

## EU Agricultural Economics Briefs

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## How many people work in agriculture in the European Union?

An answer based on Eurostat data sources

## Contents

- How many people work in agriculture in the European Union?
- 2. Which data sources are available in Eurostat?
  - 2.1. Farm Structure Survey (FSS)
  - **2.2.** Economic Accounts for Agriculture (EAA)
  - 2.3. National Economic Accounts
  - 2.4. Labour Force Survey (LFS)
  - 2.5. Regional data
- **3.** Where to find information about...?
  - **3.1.** Agricultural labour force in AWU – FSS vs EAA
  - **3.2.** Agricultural labour force in persons FSS vs LFS
  - **3.3.** Share of agriculture in total employment – National Accounts vs LFS
- 4. Conclusions

The agricultural sector has some special characteristics that make it more difficult, compared to other sectors, to know precisely how many people it employs. Firstly, in most Member States agriculture is still dominated by family farms, where family members provide labour input at different times of the year. Secondly, many farmers and farm workers pursue agriculture as a part-time activity and have other more or less important sources of income. Thirdly, agriculture is characterized by seasonal labour peaks, where large numbers of workers may be hired for relatively short periods. Finally, statistical data sources with different methodologies and purposes reflect all these situations differently, resulting in figures that may differ greatly from one source to another.

This *Brief* presents the most recent data on agricultural employment in the European Union to address the key question of the number of people employed in agriculture and the main characteristics of this agricultural labour force. It explores and compares the different Eurostat data sources for this information: the Farm Structure Survey, the Economic Accounts for Agriculture, the National and Regional Economic Accounts and the Labour Force Survey, to identify the most appropriate sources.



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## 1. How many people work in agriculture in the European Union?

In 2010 there were 12 million farms in the European Union. Nonetheless, most data sources tend to agree in saying that around 10 million persons<sup>1</sup> are employed in agriculture, representing 5% of total employment<sup>2</sup>. On the other hand, the Farm Structure Survey (FSS) indicates that 25 million people were regularly engaged in farm work in the EU during 2010.

These very different and somehow contradictory figures are explained by the special characteristics of agricultural employment but also by divergences in scope, methodologies and definitions. In particular, the FSS collects information about some categories of workers which are not included in other employment data sources, mainly family and part-time workers.

Effectively, in most EU countries the bulk of farm work is carried out by the holders and their family members (mainly their spouses): together, they account for 92.2% of those working on the farms, to very similar shares (46.6% for the holders, 45.6% for their family members). Hired non-family workers only represent 7.8% of those regularly working on the farms.

However, for many of the 25 million regularly working in agriculture, farm work only represents a minor activity: according to the FSS, more than half of them (13.8 million persons) spent less than 25% of their working time on farm work. Agriculture was a full-time activity for only 14.3% of them, being the main economic activity<sup>3</sup> for a further 28.5% of the total (7.1 million persons)<sup>4</sup>.

As a result, when converted into full-time equivalent jobs (called annual working units or AWU in agriculture), these 25 million persons only represented 9.8 million AWU, which is close to the figures provided by other data sources<sup>1</sup> and can therefore be considered a good estimate of the total number of people employed in agriculture in the EU. The share of family labour also became less important (77.5% of the total) when converted into AWU<sup>5</sup>.

On average, there were 2 persons working on each farm (but less than 1 person when measured in full time equivalent). More than half (53%) were working on farms with a small economic size<sup>6</sup> (reduced to 30.6% when converted into AWU).

Compared to the rest of the economy, men are in slight majority as they represent around 60% of total employment in agriculture (54% in the total economy).<sup>7</sup>.

The labour force in agriculture is also older than in the rest of the economy: in 2010, 33% of the agricultural labour force was younger than 40 years (44% for total employment), 57% was between 40 and 65 years (54% for total employment) and 10% was aged 65 years and more (compared to only 2% for total employment)<sup>8</sup>.

In the period 2000-2012, 4.8 million full-time jobs in the EU agriculture disappeared, 70% of them in the new MS and 93% corresponding to non-salaried workers<sup>9</sup>.

force in AWU in 2012 (see also chapter 3.1).

<sup>&</sup>lt;sup>1</sup> Different data sources provide figures on employment in EU farms / EU agriculture that are globally very close to these 10 million persons mentioned: 9.8 million AWU in 2010 (Farm Structure Survey, FSS), 10.1 million AWU in 2012 (Economic Accounts for Agriculture, EAA), 9.9 million persons in 2012 (Labour Force Survey, LFS); only data in persons from the FSS differ greatly from the other data sources for the reasons explained in the box. Nonetheless, differences may be significant at the level of individual Member States from one data source to another.

<sup>&</sup>lt;sup>2</sup> Data from the National Accounts. Similar share is obtained using the LFS, as shown in chapter 3.3.  $\frac{3}{200}$ 

 $<sup>^3</sup>$  50% or more of the working time devoted to agriculture (includes full-time workers).  $^4$  See chapter 3.2 for a comparison of data in persons from the FSS and the LFS.

<sup>&</sup>lt;sup>5</sup> Family work in AWU from the FSS can be compared with non-salaried workers in the EAA, which represented 76.2% of the total agricultural labour

<sup>&</sup>lt;sup>6</sup> In this *Brief*, holdings included in this category are those with a standard output below 4 000 EUR.

<sup>&</sup>lt;sup>7</sup> Both the FSS and the LFS provide information on the sex of the agricultural labour force, and both are close to this 60/40 distribution: 57.7% of men (in persons) and 60.0% of men (in AWU) in the FSS, 61.5% of men (in persons) in the LFS. For the total economy, percentages have been calculated using the LFS.

<sup>&</sup>lt;sup>8</sup> In the FSS, the age is only collected for farm holders and farm managers but not for the other categories of workers. For this reason, the LFS is used instead to know the shares by category of age for the whole agricultural labour force and to compare them with the shares for the total employment (the LFS actually gives information for more detailed categories of age than the ones used in this *Brief*). <sup>9</sup> Data from the Economic Accounts for Agriculture (see chapter 2.2).

# 2. Which data sources are available in Eurostat?

This second chapter will go through each of the data collections available in Eurostat which provide information on agricultural labour. These multiple data sources, with their different scope and methodology, may cause some confusion in understanding the results: this *Brief* tries to draw the best out of them while clarifying apparent inconsistencies.

As the **methodology**, **definitions and variables covered** by each of these data sources vary, the choice will depend on the objectives of the analysis to be conducted:

- the Farm Structure Survey (FSS), which collects a large number of variables related to European farms, is undoubtedly the best data source when a detailed analysis of farm labour force characteristics is needed;
- the Economic Accounts for Agriculture (EAA) provide figures on the total agricultural labour force and are most suitable to analyse the evolution of agricultural labour input over time;
- the National Economic Accounts are the preferred data source to measure employment levels, employment growth and industry breakdowns, and then to compare the level of employment in agriculture with employment in other sectors of the economy;
- the Labour Force Survey (LFS) measures participation in the labour market and also provides demographic information (age, gender or educational level) of the labour force, although the information available by economic activity, and thus also for agricultural employment, is limited.

When needed, **data at regional level** can be found in three of these data sources (the FSS, the regional tables of the National Accounts and the LFS).

The **frequency of updating** and the **latest year for which data are available** are also elements to be considered:

- the FSS does not provide annual data: information is only available for years in which a survey or census has been conducted, and this information is published with a delay of several years (currently the most recent data stem from the 2010 agricultural census); in addition, methodological changes between surveys sometimes make it difficult to compare the results from different years;
- the other three data collections provide annual data for the EU and for all Member States: estimations and/or provisional data for a given year are published in Eurostat at different moments of the following year, and may be further adjusted or corrected until they become definitive; at the time of preparation of this Brief (May 2013), 2011 or 2012 data were already available.

Links to the different data sources in Eurostat are provided in Table 1.

Table 1 Data sources for agricultural labour in Eurostat					
Data sources	Links to Eurostat websites				
Farm Structure Survey	http://epp.eurostat.ec.europa.eu/portal/page/portal/farm structure survey/introduction				
Economic Accounts for Agriculture	http://epp.eurostat.ec.europa.eu/portal/page/portal/agriculture/introduction				
National and Regional Accounts	http://epp.eurostat.ec.europa.eu/portal/page/portal/national_accounts/introduction				
Labour Force Survey	http://epp.eurostat.ec.europa.eu/portal/page/portal/employment_unemployment_lfs/introduction				

Table 1 Data sources for agricultural labour in Eurostat

## 2.1. Farm Structure Survey (FSS)

The FSS is **the best data source when a detailed analysis of farm labour force characteristics is needed**. Nevertheless, it has some limitations regarding the availability and comparability of data over time.

#### What is the FSS?

The surveys on the structure of agricultural holdings provide harmonised data on the agricultural holdings in the EU. They collect a wide range of information: number of holdings, land use and area (crops), livestock, main crops, labour force, economic size, type of activity, other gainful activities of the farm, system of farming, machinery, organic farming, etc.

The FSS is carried out in the form of an **agricultural census every ten years** (the last census was conducted in 2010, 2009 in some Member States) and as **sample surveys every 2 or 3 years** (the last survey was conducted in 2007).

#### Farm labour force

Data on the farm labour force is an important part of the FSS, which provides **information on the workers' age** (only for sole holders and farm managers), **gender**, **working time and relationship with the holder**.

The farm labour force includes all persons having completed their compulsory education (in principle, 15 years or older) who carried out farm work on the holding during the 12 months ending on the reference day of the survey, this work being done on a regular or non-regular basis.<sup>10</sup>

The farm labour force is measured in **persons** (only regular labour force) and in **annual work units** (AWU) (both regular and non-regular labour force), which correspond to the work performed by one person who is occupied on an agricultural holding on a full-time basis. Due to the high share of part-time work in agriculture, labour input can be better assessed in terms of AWU.

The FSS also gathers other important information, such as the level of education attained by the

managers of the holdings or the existence of other economic activities in the holding.

#### **Data limitations**

The FSS focuses on agricultural holdings (farms) with an utilised agricultural area (UAA) of at least one hectare (holdings with a UAA of less than one hectare are covered only if their market production exceeds certain natural thresholds)<sup>11</sup>.

In addition, **methodological changes have been introduced over time, leading to differences in the number of agricultural holdings surveyed**: for example, some countries have raised their survey thresholds for the Census 2010, making it difficult to compare data with those from previous years.

Further limitations of the FSS are the **non-availability of annual data** (data are only available for the years with survey or census) and the **delay between data collection and publication** (2010 census data were only published at the end of 2012; data from the 2013 survey can be expected in 2015).

## How many people work in agriculture in the EU, according to the FSS?

#### In persons

In 2010, around 25 million persons were regularly engaged in agricultural work in the EU. Family members represented 92% of the total (half of them were sole holders, the other half consisted of their family members) and men made up 58%.

Only 14% of these persons were working on a full-time basis. On average, there were 2 persons working on each farm, and 53% were working on farms with a small economic size<sup>12</sup>.

### In AWU

In 2010, EU farms provided a total of 9.8 million full-time equivalent jobs. In AWU, family members represented 77% of the total and men accounted for 60%. On average, each farm had less than one full-time worker.

 $<sup>^{\</sup>rm 10}$  Thus, in this Brief, 'non-regular' refers to persons working in agriculture not on a continuous basis, and not irregular in the sense of illegal workers.

<sup>&</sup>lt;sup>11</sup> FSS coverage in 2010 is described in Article 2 and Annex II of <u>Regulation (EC) No 1166/2008</u>.

 $<sup>^{\</sup>overline{12}}$  In this Brief, holdings included in this category are those with a standard output below 4 000 EUR.

Table 2 summarizes some 2010 Census data for the EU Member States and Croatia (which has joined the EU in July 2013), measured in persons:

- Seven Member States, with more than 1 million workers each, account for 80% of the regular farm labour force.
- Family labour (which includes sole holders and their family members) is still predominant in most countries. The highest shares of non-family regular workers are found in the Czech Republic and Slovakia, followed by France.
- Most farm workers are male, with particularly high shares (more than 70%) in Malta, Denmark, Ireland, the United Kingdom and Luxembourg.

- On average, there are 2 regular workers per holding, except in the Czech Republic and Slovakia, which have bigger farms and more workers per holding.
- In some countries, the share of persons working on farms with a small economic size is well above the EU average, representing 70% or more in Romania, Bulgaria, Hungary and Malta. In 10 countries they represent less than 20% of the workers.
- The share of full-time workers is very low in most Member States: only in the Czech Republic, Luxembourg, Belgium and France do they represent more than 50% of the farm labour force.

F	FARM LABOUR FORCE - Labour force directly employed by the holding*, in persons - 2010							
Countries	Total	Sole holders	Family members	Non-family regular workers	By sex - Men	Average workers per holding	Working in holdings with SO < 4000 EUR	Working full time
	1000 persons		% of total		% of total	Persons/ holding	% of total	% of total
Belgium	80.9	47.7	34.5	17.8	66.4	1.9	4.9	53.0
Bulgaria	738.9	49.4	42.8	7.8	56.5	2.0	77.7	18.4
Czech Republic	132.7	14.9	17.5	67.6	66.6	5.8	5.9	60.4
Denmark	80.1	49.8	21.2	29.0	73.6	1.9	5.6	46.7
Germany	749.7	39.2	37.8	23.0	65.4	2.5	1.6	41.9
Estonia	52.3	33.6	41.7	24.7	55.0	2.7	44.0	28.1
Ireland	272.0	51.3	42.7	6.0	72.8	1.9	20.9	28.4
Greece	1 212.7	59.6	38.3	2.2	60.4	1.7	47.3	8.6
Spain	2 227.0	38.7	48.9	12.4	65.7	2.2	35.4	14.0
France	1 014.8	39.7	16.4	44.0	68.2	2.0	10.0	52.2
Italy	3 392.7	47.3	47.9	4.8	57.3	2.1	44.4	9.3
Cyprus	82.0	46.8	48.0	5.3	61.5	2.1	68.6	7.2
Latvia	181.0	45.8	44.6	9.6	50.7	2.2	63.8	16.5
Lithuania	366.1	53.7	38.7	7.6	49.6	1.8	64.2	6.8
Luxembourg	5.0	42.6	39.8	17.7	67.9	2.3	3.6	53.0
Hungary	1 143.5	49.6	42.5	7.9	53.8	2.0	74.3	10.4
Malta	18.5	65.5	29.8	4.7	78.7	1.5	69.9	6.9
Netherlands	211.6	32.1	37.8	30.1	64.5	2.9	1.8	41.9
Austria	346.3	41.8	50.4	7.8	59.1	2.3	17.7	8.0
Poland	3 802.6	39.0	58.7	2.3	55.2	2.5	45.0	22.4
Portugal	708.1	42.0	50.9	7.1	54.6	2.3	57.8	19.1
Romania	7 156.9	53.5	45.0	1.5	53.1	1.9	83.0	0.9
Slovenia	208.5	34.2	64.3	1.6	54.2	2.8	39.2	5.2
Slovakia	91.0	24.4	26.3	49.4	66.9	3.7	32.9	31.6
Finland	125.3	49.9	38.9	11.3	67.3	2.0	13.0	25.4
Sweden	141.5	46.5	38.1	15.3	65.0	2.0	20.5	15.5
United Kingdom	418.5	42.2	34.1	23.8	71.6	2.2	12.0	39.6
EU-27	24 960.4	46.6	45.6	7.8	57.7	2.1	53.1	14.3
Croatia	513.7	44.0	53.2	2.8	55.1	2.2	52.7	7.0

#### Table 2Farm labour force (regular) in the EU Member States, in persons - Data from the FSS

*Note:* \* Labour force directly employed by the holding in persons only includes regular labour force (sole holders working on the farm + members of the sole holders' family + non-family regular workers).

Source: Eurostat, FSS (online data codes: ef Iflegaa, ef Iflegecs, ef Ifwtime, ef kvage).

Table 3 presents farm labour force data in the form of full-time equivalent jobs (AWU), including both regular and non-regular (non-family) workers:

- The conversion of the number of persons regularly working on agricultural holdings into AWU results in significantly lower figures in many Member States, and gives an indication of the importance of part-time employment in agriculture.
- Measured in AWU, the share of non-family workers in the labour force becomes more important: the total of regular and non-regular non-family workers is higher than 70% in the

Czech Republic and Slovakia, but it is also quite important in France, Estonia or Denmark. In general, part-time work seems to be more prevalent among family members than among non-family workers.

- In terms of AWU, the average number of workers per holding is below one person per holding in many countries.
- The share of the labour force working in holdings with a small economic size is much lower than that measured in persons, but it remains above 40% in seven Member States.

Table 3	Farm labour force (regular and non-regular) in the EU Member States, <u>in AWU</u> - Data from the FSS

	FARM LABOU	R FORCE - La	bour force di	rectly employ	yed by the ho	lding*, in AV	/Us - 2010	
Countries	Total	Sole holders	Family members	Non-family regular workers	Non-family non-regular workers	By sex, men**	Average workers per holding	Working in holdings with SO < 4000 EUR
	1000 AWU		% of	total		% of total	AWU/ holding	% of total
Belgium	61.6	50.1	24.9	18.3	6.7	65.6	1.4	2.6
Bulgaria	406.5	48.2	34.6	12.9	4.3	57.2	1.1	66.3
Czech Republic	108.0	13.2	9.1	74.6	3.1	66.7	4.7	2.9
Denmark	52.3	43.7	13.5	39.8	2.9	75.7	1.2	4.0
Germany	545.5	37.5	26.4	25.9	10.2	63.4	1.8	0.6
Estonia	25.1	28.9	24.2	44.6	2.3	54.8	1.3	23.6
Ireland	165.4	62.1	30.2	5.9	1.8	78.8	1.2	15.6
Greece	429.5	54.1	28.4	4.3	13.2	59.9	0.6	21.2
Spain	889.0	37.2	26.2	17.7	18.9	58.7	0.9	16.2
France	779.7	34.9	8.8	45.1	11.2	64.3	1.5	3.7
Italy	953.8	51.6	27.9	8.8	11.7	66.6	0.6	18.1
Cyprus	18.6	44.1	25.2	20.7	10.1	69.9	0.5	30.4
Latvia	85.2	45.9	37.9	15.6	0.6	51.3	1.0	48.3
Lithuania	146.8	49.3	32.3	16.3	2.0	51.6	0.7	45.7
Luxembourg	3.7	45.4	30.0	20.3	4.1	70.8	1.7	1.6
Hungary	423.5	47.8	28.9	18.4	4.8	59.5	0.7	54.1
Malta	4.9	69.4	20.7	9.0	0.8	88.7	0.4	45.8
Netherlands	161.7	33.5	25.6	28.4	12.5	63.3	2.2	1.1
Austria	114.3	57.2	28.3	11.7	2.7	64.2	0.8	7.0
Poland	1 897.2	46.5	48.2	3.9	1.5	57.0	1.3	32.4
Portugal	363.4	44.1	36.9	11.4	7.6	52.8	1.2	47.2
Romania	1 610.3	49.3	39.4	4.5	6.8	54.3	0.4	64.7
Slovenia	76.7	43.5	46.1	3.7	6.7	55.5	1.0	26.2
Slovakia	56.1	17.7	10.4	68.5	3.4	69.5	2.3	15.2
Finland	59.7	54.2	25.6	12.9	7.2	66.4	0.9	3.9
Sweden	56.9	42.5	25.9	25.8	5.8	67.6	0.8	9.9
United Kingdom	266.3	41.7	26.0	24.9	7.4	72.3	1.4	6.2
EU-27	9 761.2	45.1	32.5	14.7	7.8	60.0	0.8	30.6
Croatia	184.5	46.4	44.4	6.4	2.8	58.1	0.8	34.5

Notes: \* Labour force directly employed by the holding in AWUs includes both regular (sole holders working on the farm + members of the sole holders' family + non-family regular workers) and non-regular (non-family non-regular workers) labour force.

\*\* Only regular labour force.

Source: Eurostat, FSS (online data codes: ef\_lflegaa, ef\_lflegecs, ef\_lfwtime, ef\_kvage).

# 2.2. Economic Accounts for Agriculture (EAA)

Data provided by the EAA are most suitable to analyse the evolution of agricultural labour input over time.

## What are the EAA?

The EAA **provide detailed information on income in the agricultural sector**, in order to analyse production processes of the agricultural industry and the primary income generated by this activity: value of output, intermediate consumption, subsidies and taxes, consumption of fixed capital, rent and interests, capital formation etc. Agricultural labour input (called ALI) is an integral part of the EAA.

The EAA use Eurostat's general classification of economic activities, currently **NACE Rev. 2**<sup>13</sup>. The agricultural industry corresponds to division 01 of that classification: **Crop and animal production, hunting and related service activities**.

The EAA cover the income of all units involved in agricultural production, including those without commercial production.

## Agricultural labour input (ALI)

In the EAA, agricultural labour input (ALI) is measured in annual work units (AWU), which correspond to the number of full-time equivalent jobs (i.e., total hours worked divided by the average annual number of hours worked in full-time jobs within the economic territory); a distinction is drawn between non-salaried and salaried AWU.

**In most of the Member States, FSS is the main source for ALI data**: non-salaried AWU correspond to the family work in the FSS (holders and family members), whereas salaried AWU cover non-family workers (regular and non-regular). In years when the FSS is not carried out at EU level, ALI data are estimated using other national data sources, such as the LFS; these data may be subject to corrections once a new FSS becomes available<sup>14</sup>.

Nonetheless, ALI figures are usually higher than those reported in the FSS, because they also cover the labour input of agricultural units below the FSS threshold and the work used for agricultural services, inseparable secondary activities and hunting.

### Data limitations

The main limitation of the EAA is that **the only data provided is the number of AWU**. But given that the FSS already offers detailed data for most of the agricultural units, **the main advantage is that they offer comparable annual data**, i.e. data are available for a series of many years. Therefore, the combined use of the two data sources will provide the most appropriate information for any analysis on agricultural labour.

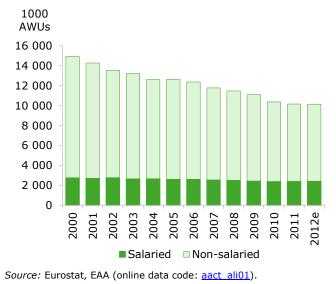
However, neither the EAA nor the FSS allow comparisons between employment in agriculture and total employment in a country or at EU level.

## How many people work in agriculture in the EU, according to the EAA?

In 2012 there were 10.1 million of full-time equivalent jobs in the agricultural sector, of which 76% were carried out by non-salaried (family) workers.

In the period 2000-2012, 4.8 million full-time jobs in the EU agriculture disappeared, 70% of them in the new MS and 93% corresponding to non-salaried workers.

#### Graph 1 Evolution of agricultural labour input in the EU<sup>15</sup> – Data from the EAA



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<sup>15</sup> All current 27 Member States included.

<sup>&</sup>lt;sup>13</sup> NACE (Nomenclature statistique des activités économiques dans la Communauté européenne) is the statistical classification of economic activities in the European Community.

 $<sup>^{\</sup>rm 14}$  Final data for year N are usually published in October of year N+3.

Table 4 shows 2012 estimated data on agricultural labour input for the EU Member States and Croatia, as well as the evolution over the period 2000-2012.

	Agric	ultural lab	our input	:	
		2012e		Differen 201	
Countries	Total	Non- salaried	Salaried	Non- salaried	Salaried
	1000 AWU	% of	total	1000	AWU
Belgium	58.1	81.8	18.2	-15.9	-0.8
Bulgaria	406.5	82.9	17.1	-354.3	-10.0
Czech Republic	105.8	24.4	75.6	0.7	-61.3
Denmark	52.4	52.9	47.1	-24.0	0.8
Germany	525.0	61.0	39.0	-132.4	-27.3
Estonia	24.6	52.8	47.2	-34.8	-5.2
Ireland	165.6	92.3	7.7	14.0	-0.9
Greece	395.7	80.6	19.4	-174.0	-16.0
Spain	881.2	59.4	40.6	-153.4	-66.9
France	774.0	66.0	34.0	-221.6	-32.8
Italy	1 151.0	63.1	36.9	-232.0	0.0
Cyprus	25.3	71.1	28.9	-6.8	1.3
Latvia	80.2	80.7	19.3	-64.2	-4.2
Lithuania	141.4	72.3	27.7	-44.9	-0.4
Luxembourg	3.8	76.3	23.7	-0.8	0.3
Hungary	440.4	76.2	23.8	-197.1	-38.5
Malta	4.9	89.8	10.2	-0.1	0.2
Netherlands	169.5	59.1	40.9	-45.6	-4.4
Austria	123.9	86.1	13.9	-47.4	3.8
Poland	2 101.3	94.6	5.4	-352.5	-41.1
Portugal	352.2	81.5	18.5	-128.9	-15.6
Romania	1 598.0	84.0	16.0	-2 073.0	26.0
Slovenia	77.8	88.4	11.6	-28.3	2.3
Slovakia	54.1	28.1	71.9	-48.0	-40.9
Finland	78.5	79.2	20.8	-32.2	-0.4
Sweden	54.1	69.7	30.3	-20.4	-5.6
United Kingdom	289.2	64.6	35.4	-33.2	-20.4
EU-27	10 134.7	76.2	23.8	-4 451.1	-357.6
Croatia	197.5	94.8	5.2	-26.7	-3.8

Table 4	Agricultural	labour	input	_	Data	from	the
	EAA						

Note: \* 2005-2012e for Croatia.

Source: Eurostat, EAA (online data code: <u>aact ali01</u>).

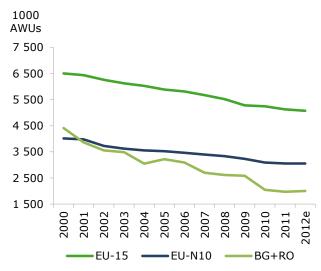
Some conclusions are detailed below:

- 70% of the agricultural labour input in the EU is concentrated in only six countries: Poland, Romania, Italy, Spain, France and Germany. Poland and Romania alone represent 37% of the total.
- Non-salaried (family) workers represent more than 80% of the AWU in 11 Member States and in Croatia. They are the main component of the agricultural labour force in most of the Member States and Croatia, with very few exceptions: the Czech Republic and

Slovakia are the only two countries were the salaried labour force predominates (more than 70% of the total), although the share of paid labour force is also important (over 40%) in Estonia, Denmark, the Netherlands and Spain.

Agricultural labour input in the EU has decreased by 32% since 2002, which represents a drop of 4.8 million full-equivalent jobs (from 14.9 million in 2000 to 10.1 million in 2012); most of this decline occurred in the nonsalaried labour. AWU in the agricultural sector fell in most countries in both categories of workers, with very few exceptions: the most significant increases in absolute terms were found in Ireland (non-salaried AWU increased by 14.0 thousand) and Romania (salaried AWU increased by 26.0 thousand). Job losses were concentrated in the 12 Member States that joined the EU in 2004 and 2007, where the restructuring of the agricultural sector has been more pronounced during this period (70% of the agricultural AWU lost in the EU). For example, Romania lost more than 2 million full-time equivalent jobs, which represented 56% of the agricultural AWU in the country in 2000 and 43% of the AWU lost in the whole EU. Other countries, like Slovakia, Estonia, Bulgaria and Latvia, also experienced important decreases (more than 45%). Graph 2 shows the evolution of the agricultural labour input in the old (EU-15) and new (EU-N10 and BG+RO) Member States.





Source: Eurostat, EAA (online data code: <u>aact ali01</u>).

## **2.3. National Economic Accounts**

Developments in agricultural labour need to be seen in the broader context of employment in the overall economy, for example by looking at **the share of agricultural employment in total employment**. This can be done with the help of the National Accounts.

#### What are the National Accounts?

National Accounts are a system of accounts and balance sheets that provide a broad and **integrated framework to describe an economy**, whether of a region, a country, or a group of countries such as the European Union. National Accounts provide systematic and detailed economic data useful for economic analysis to support policy development and monitoring.

#### Industry breakdowns

National Accounts provide information by industry breakdown, using the **NACE classification for economic activities**. Classifications are revised periodically to take account of technological developments and structural changes of the economy: the version currently in use is the NACE Rev.2, which progressively replaced NACE Rev.1.

#### **Employment in the National Accounts**

Employment and population have traditionally been considered auxiliary variables in the National Accounts, intended to calculate ratios per inhabitant or per employed person. Over time, the importance of employment within the system has increased, and is now considered a key short-term economic indicator.

Employment in the National Accounts is the result of data integration from many sources force surveys, population (labour censuses, employment registers, income tax registers, business production surveys, labour cost surveys, etc.). Due to this integration of data sources (some adjustments are needed) and to conceptual reasons (different geographical scope, coverage and thresholds), estimates of employment in the National Accounts may differ from results of other statistics and surveys, in particular from the LFS.

Nevertheless, as employment estimates in the National Accounts have to be consistent with other variables, this data source is **best suited to measure the overall level of employment in an economy and its breakdown into main economic categories**.

Employment in the National Accounts covers all persons engaged in some productive activity. It is mainly measured in persons and in hours worked, differentiates between employees and self-employed and is broken down by economic activity; other variables such as social or gender aspects of employment are not included (the LFS is the data source for this information).

#### Data limitations

Employment data in the National Accounts is broken down by branches and presented in tables with different level of detail. In a first level (10 branches), **agriculture is included in branch A together with forestry and fishing** (the so-called 'primary sector'), which is the most complete dataset. The three activities are only separated when the classification is further broken down into 64 branches, but at this level of detail **data are not complete for all years and for all Member States**, and then **aggregates for the EU have not always been calculated for the most recent year**<sup>16</sup>.

## How many people work in agriculture in the EU, according to the National Accounts?

**In 2011, there were more than 11 million persons** (more than 2 million persons less than in 2001<sup>17</sup>) **working in the EU agricultural sector** (agriculture, hunting and related service activities), **representing around 5% of total employment**.

Self-employed represented 75% of total employment in agriculture (compared to 16% in the total economy).

<sup>17</sup> All 27 EU Member States included.

<sup>&</sup>lt;sup>16</sup> As a result, while 2012 data has already been published for branch A ('primary sector'), 2011 data for agriculture alone is currently available for 16 Member States only, whereas the most recent EU-27 aggregate for agriculture correspond to 2009; and disaggregated data does not exist for four countries.

Table 5 presents the most detailed (agriculture only or the whole primary sector in the case of Spain, Malta, Poland and the United Kingdom) and recent (2010 or 2011) data currently available in Eurostat for each Member State<sup>18</sup>.

Table 5	Employment in the agricultural sector – Data
	from the National Accounts

Empl	oyment in t	he agricult	ural sector	
		2000- 2011		
Countries	1000 persons	% of total employ- ment	Self- employ- ment rate	Difference in 1000 persons
Belgium	58.4	1.3	67.3	-18.7
Bulgaria	664.0	19.4	89.7	-92.4
Czech Republic	140.3	2.8	30.4	-51.0
Denmark*	65.0	2.3	49.2	-17.0
Germany*	615.0	1.5	55.4	-71.0
Estonia	19.2	3.3	33.3	-8.9
Ireland	78.5	4.3	81.5	-42.5
Greece	491.1	11.0	86.0	-194.7
Spain**	760.6	4.1	42.5	-224.2
France*	706.8	2.6	59.2	-170.9
Italy*	890.6	3.6	48.0	-120.0
Cyprus	17.2	4.4	66.3	-0.4
Latvia	57.4	6.7	59.1	-55.0
Lithuania	106.0	7.7	64.2	-138.3
Luxembourg	4.1	1.1	56.1	0.6
Hungary	270.8	6.6	61.9	-237.9
Malta**	5.7	3.4	71.9	1.3
Netherlands	220.0	2.5	55.6	-36.2
Austria	179.8	4.4	89.0	-30.9
Poland**	2 032.6	12.7	89.6	-572.5
Portugal*	508.8	10.3	84.4	-75.8
Romania*	2 874.9	31.4	93.5	-670.5
Slovenia	67.8	7.2	93.5	-29.0
Slovakia	48.4	2.2	12.6	-45.0
Finland	90.2	3.6	74.2	-24.6
Sweden*	61.0	1.4	47.5	-31.0
United Kingdom**	394.5	1.3	55.2	9.6
EU-27***	11 428.7	5.1	75.3	-2 946.9
Note:	* 2010 and	2000-2010.		

\*\* Data include the whole primary sector. \*\*\* Calculated using national data above. Source: Eurostat, National Accounts (online data co

Source: Eurostat, National Accounts (online data code: nama nace10 e).

Even though the data presented in the table are not homogeneous, some conclusions can be drawn:

• Around 70% of employment in agriculture in the EU is concentrated in only seven countries (Romania, Poland, Italy, Spain, France, Bulgaria and Germany). Romania and Poland alone account for around 40% of the total.

- Employment in agriculture represents more than 10% of total employment in five Member States: Romania (31.4%) and Bulgaria (19.4%) present the highest rates, followed by Poland, Greece and Portugal.
- In 18 Member States, agricultural employment accounts for less than 5% of total employment, with rates below 2% in Luxembourg, Belgium, the United Kingdom, Sweden and Germany.
- Due to the nature of the activity, self-employment has always been very high. In Romania, Slovenia, Bulgaria, Poland, Austria and Greece, at least 85% of those working in agriculture are self-employed. In only seven Member States is this rate below 50%, with the lowest percentages found in Slovakia (12.6%), the Czech Republic (30.4%) and Estonia (33.3%).
- Concerning the evolution of employment in the primary sector, Table 5 shows a drop of more than 2.5 million persons since year 2000, with Poland and Romania together accounting for 42% of this decrease.

As mentioned before, National Accounts are the best data source to measure the overall level of employment in an economy, its breakdown into the main economic sectors (primary, secondary and tertiary) and, when detailed data are available, the importance of the different economic activities that integrate each of these sectors. For the primary sector as a whole (which comprises agriculture, hunting, forestry and fishing activities), available data show that in all Member States, agriculture is the main component of the primary sector, followed by employment in forestry, which is particularly high in some Member States: this is the case in Sweden and Slovakia (around 35%), Estonia, Latvia and Finland (more than 20%), the Czech Republic and Slovenia (around 15%). In general, fishing activities represent less than 5% of employment in the primary sector in most of the Member States.

 $<sup>^{18}</sup>$  The row for the EU-27 aggregate has been calculated from the individual data presented in the table, it thus does not contain 'official' figures. Data for Croatia are not yet available in Eurostat.

## 2.4. Labour Force Survey (LFS)

The LFS measures participation in the labour market (i.e. employment rates, activity rates, flows between employment and unemployment, etc.), demographic and social breakdowns (e.g. by age, gender or educational level) and is thus suitable for socio-demographic studies of the labour force.

## What is the LFS?

The LFS is a **large sample survey among private households which produces detailed annual and quarterly data (estimates) on the characteristics of employment and unemployment**. It is conducted every quarter with a sample size of about 1.5 million people, and its main statistical objective is to divide the population of working age into three mutually exclusive and exhaustive groups - persons in employment, unemployed persons and inactive persons - and to provide descriptive and explanatory data on each of these categories.

Quarterly surveys are conducted by the Member States and published by Eurostat. Annual data encompass the four reference quarters in the year. Eurostat calculates European aggregates by summing up totals from the individual Member States.

#### Industry breakdowns

The LFS sample covers all domains of economic activity, and uses the **NACE classification** already mentioned.

## Employment in the LFS

For the LFS, employed persons are those aged 15 or 16 years and above who during the reference week performed work, even for just one hour a week, for pay, profit or family gain, including the persons who were not at work but had a job or business from which they were temporarily absent because of, e.g., illness, holidays, industrial dispute or education and training.

The LFS is organised in 12 modules covering demographic background, labour status, employment characteristics of the main job, atypical work, working time, employment characteristics of the second job, previous work experience of persons not in employment, search for employment, main labour status, education and training, situation one year before the survey and income.

Results are measured in persons, differentiated by sex, age and, depending on the data, economic activity, and are used to calculate some important indicators such as the employment and unemployment rates.

## Data limitations

Despite the large amount of data on employment and unemployment that can be provided by the LFS, which is undoubtedly the best data source for labour market analysis, its ability to provide information on employment in agriculture is very limited: only the number of persons employed, by gender and by age groups, is available, and three of the main characteristics of employment in agriculture (importance of family work, part-time employment and temporary employment) are not covered by the LFS. For this reason, in general LFS data are of lower accuracy than the FSS.

Nonetheless, the LFS can be used to **complement data provided by the other data sources**. For example, **breakdown by sex and detailed age group cover all agricultural employment**, whereas in the FSS information on age is limited to holders and farm managers. Compared with the National Accounts, in the LFS **the number of persons employed in agriculture is available for all Member States and EU aggregates (EU-27 and EU-15) for the same year (currently 2012)**, and data for Croatia are also available.

# How many people work in agriculture in the EU, according to the LFS?

In 2012, 9.9 million persons aged 15 years or more were employed in the EU in the agricultural sector (crop and animal production, hunting and related service activities), representing 4.6% of total employment.

By sex, **men represented 62% of total employment in the agricultural sector** (54% in the total economy).

By age, **33% of the agricultural labour force was younger than 40 years** (44% in the total economy), **57% was between 40 and 65 years** (54% in the total economy) **and 10% was aged 65 years and more** (2% in the total economy).

2012 data for the agricultural sector are complete in Eurostat for all Member States plus Croatia. Table 6 summarizes the data available.

	Employment in agriculture – Data from the LFS
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Employment in agriculture						
			2012			
Countries	1000 persons	% of men	% of persons aged 15- 39	% of persons aged 40- 64	% of persons aged 65 and more	
Belgium	48.9	72.0	30.7	61.8	7.6	
Bulgaria	168.1	66.5	33.7	62.3	3.9	
Czech Republic	115.1	69.0	29.3	67.7	3.0	
Denmark	63.7	78.5	43.0	46.0	11.0	
Germany	572.7	65.9	27.5	63.1	9.4	
Estonia	20.3	63.5	32.0	61.6	5.9	
Ireland	81.2	87.7	23.3	57.0	19.6	
Greece	471.6	58.7	28.3	66.7	4.9	
Spain	688.6	72.5	39.2	58.9	1.9	
France	707.1	68.6	28.6	67.7	3.7	
Italy	774.9	69.3	32.0	61.1	6.9	
Cyprus	9.8	66.3	18.4	53.1	28.6	
Latvia	51.5	62.1	28.5	64.1	7.4	
Lithuania	100.0	59.5	27.7	68.5	3.8	
Luxembourg	3.0	70.0	23.3	70.0	6.7	
Hungary	178.8	72.5	36.4	62.0	1.6	
Malta	1.4	85.7	u	64.3	u	
Netherlands*	205.3	71.7	39.5	54.9	5.6	
Austria	193.1	56.1	23.5	63.4	13.1	
Poland	1 878.4	57.4	35.0	60.2	4.8	
Portugal	457.4	58.9	10.7	46.6	42.7	
Romania	2 619.1	52.7	38.8	47.2	13.9	
Slovenia	73.2	55.1	26.5	55.3	18.3	
Slovakia	55.1	76.0	26.5	73.1	0.4	
Finland	78.4	68.2	25.6	64.5	9.8	
Sweden	64.4	69.7	32.3	52.6	15.2	
United Kingdom	314.2	71.4	32.0	52.3	15.7	
EU-27	9 947.9	61.5	33.0	57.0	9.9	
Croatia	179.9	51.4	17.4	61.1	21.5	
Note:	* 2011 for u = unrelia	the Nethe able.	rlands.			

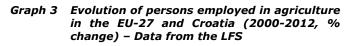
Source: Eurostat, LFS (online data code: Ifsa eqan22d).

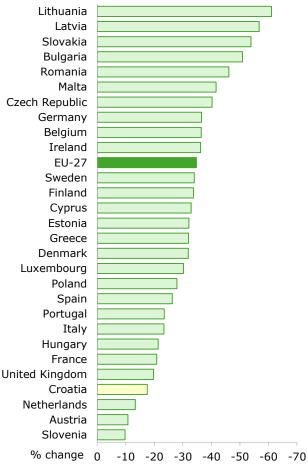
- More than 70% of total employment in agriculture in the EU is concentrated in only six countries: Romania, Poland, Italy, France, Spain and Germany. Romania and Poland, with 2.6 and 1.9 million workers respectively, represent 45% of the total.
- The proportion of men working in agriculture is higher or much higher than that of women: men represent more than 70% of the agricultural labour force in nine Member States. The countries where the presence of women is more important are Romania, Slovenia, Austria,

Poland, Greece, Portugal and Lithuania (more than 40% in each of these countries).

• When compared with the total economy, employment in agriculture is characterized by a lower share of younger workers and a higher share of workers aged 65 and more, although differences between countries are important. The highest shares of 'young farmers' (i.e. below 40 years) are found in Denmark (43%), the Netherlands, Spain and Romania (all of them close to 40%), and the lowest in Portugal (10.7%) and Cyprus (18.4%). The share of workers aged 65 and more is extremely high in Portugal (42.7%) and is also important in countries like Cyprus (28.6%), Ireland and Slovenia.

The LFS can also be used to analyse the **evolution of persons employed in agriculture in the last decade**, as it is shown in Graph 3.





Source: Eurostat, LFS (online data codes: <u>lfsa\_egan22d</u>).

## 2.5. Regional data

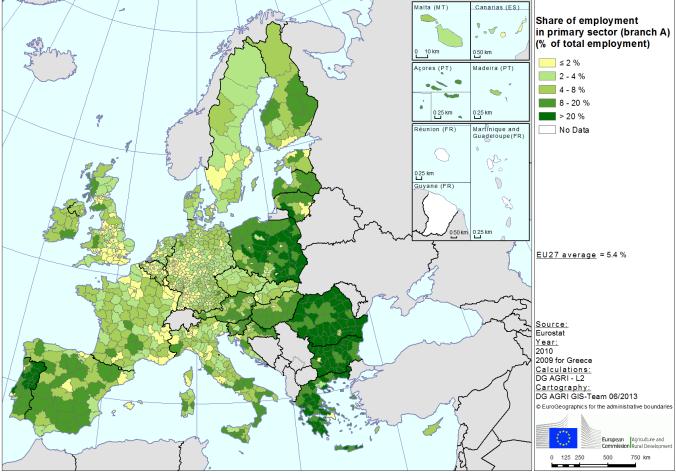
When data at regional level are needed, three of the four data sources presented in this *Brief* can be used; only the EAA do not have data on employment in agriculture at regional level:

- FSS: regional data are disseminated by Eurostat using NUTS level 2 for all Member States except Germany, for which NUTS level 1 is used instead;
- Regional Accounts: derived from the National Accounts, in the Regional Accounts information on employment is only available for the whole primary sector but at the most detailed regional level (NUTS 3);
- LFS: data on employment in agriculture are available for NUTS 2 regions.

The set of variables covered at regional level in these data sources may be smaller than the ones existing at country level.

## *Importance of employment in agriculture at regional level, using the Regional Accounts*

Map 1 shows the importance of employment in the primary sector at regional level. In 113 NUTS 3 regions (9% of the total), mainly concentrated in Romania, Bulgaria, Poland, Greece and Portugal, employment in the primary sector still represents more than 20% of total employment; in 19 regions, most of them in Romania, this share goes up to 45% or more (Ialomita and Vaslui have the highest shares with more than 60%). In another 204 regions (16%), the primary sector is also important in terms of employment, with shares between 8 and 20% of the total. However, in a majority of regions (994, 76% of the total) employment in the primary sector represent less than 8% of the employment, with a total of 846 regions (65%) below the EU-27 average (5.4%).



#### Map 1 Employment in the primary sector in 2010, by NUTS 3 regions - Data from the Regional Accounts

Source: Eurostat, Regional Accounts (online data code: <u>nama r e3em95r2</u>).

## 3. Where to find information about...?

# 3.1. Agricultural labour force in AWU – FSS vs EAA

FSS and EAA are complementary data sources: both provide data on agricultural labour force measured in AWU. Summarizing what has been already said, although the FSS is the main source for employment data in the EAA, there are differences between them: the FSS focuses on farms above a certain threshold and is only available for certain years (i.e. years when censuses or a surveys are carried out), whereas the EAA provide annual figures that also cover holdings below the FSS threshold and include labour input of agricultural services, inseparable secondary activities and hunting; for this reason, EAA figures are usually higher. In years when the FSS is not carried out at EU level, EAA data are estimated using other data sources; these data may be subject to corrections once a new FSS becomes available.

AWU figures for the same year should then be very similar in both data sources (see 2010 comparison in Table 7): as expected, EAA figures are similar or slightly higher for the EU-27 and for most of the Member States and Croatia, but some countries present higher values in the FSS or significant differences between the two data sources (this is the case for Slovakia and Finland). In some cases, the reason may be that, whereas FSS data are already definitive, this is not yet the case for 2010 data from the EAA: the EAA are under a process of continuous revision which depends on the data available in each country, and 2010 final data are expected to be published by Eurostat in October 2013. In other cases, differences may be explained by the methodology used in the EAA in a particular country.

Family farm labour force (FSS) and non-salaried labour force input (EAA) are equivalent concepts: Table 7 shows similar results from both data sources for most of the countries.

With all this in mind, what could be the best answer to the question 'How many people work in agriculture (in full-time equivalent jobs) in the EU (or in a particular Member State)'?

Focusing on the EU, two different and perfectly correct answers could be the following ones:

• In 2010 there were 9.8 million full-time equivalent jobs in the EU farms (source: Eurostat, FSS 2010). • In 2012<sup>19</sup> there were around 10.4 million full-time equivalent jobs in the agricultural sector of the EU (source: Eurostat, EAA estimates).

The first answer would be more appropriate when more detailed information on the characteristics of the farm labour force needs to be provided as well (sex, age, distribution by type of holding, etc.). The use of EAA figures would be a better option when the most recent figures are needed<sup>20</sup> or to create, for example, a graph representing the evolution of the labour force in agriculture (see Graph 2).

Table 7	Labour force in agriculture in 2010, in AWU
	– FSS vs EAA

	FS	S	EAA				
Countries	Total farm labour force	Sole holders + family members	Total labour force input	Non- salaried			
	2010						
	1000 AWUs	% of total	1000 AWUs	% of total			
Belgium	61.6	75.0	61.9	83.5			
Bulgaria	406.5	82.8	406.5	82.9			
Czech Republic	108.0	22.3	108.8	24.1			
Denmark	52.3	57.3	54.1	54.3			
Germany	545.5	63.9	537.5	60.8			
Estonia	25.1	53.1	25.4	52.4			
Ireland	165.4	92.3	165.6	92.3			
Greece	429.5	82.5	420.8	81.3			
Spain	889.0	63.4	924.2	58.4			
France	779.7	43.7	809.5	66.9			
Italy	953.8	79.5	1 171.0	64.6			
Cyprus	18.6	69.2	25.4	71.3			
Latvia	85.2	83.8	85.9	81.0			
Lithuania	146.8	81.7	143.4	72.9			
Luxembourg	3.7	75.4	3.6	75.0			
Hungary	423.5	76.8	440.0	76.1			
Malta	4.9	90.1	4.9	89.8			
Netherlands	161.7	59.1	177.7	59.1			
Austria	114.3	85.6	129.5	87.4			
Poland	1 897.2	94.6	2 101.3	94.6			
Portugal	363.4	81.0	369.9	80.9			
Romania	1 610.3	88.7	1 639.0	87.2			
Slovenia	76.7	89.6	77.0	89.2			
Slovakia	56.1	28.1	82.6	45.4			
Finland	59.7	79.8	82.1	80.5			
Sweden	56.9	68.4	59.5	69.7			
United Kingdom	266.3	67.7	277.1	65.5			
EU-27	9 761.2	77.5	10 384.1	76.9			
Croatia	184.5	90.8	202.0	94.1			

Sources: Eurostat, FSS and EAA (online data codes: <u>ef lflegaa</u> and <u>aact ali01</u>).

<sup>&</sup>lt;sup>19</sup> See 2012 data in Table 4.

 $<sup>^{\</sup>rm 20}$  As a reminder, data from the 2013 FSS will be only available in 2015.

## 3.2. Agricultural labour force in persons – FSS vs LFS

Data on persons working in agriculture can be found in the FSS (farm labour force), in the National Accounts and in the LFS (employment in agriculture). As explained in Chapter 4, disaggregated data concerning agriculture only are not available for all Member States in the National Accounts, and data for Croatia are not available yet. For this reason and in order to simplify, this chapter will only focus on the other two data sources.

Table 8 shows FSS and LFS figures for 2010. Contrary to what happens with data in AWU, the first evident conclusion is that figures from both data sources are completely different: according to the FSS, 25 million persons worked regularly in the EU farms in 2010, whereas in the LFS only 10.4 million persons<sup>21</sup> were employed in agriculture in the EU in the same year.

The gap can largely be explained by differences in methodology and definitions. The FSS includes a large number of persons in the regular farm labour force who are not considered to be employed in agriculture following the methodology and definitions of the LFS.

How is this possible? It is likely that the **specific characteristics of employment in agriculture, especially the importance of part-time and family labour,** and how these variables are considered in each survey, are the key to understanding these big differences.

To illustrate the importance of part-time employment, Table 8 also includes detailed FSS data on the working time devoted to agriculture: for almost 14 million persons in the EU<sup>22</sup>, farm work only represents a minor activity (i.e. less than 25% of their annual working time is spent on farm work); in the LFS, most of these people will probably not be counted as employed in agriculture but in the sector related with their main activity (provided that they are considered as employed). For another 11 million (a figure which is much closer to the LFS results), agriculture represents the main or secondary economic activity. A detailed analysis of the data and all elements that influence the figures obtained in each Member State would go beyond the scope of this *Brief*, but data presented in Table 8 allow finding a good answer to the question 'How many people work in agriculture (in persons) in the EU'?:

 In 2012<sup>23</sup> around 10 million persons had an employment in agriculture in the EU (source: Eurostat, LFS), although according to the latest FSS data the number of persons that during the year were regularly engaged in farm work in the EU reached 25 million in 2010 (which includes a large number of part-time and family workers).

Table 8	Labour	force	in	agriculture	in	2010,	in
	persons	– FSS	vs L	.FS			

		LFS					
Countries	Total regular farm labour force	Agricul- ture is a minor activity*	Agricul- ture is a secon- dary activity*	Agricul- ture is the main activity*	Total employ- ment		
	2010						
Belgium	1000 persons   80.9 14.7 11.4 54.8 55.5						
Bulgaria	738.9	197.4	180.1	361.4	187.4		
Czech Republic	132.7	197.4	130.1	103.2	115.8		
Denmark	80.1	23.8	9.7	46.6	60.3		
Germany	749.7	114.8	132.5	502.5	588.0		
Estonia	52.3	25.0	7.3	20.0	17.2		
Ireland	272.0	64.2	52.5	155.4	79.0		
Greece	1 212.7	713.3	211.0	288.5	528.3		
Spain	2 227.0	1 472.4	224.1	530.5	724.3		
France	1 014.8	240.5	123.2	651.1	698.1		
Italy	3 392.7	2 360.3	397.7	634.6	790.9		
Cyprus	82.0	63.4	7.9	10.8	14.0		
Latvia	181.0	71.5	35.3	74.3	60.1		
Lithuania	366.1	156.1	100.6	109.4	109.9		
Luxembourg	5.0	0.6	0.7	3.7	2.2		
Hungary	1 143.5	612.5	231.2	299.8	151.1		
Malta	18.5	12.7	2.7	3.2	1.6		
Netherlands	211.6	41.7	32.4	137.6	227.9		
Austria	346.3	165.3	65.2	115.8	202.5		
Poland	3 802.6	1 518.3	667.0	1 617.4	1 977.3		
Portugal	708.1	286.1	135.2	286.8	511.1		
Romania	7 156.9	5 169.0	1 303.3	684.7	2 725.8		
Slovenia	208.5	109.2	40.1	59.3	81.7		
Slovakia	91.0	25.9	13.0	52.1	56.3		
Finland	125.3	54.7	19.2	51.5	84.1		
Sweden	141.5	80.2	20.2	41.2	63.8		
United Kingdom	418.5	141.9	50.6	226.1	318.9		
EU-27		13 752.0	4 086.3	7 122.1			
Croatia	513.7	261.4	128.2	124.2	214.6		
Notes: * Less than 25% (minor), between 25-50% (secondary), 50% or more (main) of the working time devoted to agriculture.							

Sources: Eurostat, FSS and LFS (online data codes: <u>ef lflegaa</u>, <u>ef lfwtime</u> and <u>lfsa egan22d</u>).

<sup>&</sup>lt;sup>21</sup> Persons aged 15 years and more.

<sup>&</sup>lt;sup>22</sup> These 14 million persons represent 56% of the total. As a reminder, family labour force represents 45.6% of total regular farm labour force.

<sup>&</sup>lt;sup>23</sup> See 2012 data in Table 6.

## 3.3. Share of agriculture in total employment – National Accounts vs LFS

The share of agriculture in total employment is another key economic indicator which may be calculated using data from both the National Accounts and the LFS, as they cover employment by economic activity for the whole economy.

It has already been said that the National Accounts are the best source to measure the overall level of employment in an economy and its breakdown into the main economic categories. Consistent with that, National Accounts data are used in many publications of the European Commission to present the share of agriculture in total employment: the annual report on employment and social developments in Europe<sup>24</sup>, country fact sheets with main data to measure performance<sup>25</sup>, the annual report on rural development<sup>26</sup> and many others. In these publications, data are normally presented broken down by economic sectors for the whole economy (primary, secondary and tertiary, or agriculture, industry, construction, etc.): 'agriculture' is then a broad category which covers 'agriculture, forestry and hunting', i.e. branch A of the NACE classification.

As presented in Chapter 4, even if more detailed data by economic activity exist in the National Accounts databases, they are not complete for all Member States. The most detailed and recent data presented in Table 5 are shown, in the form of percentage, in Table 9, together with the shares corresponding to branch A. The same shares have been calculated using LFS data for the year 2012.

In many Member States and for the whole EU-27, the shares calculated for agriculture only are very similar to the ones obtained for branch A, the main difference being the importance of the forestry sector (as in general, fishing activities represent less than 5% of the employment in the primary sector in most of the Member States). This is true for both National Accounts and LFS data.

<sup>24</sup> DG for Employment, Social Affairs and Inclusion -

development/index en.htm.

When comparing results for the same country, using one or the other data source does not change the result significantly, with the only clear exception of Bulgaria. This is coherent with the fact that the LFS is one of the main data sources used to calculate employment levels in the National Accounts.

In conclusion, both data sources could be used to calculate the share of agriculture in total employment. However, National Accounts should be the preferred source when calculating the share for branch A, to be coherent with other publications. For agriculture only, LFS data could be used alone or in combination with the National Accounts to complete missing values.

Table 9	Share of agriculture in total employment -
	National Accounts vs LFS

·	Macionar	Accounts	LF	· •		
Countries	Agricul- ture	Branch A	Agricul- ture	Branch A		
	2011* 2012** 2012			***		
	% of total employment					
Belgium	1.3	1.3	1.1	1.2		
Bulgaria	19.4	19.4	5.7	6.4		
Czech Republic	2.8	3.3	2.4	3.1		
Denmark	2.3	2.6	2.4	2.6		
Germany	1.5	1.6	1.4	1.5		
Estonia	3.3	4.6	3.3	4.7		
Ireland	4.3	4.7	4.4	4.7		
Greece	11.0	12.2	12.5	13.0		
Spain	n.a.	4.2	4.0	4.4		
France	2.6	2.8	2.7	2.9		
Italy	3.6	3.8	3.4	3.7		
Cyprus	4.4	3.6	2.5	2.9		
Latvia	6.7	8.3	5.8	8.4		
Lithuania	7.7	8.9	7.8	8.9		
Luxembourg	1.1	1.2	1.3	1.3		
Hungary	6.6	7.4	4.6	5.2		
Malta	n.a.	3.3	0.8	1.0		
Netherlands	2.5	2.6	2.5	2.5		
Austria	4.4	4.7	4.6	4.9		
Poland	n.a.	12.5	12.0	12.6		
Portugal	10.3	11.0	9.9	10.5		
Romania	31.4	30.4	28.3	29.0		
Slovenia	7.2	8.3	7.9	8.3		
Slovakia	2.2	3.1	2.4	3.2		
Finland	3.6	4.6	3.2	4.1		
Sweden	1.4	2.1	1.4	2.0		
United Kingdom	n.a.	1.3	1.1	1.2		
EU-27	5.0	5.2	4.6	4.9		
Croatia	n.a.	n.a.	12.4	13.7		

Portugal, Romania and Sweden. 2009 data for EU-27.

\*\* 2011 data for France and the United Kingdom. \*\*\* 2011 data for the Netherlands.

Sources: Eurostat, National Accounts and LFS (online data codes: nama nace10 e, nama nace64 e, Ifsa egan22d and Ifsa egan2).

http://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=73 15. <sup>25</sup> DG for Regional Policy -

http://ec.europa.eu/regional\_policy/information/brochures/pages/cou ntry2012/index en.cfm. <sup>26</sup> DG for Agriculture and Rural Development -

http://ec.europa.eu/agriculture/statistics/rural-

## 4. Conclusions

How many people work in agriculture in the EU and in each Member State? Are family workers still predominant in European farms? What is the share of women in the agricultural labour force and the distribution by age? How much has this labour force changed in the last decade, especially in the Member States that joined the EU in 2004 and 2007? What is the share of agricultural employment in total employment in the EU and in the Member States? And what is the picture at regional level?

This Brief has tried to find an answer to all these questions using the most recent data available in different Eurostat databases, focusing on the EU but including enough information to allow further analysis for individual Member States if needed (an analysis which would go beyond the scope of the Brief). The main findings are listed below:

- In 2010 there were 12 million farms in the European Union, but most data sources tend to agree in saying that around 10 million persons (in full-time equivalents) are employed in agriculture in the European Union (which represent less than 1 full time worker per farm). These 10 million persons working in the EU farms represent 5% of the total employment.
- Nonetheless, the FSS also indicates that the number of persons regularly engaged in farm work in the EU reached 25 million in 2010:
  - The bulk of farm work in the EU is still carried out by the holders and members of their family (92.2% of the persons working in the farms), with hired non-family workers only accounting for 7.8% of those regularly working on the farms.
  - For a large number of people, farm work only represents a minor activity (13.8 million, 55% of the total), being the main economic activity for only 28.5% of the total (7.1 million persons).

Four different data sources which provide data on agricultural employment have been presented: two databases which specifically cover the agricultural labour force (the Farm Structure Survey and the Economic Accounts for Agriculture), and two databases which cover employment in the total economy (the National Accounts and the Labour Force Survey).

Each data source brings essential information that allows us to better understand the structure and developments of the agricultural labour force in the European Union. These multiple data sources, with their different scope and methodology, may also cause some confusion in understanding the results: this *Brief* has tried to draw the best out of them while clarifying apparent incoherencies.

A first general conclusion is that the Farm Structure Survey remains the main data source for detailed information on the characteristics of the agricultural labour force. Due to the complexity of this sector in terms of employment, it remains essential to have a specific data source to cover all the different variables (i.e. family/non-family labour, regular/temporary work, full-time/part time employment, holders/managers, etc), as the FSS does. Other data sources can be used to provide some additional information which is not covered by the FSS, and to compare the level of employment in agriculture with employment in other economic sectors.

This *Brief* has also showed how **statistical data are highly dependent on the methodology and definitions used for their collection**, and how this is particularly relevant in the case of statistics on employment in agriculture. It is worth stressing the importance of always mentioning the source of the data used (as detailed as possible), and how reading the metadata associated to the specific data source, together with other related information, can help to better understand and correctly interpret the figures.

This document does not necessarily represent the official views of the European Commission

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