

AGRICULTURE AND FISHERIES

THEME 5 - 14/2001

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Thirty years of agriculture in Europe Changes in agricultural employment

Claude Vidal

The agricultural sector in EU-9* lost 49% of its workers - some 3.8 million people - between 1975 and 1999. This reduction in the number of labour force has been a focal point in the restructuring of Community agriculture for 30 years. It is linked to the reduction in the number of holdings, to the increased size of holdings, to the concentration of labour in bigger holdings and to gains in productivity. Family labour force still account for four out of every five people employed in agriculture. The agricultural population is old – 40% of them are over 55 – and getting older, especially in Greece, Spain, Italy and Portugal. Part-time work has increased, affecting 80% of farm workers in EU-15 in 1997. There has also been an increase in multiple job-holding, which now involves a third of all family labour force. Those involved tend to be the spouse and other family members, rather than the holder of the holding.

Big drop in number of farm labour force

In EU-9*1 between 1975 and 1997, the number of agricultural labour force (measured by AWUs²) fell by 43%, or 2.5% per year on average (Figure 1). Apart from this massive trend, European agriculture has been marked by various periods of restructuring. Prior to 1979/80, the agricultural sector was shedding jobs at a very fast rate (3% per year). One of the factors in restructuring was the disappearance of the more marginal holdings, especially subsistence farming. Between 1979/80 and 1987 this phenomenon slowed down, since most of the least productive holdings had disappeared.

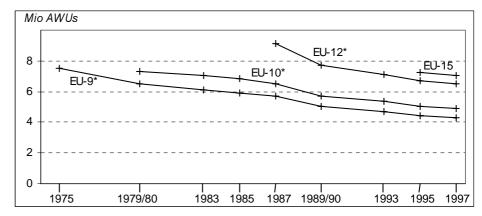


Figure 1: Trend in volume of agricultural labour force

² AWU: Annual Work Unit (cf. Box 1, page 7).

¹ EU-9 means the Europe of the Nine (B, DK, D, F, IRL, I, L, NL and UK), EU-10 the Europe of the Ten (EU-9 plus EL), EU-12 the Europe of the Twelve (EU-10 plus E and P). In this report, in order to avoid having to analyse changes caused by German unification, EU-9*, EU-10*, D*, etc., do not include the former East Germany.

Between 1987 and 1989/90 the agricultural labour force shrank more quickly, at an annual rate of about 5.1%. More than 800 000 AWUs went in EU-10*. The contraction was greatest in Spain (-13.2%/year) and Greece (-8.5%/year). In Germany*, Denmark, France and Portugal, the annual decline was more than 5%.

Three farmtype³ were mainly involved in this reduction: field crops (-34%), mixed crops-livestock farming (-19%) and dairy farming (-16%). In Spain, after it joined the Community, three farmtype underwent a lot of restructuring: mixed livestock farming (-21%), field crops (-20%) and mixed cropping (-18%). Between 1987 and 1989/90 every region in Spain apart from *Andalucia* lost more than 20% of its total labour force (in AWUs).

Restructuring in Greece affected field crops (-48%), permanent crops (-23%) and mixed cropping (-19%). *Makedonia kai Thraki* and *Aigaio* lost more than 20% of their agricultural labour force. In Portugal the phenomenon continued until 1993, affecting mixed cropping (-34%), mixed crops-livestock farming (-30%) and mixed livestock farming (-31%). There were also drops of 20% of the total labour force in *Hessen, Saarland, Rheinland-Pfalz* (D), *Umbria, Toscana* (I) and *Northern Ireland* (UK). Apart from the disappearance of the smallest holdings, the introduction of a policy of restrictive prices and stabilisers⁴ could be an explanatory factor.

	EU-10				EU-15
Farmtype	% AWUs	Average annual changes (%)			% AWUs
	1985	85-87	87-90	90-97	1997
Grazing livestock (4)	30%	-4.1%	-3.1%	-3.0%	27%
Field crops (1)	20%	-0.6%	-8.7%	-0.6%	19%
Permanent crops (3)	18%	+0.5%	-1.9%	-0.3%	23%
Mixed crops-livestock (8)	11%	-2.7%	-9.0%	-2.3%	9%
Mixed cropping (6)	9%	-2.2%	-8.3%	-2.2%	9%
Mixed livestock (7)	5%	-6.4%	-12.4%	-5.9%	4%
Horticulture (2)	5%	-2.4%	+4.7%	-0.8%	7%
Granivores (5)	2%	-0.9%	-5.8%	-0.5%	2%
TOTAL	6.8 Mio	-2.2%	-5.1%	-1.7%	7.0 Mio

Table 1: Breakdown and change in agricultural labour force by FT

In the case of the 'field crop' farmtype, 81% of the reduction in the labour force that was recorded between 1985 and 1997 occurred between 1987 and 1989/90 (Table 1). After dairy quotas were introduced in 1984, the reduction of the labour force in dairy farms was more gradual, running from 1985 to 1993.

Since 1995 the reduction in the number of labour force seems to have eased off, one of the reasons being the reform of the CAP.

Agricultural sector losing importance

Between 1975 and 1999 in EU-9* the growth in the service sector fuelled growth in employment while agriculture was losing half of its labour force (Table 2). In 1999 in EU-15 agriculture accounted for no more than 4.5% of the active population in Europe, i.e. 6.9 million people. The sector was still significant in Greece, Ireland and Portugal (Figure 2).

In 1997 Italy alone accounted for three out of every ten labour force in the permanent agricultural labour force in EU-15 (Box 1), because of the country's large number of holdings (33% of the total). The loss of jobs in agriculture is recent in the countries of Southern Europe (Greece, Portugal, Spain and Italy), Ireland and Finland. In Belgium, Germany, Sweden, Denmark, the Netherlands, Luxembourg and the

United Kingdom the agricultural sector employs less than 4% of the active population. The sector's share of employment was already small at the beginning of the 80s and has shrunk little since.

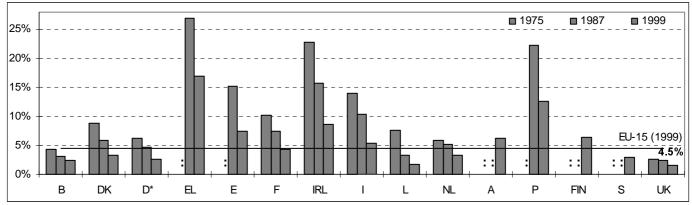
Number	1975	1999	Trends 1975-99		
employed	Mio	Mio	Mio	%	
Services	48.1	78.2	+30.2	+63%	
Industry	40.9	33.7	-7.1	-17%	
Agriculture	7.6	3.8	-3.8	-49%	
Total	98.6	115.8	+17.2	+17%	

Table 2: Sectoral employment trends in EU-9*



³ FT: farmtype.

⁴ Stabiliser: introduction of a co-responsibility levy in the event of exceeding a pre-determined quantity of cereals.



Source: Eurostat LFS
Figure 2: Employment in agricultural sector in 1975, 1987 and 1999 (% of total active population)

: not surveyed

Greater productivity and concentration of labour force

Between 1975 and 1997 in EU-9*, agricultural labour force productivity, as measured by GVA/AWU⁵, increased by a factor of 2.5 (**Figure 3**). These gains in productivity were particularly noticeable between 1975 and 1987. They stemmed from steady technical progress and restructuring of holdings. These changes were influenced by agricultural policies (price support, various subsidies and grants) at national and Community level.

The physical merging of holdings continued, as the number of holdings declined but individual size increased (cf. Statistics in Focus, Theme 5, 1/2000, Farm numbers declining as farms grow in size).

The ratio of agricultural area to volume of work (UAA/AWU) grew in every country at a faster rate than holding size. A specific UAA was thus worked by less labour in 1997 than it had been in 1975.

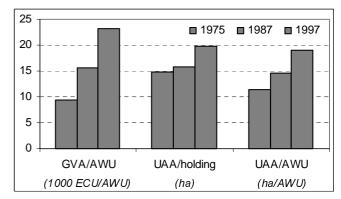


Figure 3: Trend in productivity in EU-9*

The UAA/AWU ratio steadily rose in EU-9* between 1975 and 1997, rising from 11.5 to 18.9 ha/AWU. The ratio doubled in Germany* and France. These two countries, along with Italy, lost a big chunk of their labour force. In 1997 the average UAA/AWU ratio was 18.3 ha/AWU in EU-15, with the highest figure occurring in the United Kingdom (38.9 ha/AWU).

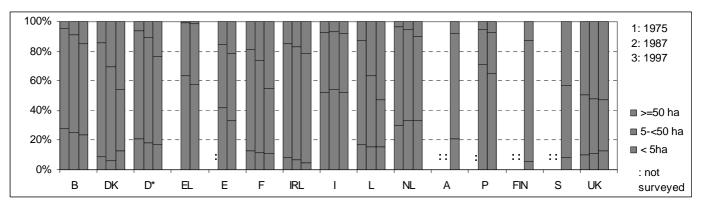


Figure 4: Breakdown of volume of labour force by UAA class of holdings

Between 1975 and 1997 in EU-9* there was a sharp increase in the number of holdings of at least 50 ha

(+37%). These big holdings account for a growing share of the total labour force (from 14% of AWUs in

⁵ GVA: gross value added, at market prices, at constant prices, and at 1990 exchange rates.



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1975 to 24% in 1997). It is the only category of holding in which there has been an absolute increase in the size of the labour force (+0.6%). This trend has affected every country (**Figure 4**).

In EU-15 in 1997 the holdings of more than 50 ha accounted for 21% of the total labour force, 8.5% of all holdings and 61% of all UAA. In the United Kingdom these large holdings provided jobs for more than half of the agricultural labour force.

The concentration of the labour force in large holdings was also noticeable in France, Denmark, Germany* and in Luxembourg. In France and Denmark the figure rose from less than a fifth in 1975 to almost half of the total in 1997. In Germany* it went from 6% to 24%. Following unification, it went as high as 34% in the whole of Germany in 1997. In EU-9* the volume of labour per holding has declined in most countries, falling from 1.3 to 1 AWU. In 1997 the figure was also 1 AWU per holding in EU-15.

Traditionally family agriculture

In 1997 in EU-15 family labour force accounted for 79% of the total agricultural labour force. This corresponded to 5.6 million AWUs, or 13.7 million people (Figure 5). Non-family labour force were divided between permanent employees (12%) and occasional employees (9%).

Between 1975 and 1997 in EU-9* the proportion of non-family labour force (in AWUs) increased slightly, rising from 16% to 19%. This reduction in the size of the family labour force is connected with the sharp decline (-43%) in the number of spouses working on holdings (Tableau 3). Their number has declined more than other members of the holder's family.

Between 1979/80 and 1997 the size of the family labour force in agriculture (in AWUs) fell by 59% in Denmark. In France and Germany* it more than halved. In 1997 in

EU-15 the family share of the labour force exceeded 90% (in AWUs) in Finland, Ireland and Austria (Figure 6). The figure was below two-third in Denmark and the United Kingdom, where holdings are large and tend to be professionally run.

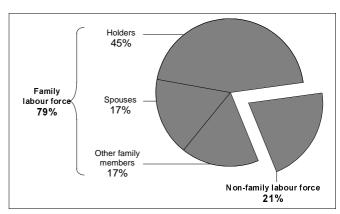


Figure 5: Breakdown of total agricultural labour force in EU-15 in 1997 (AWUs)

	1975	1997	Trend	s 75-97
	Mio	Mio	Mio	%
Family labour force	11,7	7,9	-3,8	-33%
Holders	5,8	4,1	-1,7	-30%
Spouses	3,2	1,8	-1,4	-43%
Other family members	2,7	2,0	-0,8	-27%
Non-family labour force	1,0	0,7	-0,3	-32%

Table 3: Breakdown of permanent labour force in EU-9(% persons)*

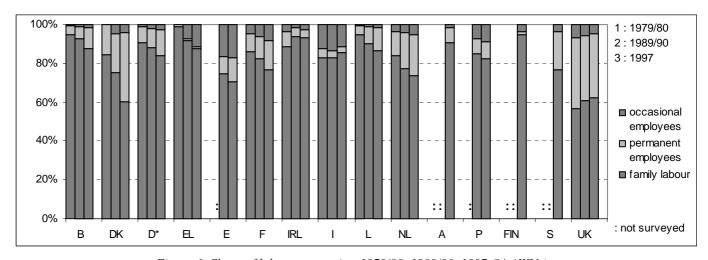


Figure 6: Share of labour categories, 1979/80, 1989/90, 1997 (% AWUs)



Between 1979/80 and 1997 the volume of non-family labour increased by more than 40% in Belgium, Denmark, the Netherlands and Luxembourg.

It fell by 60% in Ireland, by 37% in the United Kingdom, by 29% in Italy, by 16% in France and by 12% in Germany*. There was a slight increase in occasional employees' share of the volume of labour. In EU-15 in 1997 it was greater in Southern Europe (17% of total labour in Spain), because of the importance of farming requiring seasonal labour (permanent crops and market gardening).

Between 1979/80 and 1997 in EU-9* there was a slight decline in the number of female workers in agriculture (permanent labour force). In EU-15 in 1997 women accounted for 31% (in AWUs) of the labour force (see Statistics in Focus, Theme 5. 7/2001, Agriculture in Europe: the spotlight on women).

Agricultural labour force: old and getting older, especially in the south

In 1995 in EU-15 workers aged 55 or more represented 38% of the permanent labour force (in AWUs) in agriculture. As in other sectors of activity, the proportion of old workers⁶ is increasing. However, the average age of the agricultural labour force is higher than the average in other sectors of activity (Figure 7). Farm workers keep on working beyond the retirement age in other sectors. Lastly, as holdings grow in size, it makes it financially more and more difficult for young farmers to take over.

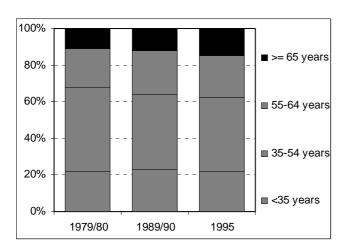
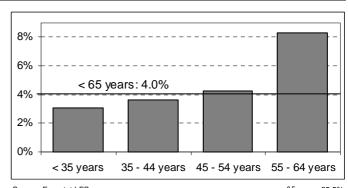


Figure 8: Age of permanent labour force EU-9* (% AWUs)



Source: Eurostat LFS age group >=65 years: 25.5% Figure 7: Active agricultural population less than 65 years old in EU-15 in 1999 (% of total active population)

Between 1979/80 and 1995 in EU-9* the proportion of old workers in the agricultural labour force rose from 32% to 38%. The figure for those aged 55-64 remained stable, but there was an increase in the case of those over 65 (Figure 8). In 1997 in Greece, Spain, Italy and Portugal the average age of the agricultural labour force was higher than the EU average (Figure 9). This is partly explained by the fact that farmers keep working late in life in these countries.

In 1995 in EU-15 one person in five in agriculture was under the age of 35. The figure stayed unchanged between 1979/80 and 1995 in EU-9*. The percentage was higher in the Netherlands (32%), Denmark (34%) and Austria (30%). In Denmark however the figure had shot up between 1979/80 and 1997, almost doubling from 20% to 36%.

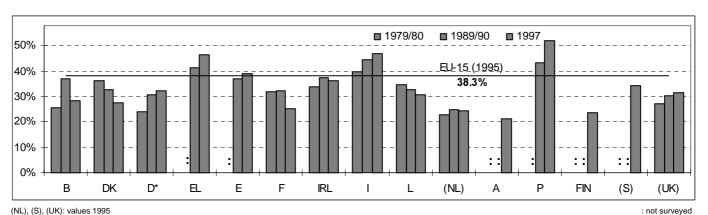


Figure 9: Farm workers aged 55 or more (% AWUs)

 $^{^6}$ 'Old people' here means those aged 55 or over.



More part-time and multiple-job working

Between 1975 and 1997 in EU-9* the number of people working part-time increased slightly, from 72% to 75%. In 1997 in EU-15 four people out of five worked part-time, and part-time working was particularly common in southern Europe (Greece,

Spain, Italy and Portugal) and Austria. This feature was connected with the large proportion of smaller holdings unable to offer full-time employment (Figure 10).

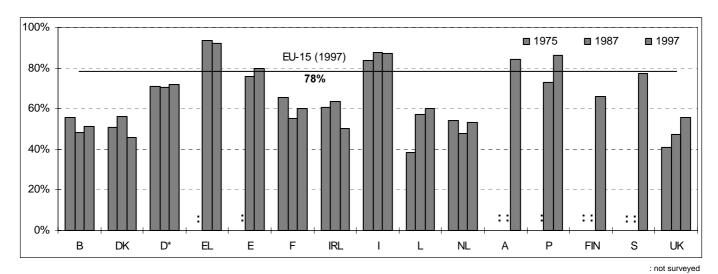


Figure 10: Part-time working of permanent labour force (% persons)

ns)

Part-time working is still predominant among the spouses of holders. Between 1979/80 and 1997 in EU-9* it grew sharply among permanent employees and, to a lesser degree, among holders and other members of their families. The need for an additional income in order to be able to live on the holding and a more attractive labour market (in terms of job opportunities and salaries) in other sectors of activity were the main reasons. In 1997 one farmer in four worked part-time on his holding in EU-15. The proportion was one in ten for spouses and just under one in seven for other family members (**Figure 11**).

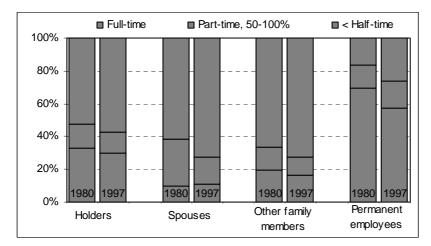


Figure 11: Working time of labour force in EU-9* (% persons)

Between 1979/80 and 1997 in EU-9* the proportion of holders' spouses having multiple jobs doubled from 11% to 24%. At the same time, it declined among holders themselves, indicating more professional а approach to farming. In 1997 in EU-15 multiple jobs were held by one spouse in four, just under half of other family members and three out of ten Multiple jobs managers. were particularly common in Sweden (64% of people), Ireland (49%), Finland (43%) and Denmark (37%). On the other hand, less than one spouse in six worked off the holding in Belgium, Greece and Luxembourg.

Between 1979/80 and 1997 multiple job-holding spread in Denmark, Germany*, the United Kingdom, France, Ireland, the Netherlands and Luxembourg.



Box 1: Employment in agriculture - Statistical sources and applications

Farm Structure Survey (FSS)

It provides the most accurate picture of the farm labour force, covering all those with an agricultural activity, even secondary. The results allow the period from 1975 to 1997 to be analysed. Where data for some aspects are not available for the whole period, the analysis refers to 1979/80-1997.

Volume of farm labour force

This is expressed in **Annual Work Units (AWUs)**. One AWU is equivalent to the work of one full-time employee, i.e. a minimum of 1 800 hours of work per year (8 hours a day for 225 days a year). It is a measurement of labour force as a resource of a holding and corrects the effect of part-time working, which is a very common feature among agricultural workers.

Family labour force

This covers holder's being a natural person, the spouses of the holder and other members of the holder's family working on the holding.

Holders and holder managers

In EU-15 some 95% of holders are also managers. The results that are available for holder managers are thus valid for all holders. This applies, for example, in the case of multiple job-holding.

Spouses of the holder

Only spouses performing agricultural work on the holding during the 12 months prior to the survey are included. The total number of spouses is not recorded.

Non-family labour force regularly employed (called here 'permanent employees')

This covers those who are not members of a holder's family but who worked on the holding in every week of the 12 months prior to the survey (apart from holidays, sick leave, etc).

Non-family labour force employed on a non-regular basis (called here 'occasional employees')

This includes others who are not part of the holder's family. There is no information on the number of people and their breakdown by age group. There can thus be no analysis in terms of number of people.

Permanent labour force

This includes *family labour force* and *non-family labour force regularly employed*. This aggregate allows the labour force to be analysed in terms of number of persons.

Total labour force

This includes family labour force, non-family labour force regularly employed and non-family labour force employed on a non-regular basis.

Multiple job-holding

A multiple job-holder is one who receives remuneration for an activity other than one related to agricultural work.

Employment statistics

These allow comparisons to be made of employment in the agricultural sector in the broadest sense (agriculture, hunting, fisheries and forestry) and in other economic sectors. Individuals are assigned to the economic sector of their principal activity. The employment details are recorded according to the same criteria for all sectors, from 1970 to 1999.



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