Statistics in focus

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Different organic farming patterns within EU-25[1]

An overview of the current situation

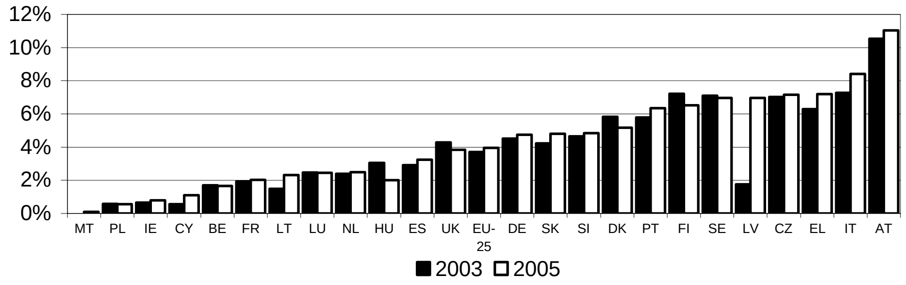
The aim of this publication is to give an overview of the current state of organic farming throughout the European Union following enlargement in May 2004. The structure of the publication mirrors the one published in 2005.

The main conclusions of the analysis are:

- The organic area out of the total Utilised Agricultural Area is around 4% across the EU-25, with a slight upward trend.
- Austria has the highest share of organic area over total Utilised Agricultural Area, posting 11% in 2005.
- Increases in EU-15 organic crops and operators are very slight. However, there is a great difference between Nordic and southern Member States, the latter still showing a certain amount of dynamism.
- Italy accounts for nearly 18% of total organic area in the EU-25. The Czech Republic has the highest percentage (over 4%) among the countries which joined the EU in 2004.
- Organic crops with the highest share in organic farming, leaving aside pastures and meadows, are annual crops. Nevertheless, in southern Member States permanent crops account for a significant percentage of total organic crops.
- The average size of organic agricultural holdings is bigger, in general, than the average size of all holdings.
- Some Member States breed considerable numbers of organic livestock, especially sheep and cattle. On the other hand, developments in organic livestock rearing are uncertain, the available data showing trends in the sector to be erratic.

Slight increase in organic area[2] over the total Utilised Agricultural Area in EU-25

Figure 1: Organic area against total Utilised Agricultural Area in %, 2003/2005



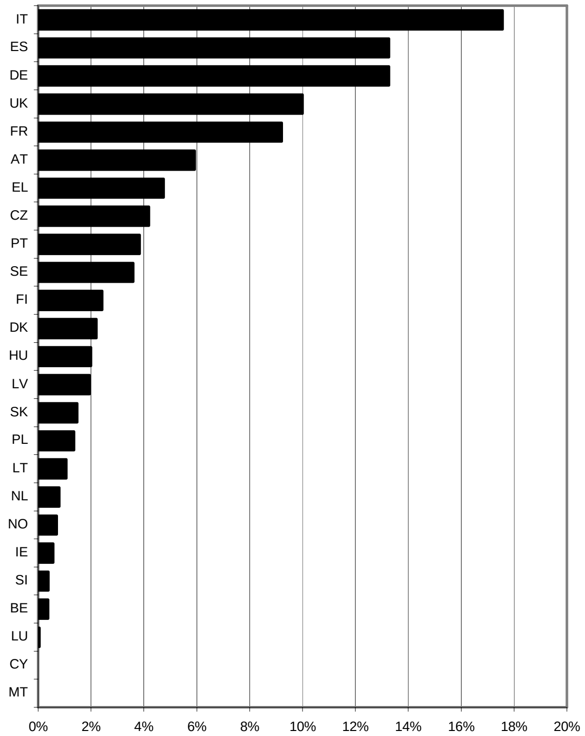
Sources: Eurostat Organic Farming Statistics; Farm Structure Surveys

NB: Organic area data 2003: CY, LV, LT, MT, SI 2004
Organic area data 2005: LU, PL 2004

[1] There are no data on Estonia. Bulgaria and Romania, who became members of the EU on 1 January 2007, were not obliged to supply data for the time period mentioned in this publication.
[2] Organic crops in fully converted and under conversion areas. The EU-15 and EU-25 totals for 2004 and 2005 are estimated using data from other years

The percentage of the total organic area over the total Utilised Agricultural Area within EU-25 has slightly increased from 2003 to 2005, from 3.7% to 4%. Figure 1 shows the percentage of organic crop area out of the total Utilised Agricultural Area in 2003 and 2005 by country. Organic crops account for 11% of the total agricultural area in Austria and the figure is still rising. Italy also exhibited significant dynamism between 2003 and 2005, posting more than 8% of organic area over total area in 2005. However, the Nordic Member States seem to have the areas under organic crops stabilised and now these areas are decreasing, in Denmark from 5.8% to 5.2%, in Finland from 7.2% to 6.5% and, more slightly, in Sweden from 7.1% to 7%.

Figure 2: Share of total organic area by country (%) out of total EU-25 organic area, 2005



NB: LU, PL 2004

Table 1: Organic (fully converted and under conversion) area 2005 (ha) and % changes 2004-2005

	Organic area 2005	% changes 2004-2005
EU15	5 350 604	4%
EU25	6 115 465	6%
BE	22 994	-3%
CZ	254 982	-3%
DK	134 129	-13%
DE	807 406	5%
IE	34 912	19%
EL	288 737	16%
ES	807 569	10%
FR	560 838	5%
IT	1 069 462	12%
CY	1 698	*96%*
LV	118 612	*354%*
LT	64 544	75%
LU	3 158	:
HU	128 576	-3%
MT	14	*1300%*
NL	48 765	1%
AT	360 369	5%
PL	82 730	:
PT	233 458	8%
SI	23 499	4%
SK	90 206	76%
FI	147 587	-9%
SE	222 268	1%
UK	608 952	-12%
NO	43 010	6%

Source: Eurostat Organic Farming Statistics

NB: LU, PL 2004

Regarding the share of the total organic area of each Member State over the total organic area in the EU-25 (Figure 2), Italy accounts for nearly 18% of all organic crops in the EU-25. Germany and Spain follow with a share of nearly 14%. The Czech Republic is the country with the highest percentage (4%) among the Member States which joined the EU in 2004.

The growth rates of organic crop area between 2004 and 2005 (Table 1) are very high in Malta and Latvia. Ireland, Greece, Spain, Italy, Cyprus, Lithuania, and Slovakia have recorded positive growth of more than 10%. Belgium, the Czech Republic, Denmark, Hungary, Finland and the UK are experiencing downswings in organic area, at least for those two years.

EU-25: 87% of organic operators are producers

The pattern of organic operators is similar to organic farming area (Table 2). It is clear that the main activity of organic operators is producing organic crops and animals at the first level of the production chain, i.e. at farm level. This is particularly so in the Czech Republic, Cyprus, Latvia, Lithuania, Hungary, Poland, Slovenia and Slovakia, where the number of producers far exceeds the number of processors. However, there are other Member States, like Belgium and the Netherlands, with over 42% of processors, and Germany, France, Luxembourg and the UK, where the percentage of processors is around 30%. The significance of processors indicates more developed production and marketing of organic products in those countries. On the total of operators, Nordic Member States are on the decline, Latvia, Lithuania and Slovakia are currently growing more rapidly and the other Member States, especially Greece and Italy, are still recording significant increases. The remarkable increase of importers in the United Kingdom is due to an underestimation of their number in 2004.

Table 2: Number of organic operators by type, 2005, and % changes 2004-2005

	Number of operators by type				**% changes 2004-2005**			
	ALL	Producers	Processors	Importers	ALL	Producers	Processors	Importers
EU15	168 524	144 767	27 379	1 881	9.7%	9.9%	7.0%	16.8%
EU25	182 305	157 852	27 951	1 916	13.4%	11.1%	7.1%	17.0%
BE	1 282	720	530	67	6.0%	9.3%	-1.5%	4.7%
CZ	1 234	835	131	7	9.9%	-0.8%	7.4%	16.7%
DK	3 597	3 036	603	100	-7.2%	-4.1%	-13.6%	69.5%
DE	22 032	17 020	7 153	590	5.4%	2.5%	10.4%	15.0%
IE	1 066	957	120	7	12.7%	13.9%	3.5%	16.7%
EL	15 556	14 771	1 002	9	57.4%	59.2%	32.5%	-10.0%
ES	17 509	15 693	1 764	52	-1.0%	-2.0%	7.9%	30.0%
FR	16 546	11 402	4 995	149	:	3.1%	2.5%	:
IT	49 469	44 860	6 418	200	19.6%	21.4%	5.5%	-3.4%
CY	159	159	:	:	:	:	:	:
LV	2 883	2 873	36	0	174.6%	175.5%	414.3%	0.0%
LT	1 817	1 802	15	0	51.2%	53.0%	-38.0%	0.0%
LU	110	74	36	1	5.8%	12.1%	-5.3%	0.0%
HU	1 898	1 731	281	15	:	:	:	:
MT	7	6	4	0	600.0%	500.0%	300.0%	:
NL	2 238	1 377	940	193	1.0%	-0.4%	-4.7%	9.7%
AT	21 455	20 321	1 056	78	1.0%	0.2%	19.2%	8.3%
PL	3 815	3 760	55	:	:	:	:	:
PT	1 660	1 577	82	1	13.6%	14.4%	1.2%	:
SI	1 758	1 724	33	13	8.9%	10.9%	73.7%	116.7%
SK	210	195	17	0	65.4%	66.7%	21.4%	:
FI	4 782	4 436	394	21	-10.2%	-10.6%	-6.2%	50.0%
SE	4 809	4 238	412	159	-11.0%	-10.3%	-11.8%	-25.4%
UK	6 413	4 285	1 874	254	7.8%	-0.8%	21.7%	195.3%
NO	2 889	2 558	403	30	0.5%	0.4%	3.6%	3.4%

Source: Eurostat Organic Farming Statistics

NB: HU 2004; CY, PL 2004 total estimated; FR importers 2004, total 2005 estimated; EU-15 and EU-25 estimated using data for other years.

Table 3: Number of total, new and withdrawn organic operators - Share of new operators out of the total in % and relevant importance of withdrawn operators, 2005

	Operators at the end of 2005	**New operators**	**Withdrawn operators**	**Share of new operators over total**	**Relevant importance of withdrawn operators**
BE	1 282	136	64	11%	5%
CZ	1 234	229	118	19%	10%
DK	3 597	252	530	7%	15%
DE	22 032	2 479	1 356	11%	6%
IE	1 066	144	24	14%	2%
EL	15 556	7 284	1 613	47%	10%
ES	17 509	:	:	:	:
FR	16 546	:	:	:	:
IT	49 469	12 060	3 948	24%	8%
LV	2 883	1 845	12	64%	0%
LT	1 817	:	:	:	:
LU	110	17	11	15%	10%
HU	1 898	:	:	:	:
MT	7	6	0	86%	0%
NL	2 238	152	130	7%	6%
AT	21 455	625	405	3%	2%
PL	3 815	:	:	:	:
PT	1 660	199	0	12%	0%
SI	1 758	402	219	23%	12%
SK	210	117	34	56%	16%
FI	4 782	155	697	3%	15%
SE	4 809	128	725	3%	15%
UK	6 413	1 197	731	19%	11%
NO	2 889	217	203	8%	7%

Source: Eurostat Organic Farming Statistics

NB: HU, PL 2004; FR importers 2004, total 2005 estimated

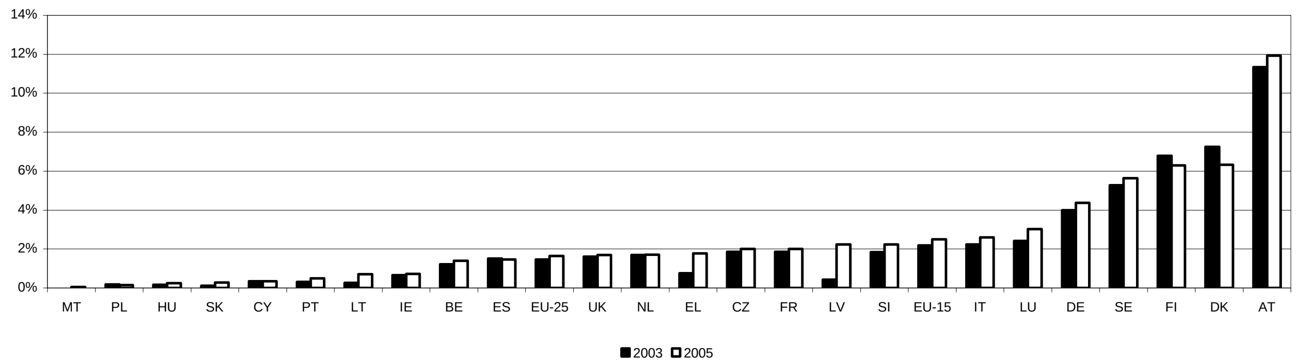
One of the factors that highlights the decline in organic farming in the Nordic Member States is that the number of organic operators leaving the activity is much higher than the number of new operators starting an organic farming business.

Looking to the countries for which data are available, Table 3 shows that the percentage of new operators out of the total is especially high in Latvia, Malta, Slovakia and Greece. Other countries have seen the number of operators stabilised, e.g. the Netherlands, Austria and Norway. The rest show more new than withdrawn operators, but not as strong as in the above-mentioned countries.

Organic producers: 1.6% of all agricultural holdings

Most EU-25 countries show an upward trend in the share of organic producers out of the total number of agricultural holdings, similar to the situation regarding areas under organic crops (Figure 3). While Austria, with nearly 12%, recorded the highest percentage in 2005, the share is decreasing in Denmark, Finland and Spain. Latvia and Slovenia post figures of about 2%, whereas in Poland, Hungary and Slovakia the share is less than 0.3%.

Figure 3: Organic producers out of total agricultural holdings in %, 2003/2005



Sources: Eurostat Organic Farming Statistics
Farm Structure Surveys

NB: Organic data 2003: CY, PL 2004; Organic data 2005: CY, HU, PL 2004

Table 4: Average size of agricultural holdings: organic and all in ha, 2005

	Organic holdings (ha/holdings)	All holdings (ha/holdings)
EU-25	38.7	16.0
EU-15	37.0	21.4
BE	31.9	26.9
CZ	305.4	84.2
DK	44.2	53.7
DE	47.4	43.7
IE	36.5	31.8
EL	19.5	4.8
ES	51.5	23.0
FR	49.2	48.6
IT	23.8	7.4
CY	5.5	3.4
LV	41.3	13.2
LT	35.8	11.0
LU	47.8	52.7
HU	76.8	6.0
MT	2.3	0.9
NL	35.4	23.5
AT	17.7	19.1
PL	22.0	6.0
PT	148.0	11.4
SI	13.6	6.3
SK	462.6	27.4
FI	33.3	32.1
SE	52.4	42.1
UK	142.1	55.6

Sources: Eurostat Organic Farming Statistics;
Farm Structure Surveys

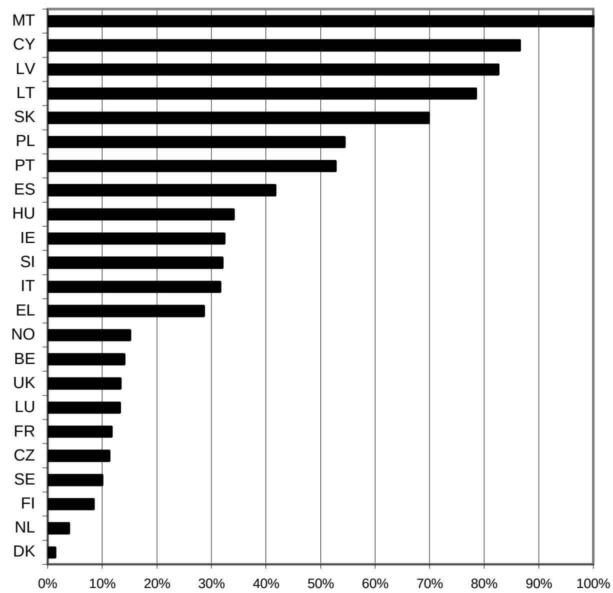
NB: Organic data CY, LU, HU, PL 2004

The average size of the organic agricultural holdings is calculated using data for the most recent available years. None the less, it gives a good picture of the structure of organic holdings in comparison with all holdings (Table 4). It is worth noting that the Farm Structure Survey measures the total Utilised Agricultural Area, i.e. it includes other areas not directly used for cultivation. This survey also excludes very small holdings. Taking these two factors into account, it would be normal to have smaller average sizes among organic holdings, since Organic Farming statistics only account for crop area and include all registered holdings of all sizes. In general, however, all Member States, with the exception of Denmark, Luxembourg and Austria, have bigger average sizes in the organic sector. This is more noticeable in some other Member States, specifically the Czech Republic and Slovakia, but it can also be seen in Hungary, Poland and Portugal. The Organic Farming Regulation No 2092/91 demands special characteristics for breeding animals to be certified as organic: it requires a minimum area per type of animal. Having said that, the size of the organic holdings shows that they are more economically efficient with larger sizes, that is, there are increasing marginal returns to scale coming with size.

Area under conversion out of total organic area varies from 1% to 100%

Real organic production comes from the fully converted area. All areas need to have a period where they are under the conversion process before being considered organic. This period is established in the Organic Farming Regulation (EC) N. 2091/92. The area under conversion over the total area gives the potential growth in the organic sector in the near future. For the 21 Member States and Norway for which data are available, the differences in the potential increase of organic production are noticeable (Figure 4). Some countries have great potential, with areas under conversion between 70% and 100%, namely, Cyprus, Latvia, Lithuania, Malta and Slovakia. Others like Ireland, Greece, Italy, Hungary and Slovenia are in the middle, with potential, at 30%, for increase. In more than one third of the Member States the share of area under conversion out of the total organic area is less than 15% and their potential for growth production is very limited. Denmark is the extreme case with a share of area under conversion of only 1.4 %.

Figure 4: Share of area under conversion out of total organic area (fully converted and under conversion), 2005

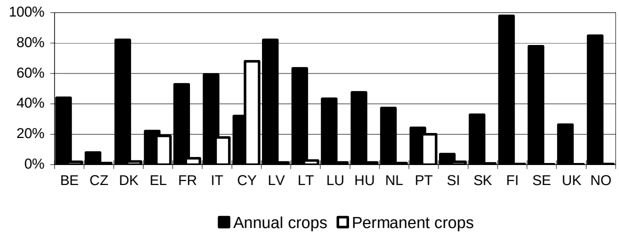


Source: Eurostat Organic Farming Statistics

NB: FR, LU, PL 2004

Crops can be classified into three main types: **Annual crops**, **Permanent crops** and **Pastures and meadows**. From the available data, only five Member States, Greece, France, Italy, Cyprus and Portugal, dedicate significant areas to producing organic permanent crops (Figure 5). These crops are mainly fruit trees, olive groves and vineyards, being mostly products that are usually cultivated in areas with a benign climate. However, only Cyprus has a higher percentage dedicated to permanent crops (mainly olives and grapes). In Greece and Portugal, the shares of annual and permanent crops are very close, at around 20% of the total fully converted organic area. On the other hand, in Denmark, Finland, Latvia and Norway the percentage of annual crops cultivated are more than 80%.

Figure 5: Share in % of annual and permanent fully converted organic crops out of total fully converted organic area, 2005



Source: Eurostat Organic Farming Statistics

NB: CZ, FR, CY, LU, HU, SI 2004

Cereals and **Green fodder** are the main organic annual crops (Table 5). All countries for which data are available have either cereals or green fodder as their main organic crops. In Hungary **Industrial crops** (mainly sunflower) account for 20%.

Table 5: Fully converted organic areas (ha) of total annual crops and shares of main organic annual crops in % of total, 2005

	Total annual crops	Cereals, incl. rice	Fresh vege-tables	Green fodder	Industrial crops	Other arable land
BE	8 704	26%	4%	66%	0%	4%
CZ	16 085	66%	1%	20%	3%	9%
DK	108 695	34%	1%	57%	1%	8%
EL	45 397	75%	1%	19%	3%	3%
FR	247 807	31%	3%	41%	7%	19%
IT	434 481	37%	3%	52%	4%	4%
CY	35	29%	6%	11%	14%	40%
LV	16 984	22%	0%	74%	1%	2%
LT	8 820	72%	1%	3%	0%	25%
LU	1 187	44%	1%	42%	1%	13%
HU	36 102	51%	2%	19%	20%	8%
NL	17 502	28%	14%	21%	2%	35%
PT	26 790	93%	2%	0%	2%	2%
SI	1 036	42%	6%	40%	5%	8%
SK	8 961	50%	2%	28%	10%	10%
FI	132 459	35%	0%	46%	2%	16%
SE	140 075	38%	1%	53%	2%	6%
UK	138 806	26%	7%	61%	1%	4%
NO	30 955	18%	0%	76%	0%	5%

Source: Eurostat Organic Farming Statistics

NB: CZ, FR, CY, LU, HU, SI 2004

Pastures and meadows: significant part of fully converted organic areas

Table 6: Fully converted organic area (in ha) and share of pastures and meadows (in %), 2005

	Total area	Pastures and meadows and unutilised land
BE	19 764	54%
CZ	226 209	92%
DK	132 283	16%
EL	206 205	59%
FR	468 476	43%
IT	731 537	23%
CY	230	0%
LV	20 691	17%
LT	13 905	34%
LU	2 741	55%
HU	75 834	51%
NL	46 877	62%
PT	110 370	56%
SI	15 985	93%
SK	27 247	66%
FI	135 223	1%
SE	179 535	22%
UK	527 836	73%
NO	36 510	15%

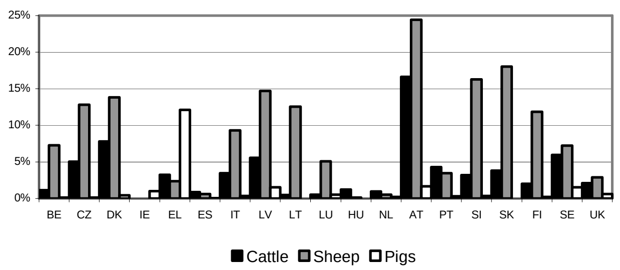
NB: FR, LU, HU 2004

Source: Eurostat Organic Farming Statistics

Table 6 contains figures showing the significance of the pastures and meadows within the total fully converted organic area. There are Member States where this category is the most representative, e.g. the Czech Republic and Slovenia, whose shares reach more than 90%. On the other hand, this category is insignificant in Cyprus and Finland. The other Member States have quite considerable fully converted organic areas dedicated to "pastures and meadows" that do not represent agricultural production. Note that Italy, which has the biggest fully converted organic area, dedicates 23% to pastures and meadows whereas the UK has more than 70%. This type of area will be mostly used to feed livestock.

Organic livestock: Sheep are the most popular species

Figure 6: Organic livestock, cattle, sheep and pigs, out of total livestock in %, 2005



Sources: Eurostat Organic Farming Statistics
Eurostat Animal production statistics

NB: Organic livestock: HU 2004, LU 2002; SE cattle 2004

The percentages of some organic species - **cattle, sheep** and **pigs** - in the total production of these animals show that some Member States produce a considerable amount of organic livestock and that sheep are the most popular in the organic domain in nearly all Member States where data are available (Figure 6). In Austria, as much as 24% of the sheep is bred using organic production methods. Organic cattle are also significant in Austria, at 17%, and account for over 5% of the total in the Czech Republic, Denmark, Latvia and Sweden. Greece is the only country with a high percentage of organic pigs, 13% of the total production of pigs.

Organic livestock is on the increase in some Member States and on the decrease in others (Table 7).

Table 7: Organic livestock (number of heads), 2005 and % changes 2004-2005

	Organic livestock 2005			% changes 2004-2005		
	Cattle	Pigs	Sheep	Cattle	Pigs	Sheep
BE	30 116	8 090	10 636	-6%	-3%	50%
CZ	67 956	3 108	24 230	-32%	129%	-23%
DK	122 760	53 541	11 609	-2%	-8%	-1%
IE	21 950	700	38 000	:	:	:
EL	22 900	126 003	218 293	55%	353%	63%
ES	56 701	10 665	137 831	6%	26%	-4%
IT	222 516	31 338	738 737	3%	18%	48%
LV	21 439	6 580	6 109	114%	217%	210%
LT	3 843	70	3 658	-42%	-16%	-3%
NL	36 269	26 200	9 340	4%	-10%	-8%
AT	333 826	52 170	79 551	1%	6%	0%
PT	62 218	6 763	124 408	14%	-30%	8%
SI	14 539	1 966	21 071	11%	59%	17%
SK	20 133	206	57 830	58%	565%	114%
FI	19 048	3 046	9 948	6%	19%	132%
SE	91 515	27 299	34 700	:	23%	-9%
UK	214 276	29 995	691 000	7%	-46%	0%
NO	18 533	494	31 962	-1%	-34%	-26%

Source: Eurostat Organic Farming Statistics

The developments in individual Member States differ according to species. While the number of heads of cattle and pigs decreased in Belgium from 2004 to 2005 by 6 and 3% respectively, the number of sheep increased by 50% during the same period. In the Czech Republic the number of pigs has more than doubled, whereas cattle and sheep lost considerable proportions of their populations (32 and 23%).

To sum up, the data on organic farming show that the trend in the organic livestock sector is quite different from one Member State to another. Of course the data only highlight changes over two years and there are no other variables to verify this evolution. These results prompt further analyses with more data.

➢ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

Article 15 of Council Regulation (EEC) No 2092/91 on organic production of agricultural products and indications referring thereto on agricultural products and foodstuffs requires Member States to inform the Commission before 1 July each year of measures taken in the preceding year to implement the Regulation.

Abbreviations
EU-15: European Union, including 15 Member States: Belgium (BE), Denmark (DK), Germany (DE), Greece (EL), Spain (ES), France (FR), Ireland (IE), Italy (IT), Luxembourg (LU), the Netherlands (NL), Austria (AT), Portugal (PT), Finland (FI), Sweden (SE), the United Kingdom (UK).
EU-25: European Union, including EU-15 + the Czech Republic (CZ), Estonia (EE), Cyprus (CY), Latvia (LV), Lithuania (LT), Hungary (HU), Malta (MT), Poland (PL), Slovenia (SI) and Slovakia (SK).
Norway (NO)

Symbol
":" not available.

Data sources
The statistical information on organic farming presented in this publication is based completely on the information submitted by Member States to the Commission. Not all Member States completed all statistical forms, which restricted the analysis to a certain extent.

The most recent figures on organic operators are provisional and subject to later revision.
Organic data in this publication represent the sum of fully converted areas and areas under conversion, unless otherwise indicated.

Utilised **A**gricultural **A**rea (**UAA**) data are extracted from the Farm Structure Survey (FSS) (NewCronos/Agriculture/Structure of agricultural holdings). The FSS basic survey is conducted every 10 years and intermediate surveys 3 times in between (data are available for the following years: 1990, 1993, 1995, 1997, 2000, 2003 and 2005).

The source of all figures presented in this publication is available at Eurostat and reflects the state of data availability in Eurostat's reference database NewCronos as at April 2007.

Data treatment
The reader is informed of the fact that units of producers, processors and importers should not be added up, because the same operator can appear in several categories at the same time (see definitions below for further information).

Terminology
The agricultural holding concept in agricultural statistics is used in the Farm Structural Survey (FSS). It is defined as a single unit both technically and economically, which has a single management and which produces agricultural products. The holding may also provide other supplementary (non-agricultural) products and services.

The Utilised Agricultural Area (UAA) is the total area taken up by arable land, permanent grassland, permanent crops and kitchen gardens.

Organic farming can be defined as a method of production which places the highest emphasis on environmental protection and, with regard to livestock production, animal welfare considerations. It avoids or largely reduces the use of synthetic chemical inputs such as fertilisers, pesticides, additives and medicinal products.

Regulation (EEC) No 2092/91 sets out in detail the requirements for agricultural products or foodstuffs bearing a reference to organic production methods. It defines in particular a method of agricultural production for crops and livestock, and regulates both the labelling, processing, inspection and marketing of organic products within the Community and the import of organic products from non-member countries.

An operator refers to any natural or legal person who produces, prepares or imports the above-mentioned products from a third country or who markets such products. Under the Regulation, the three main categories of operators are producer, processor and importer, defined as follows:

A producer/organic farmer is any natural or legal person who operates an agricultural holding involved in producing, packaging and labelling his own organic products under the rules of Council Regulation (EEC) No 2092/91.

A processor is any natural or legal person who preserves and/or processes organic agricultural produce (including slaughter and butchering of livestock). The packaging and labelling of organic products is also considered to be processing.

An importer is any natural or legal person who imports organic products from a third country with a view to the subsequent marketing of these products.

Further information:

Data: EUROSTAT Website/Theme: Agriculture and Fisheries/Data

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- Agriculture
  - Organic farming

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