crisis, confirming the dependence of the labor market on the prevailing economic environment. The results of the crisis showed that employment decreased significantly with the decline in GDP, showing that their connection is stronger during the years of crisis. In contrast, "permanent" (regular) workers are few (one in a hundred employed), but they naturally provide a large number of wages, 219 working days per year, but covering only 5.6 % of total wages provided in agriculture. In general, in the course of these 7 years, from 2009 to 2016, which partly coincides with the period of economic crisis in Greece, the category of working farm owners tends to remain stable, seasonal workers are declining (remaining a very large category in all rural employment, but with the restrictions mentioned above), while the permanent or regular workers of agricultural production increase significantly in their percentage, yet remain a very small minority among the total employed in the sector. (Haritsis, A. 2018). Based on this workforce survey, Agriculture, Forestry and Fisheries account for 12.5% of total employment in the country. Farmers employers make up 12.1% of all employers in the country. The farmers self-employed 38.2% of the self-employed in total, unpaid assisted members in the agricultural sector account for 43.3% of this category in total employment, while on the contrary, the employed farmers are only 1.8% of the total number of employees in the country (Haritsis, A. 2018).

Therefore, the reduction of employment is due to the high rate of removal of self-employed farmers from exclusive employment in agricultural production and consequently the conversion of most of them into employed or part-time employees (non-mainly farmers). Specifically, the self-employed from 746.000 Annual Work

Unit( AWU ) in the year 1990 was reduced to 570,600 AWU in 2009, showing a contraction of 175,600 AWU within the twenty years or by one-third (23.5%) (Tsimpoukakis E. 2012). At the same time, there is a significant decline in the employment of family members of the holder from 41.44% of total employment in 1993 to 30.12% of total in 2007.

**Table 4: Distribution of agricultural employment in Greece by age**

Age categories	Percentage per year			Total number of employees (thousands)		
	1986	1990	2000	1986	1990	2000
Less than 25	9.2	9.0	6.9	94.4	80.0	46.0
25-34	12.0	11.1	13.4	123.1	99.0	90.0
35-44	17.5	17.0	17.7	179.6	151.0	119.0
45-54	26.7	25.4	23.6	273.9	226.0	158.0
55-64	24.9	29.0	29.0	255.5	258.0	195.0
Over 65	9.8	8.6	9.4	100.5	76.0	63.0
Total agricultural employment (thousands)	100	100	100	1,026	889.0	671.0

Source: Eurostat, Statistics, Agriculture

In addition, the reduction in the number of young people has led to significant aging of the rural population. The majority of farmers are between 45-64 years old, while about 9.4% are over 65% (Table 4). In 2005, of the approximately 542 thousand people employed in the agriculture, 55% were over 55 years old, and only 8% were under 35 years old. The future of agriculture in Greece, as in many other European countries, is threatened by an aging workforce and a lack of desire on the part of young people to work in this field. Finally, the family character of the Greek agricultural sector is shown by the structure of employment of the self-employed and employees.

Examination of the time distribution of employment by category (self-employment, employee) shows a significant increase in salaried employees with permanent and seasonal employment in agricultural production from 11.26% of total employment in 1993 to 17.83% in 2007. Of the total number of employees in the agricultural sector in 2008, 62.6% are self-employed, 7.7% are employed, 22.4% are unpaid family members and 7.3% are employers (ELSTAT, Labor Survey Potential, 2008).

**Table 5: Workforce structure of agricultural holdings, 2012**

	2005	2006	2007	2008	2009	2010
Self-employed with staff	37.643	36.661	40.507	40.875	46.401	48.518
Self-employed without staff	328.114	325.375	314.073	321.786	335.636	349.112
wage earner	35.809	35.183	34.880	38.477	48.627	54.049
Assistant in the family business	140.434	136.096	130.264	115.697	105.896	103.416
Total	542.001	533.316	519.725	516.834	536.559	555.112

Source: Eurostat

There is a decrease in self-employed farmers and their family members working in agricultural production and an increase in wage labor, especially in high-profit categories.

In connection with the outbreak of the Coronavirus Pandemic, especially in Greece, it was found that there is a lack of labor in the countryside and that the orientation of the economy should be directed to the agricultural sector to avoid possible food shortages and most importantly this sector may lead to the stabilization of the Greek economy.



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