

Structure of agricultural holdings

Greece 2003

Statistics in focus

AGRICULTURE AND FISHERIES

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Agriculture

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A farm structure survey was carried out in all EU Member States – except Poland – in 2003. Poland has already executed this survey in 2002. The detailed results are now available for all member States. This Statistics in Focus is part of a series of country-specific publications on these results, all following the same structure.

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In Greece, in 2003 about 654 900 agricultural holdings had an economic size of at least 1 ESU (European Size Unit)*, which means 1% decline compared to 1999.

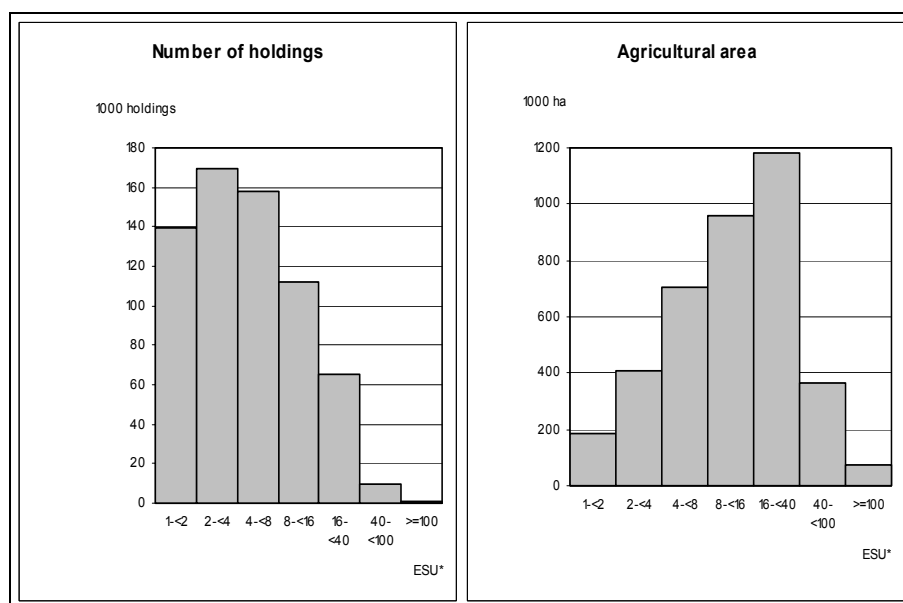
- These holdings employed 585 900 AWUs (annual work units), the equivalent of 585 900 persons working full time;
- they made use of almost 3.9 million ha of agricultural area, which is on average 5.9 hectare per holding (compared to 5.3 in 1999).

Amongst these 654 900 agricultural holdings,

- 65% made use of less than one AWU, while 9% made use of 2 or more AWUs;
- 70% used less than 5 ha, while 1% used 50 ha or more;
- 16% were mixed holdings, while 84% were specialised: olive production 28%, field cropping 16%, various permanent crops combined 10%, cereals, oil seed and protein crops 9%, sheep, goats and other grazing livestock 7%, fruit and citrus fruit orchards 7%, vineyards 3%, horticulture 3% (of which 35% under glass) and various cattle farming 1%;
- about 1% practised organic farming.

Amongst the 654 300 sole holders

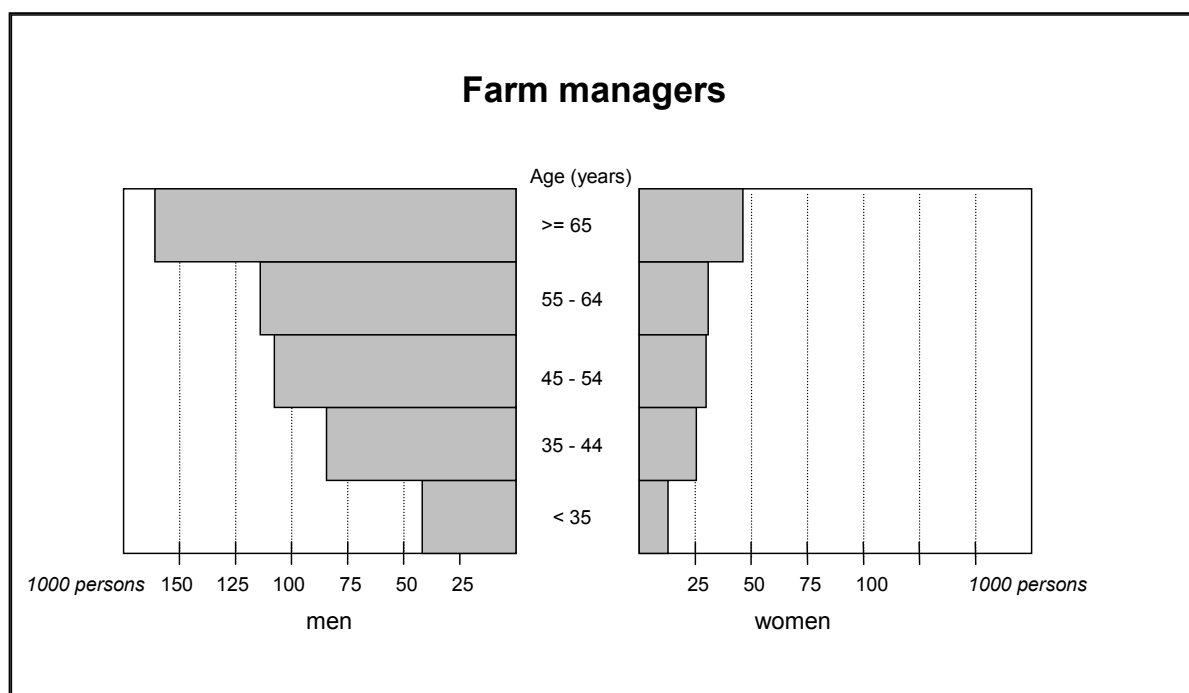
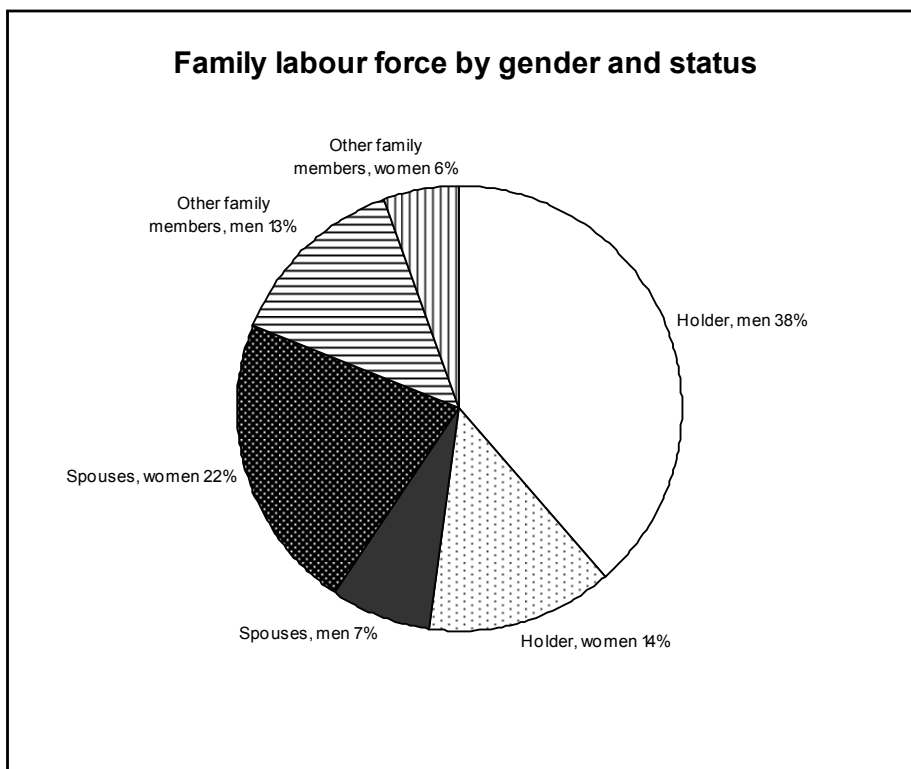
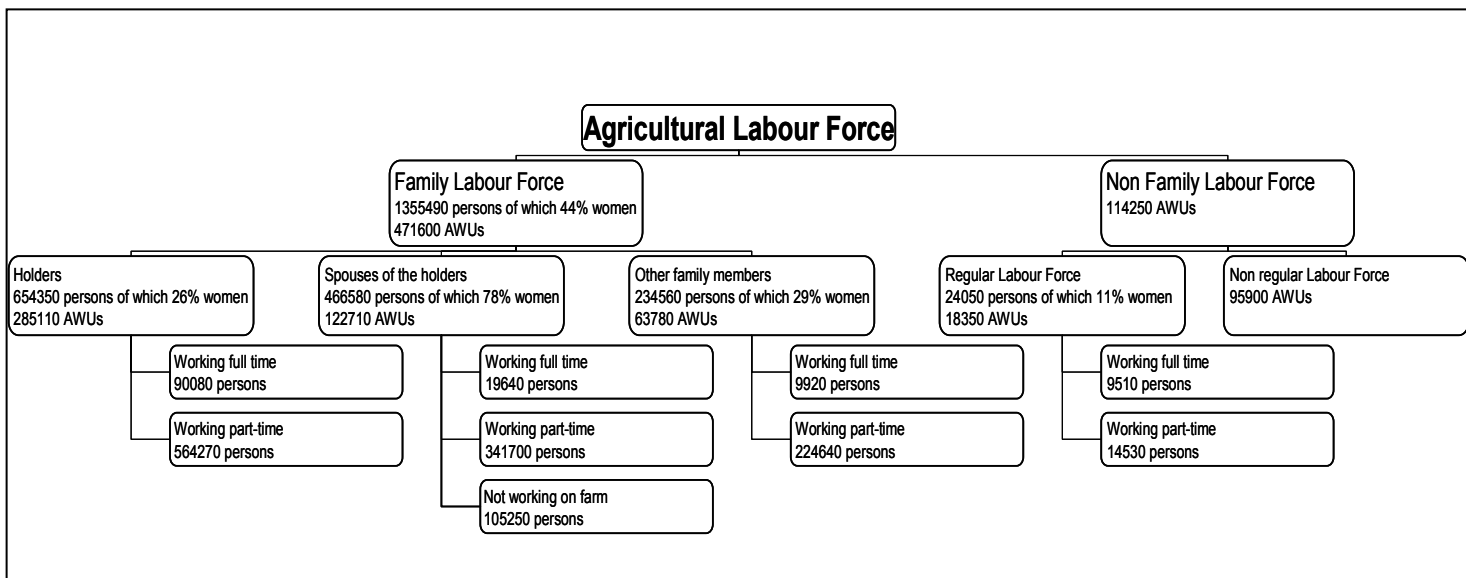
- 26% were women;
- 54% were aged 55 or more, and only 8% younger than 35 years;
- 16% had another gainful activity as major occupation.



* ESU measures the economic size of the holdings (see methodological notes).



Greece, 2003 – Holdings of at least 1 ESU



Symbols : not available 0 less than half of the unit or nil

Economic size (ESU)	<1	>=1	1-<2	2-<4	4-<8	8-<16	16-<40	40-<100	>=100
Total labour force									
1000 annual work units	30.1	585.9	46.4	91.7	138.5	151.6	126.3	26.3	5.0
Family labour force									
1000 persons	286.5	1355.5	256.0	333.7	334.0	252.1	154.7	23.1	2.0
1000 annual work units	27.0	471.6	40.6	79.2	118.7	125.1	92.1	14.5	1.4
Non-family labour regularly employed									
1000 persons	0.2	24.0	0.5	1.2	1.9	4.3	9.8	4.4	2.0
1000 annual work units	0.1	18.4	0.2	0.6	1.1	3.1	7.9	3.7	1.8
Non regular non family labour force									
1000 annual work units	3.0	95.9	5.5	12.0	18.7	23.3	26.3	8.2	1.9
Holding managers (1000)	169.6	654.9	139.6	169.2	158.0	111.9	65.5	9.8	0.9
- women (%)	33.1	22.2	30.6	26.8	22.1	14.2	9.0	6.5	6.8
- part-time - under 50 % (%)	97.2	60.8	91.9	79.9	56.7	30.6	14.8	10.4	4.7
- 50 % and over (%)	2.4	25.3	7.1	16.9	33.1	41.2	38.2	33.6	26.9
Sole/main holders (1000)	169.6	654.3	139.6	169.2	157.9	111.8	65.4	9.7	0.8
- women (%)	36.1	26.4	34.6	31.1	26.8	18.5	12.5	8.2	6.4
- distribution by age (%)									
- under 35 years	3.4	8.4	4.3	4.8	8.1	13.0	17.4	17.2	19.8
- from 35 to 44 years	10.7	16.5	11.3	13.6	16.3	21.2	25.5	30.4	21.5
- from 45 to 54 years	17.1	20.7	18.6	19.1	20.3	23.2	25.4	24.2	27.1
- from 55 to 64 years	20.9	22.1	21.3	22.7	23.0	22.2	20.5	18.8	24.0
- 65 years and over	47.9	32.3	44.4	39.9	32.3	20.3	11.2	9.4	7.7
- part-time - under 50 % (%)	97.2	61.6	92.1	80.5	57.8	31.7	16.1	11.5	5.3
- 50 % and over (%)	2.4	24.6	6.9	16.3	32.2	40.3	37.4	33.0	27.9
- with another gainful activity ¹ (%)	28.7	20.0	28.1	25.4	19.1	12.1	6.8	6.1	5.9
- as main occupation	27.9	16.4	26.1	22.2	14.5	7.3	3.0	2.3	2.8
- as a subsidiary occupation	0.8	3.6	2.0	3.2	4.6	4.8	3.7	3.7	3.1
Spouse of sole holder (1000)	94.1	466.6	87.3	117.0	117.8	85.2	51.2	7.6	0.6
- women (%)	74.6	77.8	73.7	74.0	76.1	82.3	87.7	93.0	94.5
- distribution by age (%)									
- under 35 years	5.4	10.3	5.1	6.4	8.7	14.7	22.0	25.6	23.4
- from 35 to 54 years	36.9	43.6	38.1	38.5	42.0	50.1	55.0	58.0	59.3
- 55 years and over	57.7	46.1	56.9	55.1	49.3	35.2	23.0	16.4	17.1
- part-time - under 50 % (%)	55.3	57.6	65.5	66.0	61.1	47.9	37.3	30.3	22.1
- 50 % and over (%)	0.9	15.7	3.3	7.7	16.3	27.9	31.2	26.6	23.1
- with another gainful activity (%)	23.1	19.5	23.7	22.3	20.2	15.5	12.0	12.3	8.8
- as main occupation	22.6	18.2	22.9	21.3	18.8	13.7	10.4	10.9	8.3
- as a subsidiary occupation	0.5	1.3	0.8	1.0	1.3	1.7	1.5	1.4	0.5
Other members of the holder's family working on the holding (1000)	22.9	234.6	29.1	47.6	58.3	55.1	38.1	5.8	0.6
- women (%)	29.9	29.5	26.7	29.5	29.5	31.4	29.8	24.7	21.4
- part-time - under 50 % (%)	99.3	82.0	98.2	94.6	87.0	75.3	61.6	50.2	35.2
- 50 % and over (%)	0.5	13.8	1.6	4.9	11.1	19.9	26.2	30.9	36.0
- with another gainful activity (%)	56.4	34.8	55.3	48.1	37.9	24.7	15.9	12.5	6.0

¹ Only holders being also farm managers.

Symbols : not available 0 less than half of the unit or nil

Economic size (ESU)	<1	>=1	1-<2	2-<4	4-<8	8-<16	16-<40	40-<100	>=100
Holdings									
- total number (1000)	169.6	654.9	139.6	169.2	158.0	111.9	65.5	9.8	0.9
- by legal personality of the holder (%)									
- sole holder	100.0	99.9	100.0	100.0	100.0	99.9	99.8	99.3	87.6
- legal person	0	0.1	0	0	0	0.1	0.2	0.7	12.3
- group holders	0	0	0	0	0	0	0	0	0
- by employed labour force (%)									
- under 1 AWU	98.9	64.9	96.0	87.6	62.4	31.2	13.4	6.2	1.6
- from 1 to less than 2 AWU	1.1	25.7	3.8	11.9	34.2	51.3	43.1	31.2	17.0
- from 2 to less than 3 AWU	0	7.2	0.2	0.5	3.2	15.7	31.5	29.3	23.0
- 3 AWU and over	0	2.2	0	0	0.2	1.8	12.0	33.4	58.4
- by agricultural area (%)									
- under 5 ha	99.9	69.9	99.0	92.4	71.5	33.8	17.3	11.4	20.3
- from 5 to less than 20 ha	0.1	24.9	1.0	7.5	27.8	59.8	53.5	28.1	17.8
- from 20 to less than 50 ha	0	4.2	0	0.1	0.7	5.6	24.2	39.7	24.0
- from 50 to less than 100 ha	0	0.8	0	0	0	0.6	4.2	14.3	16.1
- 100 ha and over	0	0.2	0	0	0	0.1	0.9	6.5	21.6
- by livestock size (%)									
- without livestock	69.7	46.1	61.2	52.6	42.3	33.6	29.4	35.6	37.0
- under 10 LSU ⁺	30.3	44.7	38.8	47.2	52.9	45.2	33.2	26.0	18.3
- from 10 to less than 20 LSU	0	3.9	0	0.2	4.4	12.1	6.8	2.7	2.0
- from 20 to less than 50 LSU	0	3.9	0	0	0.4	8.7	22.4	6.9	2.5
- from 50 to less than 100 LSU	0	1.0	0	0	0	0.3	7.2	15.7	3.7
- 100 LSU and over	0	0.3	0	0	0	0	0.9	13.1	36.5
- by farm type (%)									
... specialist cereals, oil seed and protein crops	11.2	9.2	12.4	10.7	8.6	6.8	4.9	5.0	7.0
... general field cropping	2.9	16.4	5.7	11.4	19.5	24.4	29.0	29.2	14.1
... specialist horticulture	0.6	2.5	0.8	1.2	1.6	4.1	7.0	13.1	21.4
... specialist vineyard	4.1	2.8	2.5	2.5	3.0	4.0	2.3	0.4	0.5
... specialist fruit and citrus fruit	7.2	7.3	8.2	8.7	8.3	5.8	2.9	2.4	0.4
... specialist olives	55.2	27.5	45.7	36.3	24.3	11.8	4.5	2.8	2.0
... various permanent crops combined	5.5	9.7	9.2	11.2	11.7	8.9	4.7	4.0	5.5
... specialist dairy farming	0	0.5	0.2	0.1	0.1	0.6	1.5	6.4	7.5
... specialist cattle – rearing and fattening	0	0.3	0.1	0.1	0.2	0.5	1.4	1.6	1.1
... cattle – dairy farming, rearing and fattening combined	0	0.1	0	0	0.1	0.1	0.6	1.3	0.4
... sheep, goats and other grazing livestock	2.9	7.3	3.6	4.0	6.1	11.9	17.5	11.8	7.2
... specialist granivores	0.5	0.4	0.2	0.2	0.2	0.4	0.9	3.3	21.5
... mixed cropping	4.6	8.8	6.5	8.1	9.4	10.4	10.6	10.4	8.2
... mixed livestock, mainly grazing livestock	0.8	1.5	0.8	1.0	1.5	2.3	2.8	1.1	0.8
... mixed livestock, mainly granivores	0.6	0.2	0.3	0.3	0.1	0.1	0.3	0.4	0.2
... field crops – grazing livestock combined	0.7	2.1	0.8	1.0	1.7	3.6	5.3	4.7	1.4
... various crops and livestock combined	3.2	3.5	3.0	3.2	3.6	4.2	3.9	2.2	0.6
- by farming methods (%)									
- organic farming	0.1	1.1	0.4	0.7	1.2	1.6	2.6	2.7	7.1
- irrigating	37.7	64.9	48.2	59.2	69.7	76.6	80.2	84.2	75.4
- with crops under glass	0	1.7	0	0.2	0.9	3.6	6.6	8.2	14.5
- % in less favoured or mountain area	56.2	61.1	59.4	61.6	61.3	62.9	60.7	55.9	44.6

+ LSU : Livestock Unit

Symbols : not available 0 less than half of the unit or nil

Economic size (ESU)	<1	>=1	1-<2	2-<4	4-<8	8-<16	16-<40	40-<100	>=100
Area (1000 ha)									
• Total area of agricultural holdings	124.1	4176.0	225.7	466.4	773.0	1031.8	1214.5	390.2	74.4
• H. Other area	33.2	299.0	38.9	56.8	70.5	73.2	34.0	24.5	1.3
Wooded area	5.5	64.3	3.4	12.9	7.0	30.6	4.2	5.9	0.1
• Agricultural area	90.8	3876.9	186.8	409.6	702.5	958.6	1180.5	365.7	73.2
- D. Arable land	35.8	1999.2	77.0	175.6	326.1	494.5	665.4	217.0	43.7
Cereals	24.9	1177.5	56.1	118.6	206.5	294.9	365.8	110.8	24.7
<i>Common wheat and spelt</i>	6.7	107.5	8.2	14.1	17.2	25.4	29.8	10.8	1.9
<i>Durum wheat</i>	11.5	654.6	32.9	69.8	116.6	155.7	203.7	60.5	15.4
<i>Rye</i>	1.0	12.9	1.3	1.0	2.3	3.3	4.1	0.9	0
<i>Barley</i>	2.2	87.3	3.9	8.0	14.8	23.8	27.5	6.8	2.4
<i>Oats</i>	0.7	61.0	2.2	5.3	10.9	16.3	21.1	4.7	0.5
<i>Grain maize</i>	2.5	226.3	6.8	18.4	40.2	64.7	71.7	21.6	2.9
Dried pulses	0.2	9.9	0.3	0.8	1.6	2.2	3.2	1.2	0.6
Root crops	0.4	55.5	0.9	2.5	6.4	12.0	21.7	10.3	1.7
<i>Potatoes</i>	0.3	20.1	0.5	1.2	2.5	3.6	7.2	4.0	0.9
<i>Sugar beet</i>	0	35.3	0.3	1.3	3.8	8.3	14.5	6.2	0.8
<i>Fodder root</i>	0	0.1	0	0	0	0.1	0	0	0
Industrial crops	0.8	401.1	4.9	22.4	59.0	100.8	158.3	50.8	5.0
<i>Tobacco</i>	0	53.5	0.1	2.7	10.8	18.1	17.6	3.6	0.5
<i>Hops</i>	0	0	0	0	0	0	0	0	0
<i>Cotton</i>	0.6	337.2	4.2	18.2	46.3	80.3	137.5	46.3	4.4
<i>Rape and turnip</i>	0	0	0	0	0	0	0	0	0
<i>Sunflower</i>	0.1	7.9	0.4	0.9	1.4	2.1	2.3	0.7	0.1
<i>Soya</i>	0	0.1	0	0	0	0	0	0	0.1
Fresh vegetables, melons,	0.1	64.8	0.5	1.9	5.0	12.3	26.5	14.8	3.9
<i>outside</i>	0.1	60.6	0.5	1.8	4.8	11.3	24.5	14.2	3.5
<i>under glass</i>	0	4.2	0	0	0.2	1.0	2.0	0.6	0.4
Flower and ornamental plants	0	0.8	0	0	0	0.1	0.2	0.3	0.2
<i>outside</i>	0	0.5	0	0	0	0	0.1	0.2	0.2
<i>under glass</i>	0	0.3	0	0	0	0	0.1	0.1	0.1
Fodder plants	3.0	170.2	6.5	14.1	26.2	46.3	58.7	15.6	2.9
Fallow land	6.5	115.4	7.8	15.2	20.9	25.1	29.7	11.9	4.5
- E. Kitchen garden	2.0	10.6	2.0	2.8	2.8	1.9	1.0	0.1	0
- F. Permanent pasture and meadows	3.9	816.3	12.1	30.5	85.2	204.1	346.3	114.3	23.8
- G. Permanent crops	49.1	1050.8	95.7	200.8	288.4	258.1	167.7	34.4	5.7
Fruit and berry plantation	2.4	120.9	6.3	16.7	30.8	34.4	26.1	6.3	0.3
Citrus plantation	1.6	50.6	3.9	9.2	15.2	12.8	8.1	1.1	0.3
Olive trees	41.7	763.6	78.7	158.4	212.7	176.3	111.4	23.0	3.0
Vineyard	3.3	108.1	6.6	15.5	28.2	32.9	20.9	3.0	1.2
Ratios									
Agricultural area per holding (ha)	0.5	5.9	1.3	2.4	4.4	8.6	18.0	37.5	78.7
Agricultural area... (%)									
... own farmed	96.9	64.9	93.5	89.4	80.9	66.0	51.6	39.1	29.0
... in less favoured or mountain area	61.6	70.2	65.3	67.3	68.2	71.9	72.4	68.5	68.0
... organic farmed	0.1	1.3	0.2	0.5	0.7	1.1	1.7	2.2	8.1
... irrigated	24.0	32.8	25.0	29.0	33.1	34.0	33.6	35.9	27.9
... under cover crop protecting soil	0	0	0	0	0	0	0	0	0

Symbols : not available 0 less than half of the unit or nil

Economic size (ESU)		<1	>=1	1-<2	2-<4	4-<8	8-<16	16-<40	40-<100	>=100
Total livestock	(1000 LSU)	26.4	2602.5	47.0	112.7	270.7	580.3	983.5	365.8	242.6
of which grazing	(%)	42.3	76.7	59.5	70.6	79.7	87.0	87.6	72.6	16.5
Grazing livestock	(1000 heads)									
Equidae		1.4	30.3	2.7	6.2	8.8	6.7	5.1	0.7	0.1
Bovine animals										
Under 1 year		0.3	255.3	0.8	4.5	18.1	45.6	113.1	52.7	20.5
From 1 to less than 2 years		0	114.4	0.3	2.0	5.8	20.1	49.4	27.9	8.9
Dairy cows		0.1	170.1	0.7	2.0	7.0	24.4	61.6	59.9	14.5
Other cows		0.4	151.3	0.9	2.5	9.2	27.2	81.4	27.3	2.8
Other bovine animals 2 years and older		0.1	41.1	0.1	0.3	1.6	6.5	20.2	10.8	1.6
Sheep		53.7	9372.2	145.7	447.7	1286.8	2797.4	3852.4	805.7	36.5
Goats		40.9	5246.4	92.1	222.8	530.4	1353.3	2483.4	527.4	37.0
Granivores										
Pigs	(1000 heads)									
Piglets < 20 kg		2.5	432.5	4.2	10.9	27.0	73.6	98.0	76.7	142.2
Breeding sows		0.3	137.9	0.8	3.7	7.7	19.9	32.3	26.0	47.5
Other pigs		2.5	506.3	4.2	11.0	22.6	41.5	77.9	94.0	255.0
Poultry	(million heads)	1.2	37.4	1.4	2.2	3.4	4.4	8.0	6.9	11.2
Broilers		0.4	25.3	0.5	0.8	1.2	2.2	5.8	5.7	9.2
Laying hens		0.7	10.7	0.8	1.3	2.0	1.9	1.8	1.2	1.7
Other poultry		0	1.4	0.1	0.1	0.2	0.3	0.4	0	0.3
Rabbits, breeding females	(1000 heads)	6.4	262.7	20.3	46.0	62.6	58.4	49.3	6.8	19.4
Beehives	(1000)	4.8	763.3	21.5	76.1	157.8	271.4	228.2	7.9	0.4
Total livestock per holding with...	(LSU/holding)									
Livestock		0.5	7.4	0.9	1.4	3.0	7.8	21.3	58.2	413.9
Grazing livestock		1.0	11.2	1.6	2.5	4.8	11.3	27.7	68.0	211.3
Bovine animals (cattle)		1.8	28.0	3.3	4.9	8.2	16.1	41.4	94.0	279.9
Cattle, other than cows		2.2	29.9	3.8	5.1	8.7	16.7	41.9	96.3	279.9
Granivores		0.5	5.9	0.8	1.2	2.5	6.3	17.5	51.5	485.6
Pigs		1.1	15.1	2.0	2.7	4.5	10.4	25.9	70.2	571.4
Average size of herds*	(head/holding)									
Equidae		1.0	1.5	1.4	1.3	1.4	1.5	1.8	2.7	4.2
Dairy cows		1.0	14.8	1.8	2.5	3.4	6.7	18.0	52.6	142.6
Other cows		1.6	17.3	2.9	3.3	5.4	10.7	27.7	60.6	63.9
Sheep		7.6	74.1	12.1	20.2	38.6	84.7	167.5	291.3	246.5
Goats		4.0	44.7	6.7	9.4	17.5	47.9	129.8	255.5	263.9
Breeding sows		1.2	11.3	1.8	2.6	3.2	6.0	8.8	35.0	302.4
Other pigs > 20 kg		1.7	18.3	2.0	2.6	3.3	5.8	12.8	92.0	1500.0
Rabbits, breeding females		2.2	6.3	3.7	4.5	5.2	6.5	10.6	12.4	498.6
Laying hens	(1000/holding)	0	0	0	0	0	0	0.1	0.3	6.5
Broilers	(1000/holding)	0	0.2	0	0	0	0.1	0.3	2.5	45.2
Beehives	(hive/holding)	11.7	69.2	19.4	33.3	56.6	88.4	139.1	62.7	35.9

* number of animals of a given livestock category per holding with this kind of animals

Symbols : not available 0 less than half of the unit or nil

Economic size (ESU)	<1	>=1	1-<4	2-<4	4-<8	8-<16	16-<40	40-<100	>=100
Holdings with another gainful activity than agricultural production:									
(% all holdings)	0.1	1.6	0.4	0.7	1.4	2.6	4.3	5.5	10.2
Tourism	0	0.1	0	0	0.1	0.1	0.1	0.1	0.1
Handicraft	0	0	0	0	0	0	0	0	0.1
Processing of farm products	0.1	0.9	0.2	0.5	0.8	1.6	2.1	2.2	6.0
Wood processing	0	0	0	0	0	0	0	0	0
Aquaculture	0	0	0	0	0	0	0	0	0
Renewable energy production	0	0	0	0	0	0	0	0	0
Contractual work	0	0.6	0.1	0.1	0.5	0.9	2.2	3.2	3.8
Other gainful activities n.a.e	0	0	0	0	0	0	0	0.1	0.5

➤ METHODOLOGICAL NOTES

The survey on the structure of agricultural holdings in Greece was carried out between 1 February and 30 May 2004 on a sample base. Prior full-scale agricultural census has been conducted last time in 1999. The reference time of the agricultural survey 2003 was 1st November 2003 in case of livestock, and the reference period for crop production from 1 October 2002 to 30 September 2003.

The target population was all holdings included in farm register after the past agricultural census in 1999. An agricultural, livestock or mixed holdings is a unit, which utilises at least 0.1 ha agricultural area or at least 0.05 ha greenhouse or having at least certain number of animals (1 cow; 2 oxen, horses, mules or donkeys; 5 sheep, goats, pigs or ostriches; 50 poultry; 20 beehives). The sample was drawn as stratified one-stage random sample. Strata are based on type of farming (8 classes), economic size (5 classes) and geographical location (nomos); the sample was allocated among them by Neyman-method. Certain strata had been exhaustively surveyed, like holdings with at least 40 ESU, strata with less than 5 units, etc. Additionally 6000 holdings engaged in organic farming were included in the survey. These holdings are recorded only in the administrative database of the Ministry of Rural development and Food. The sample size from the farm register was more than 10% [86 thousand units], while altogether 92 thousand holdings have been interviewed.

The data are checked in two phases. Non-responding units (invalid address, permanent absence, etc) have been replaced from the complementary sample. Partly completed questionnaires, incorrect data have been corrected via utilisation the relevant questions from the questionnaire, via average values in the concerning strata, from administrative sources or via telephone contact with the farmer.

For each activity ('enterprise') on a farm (for instance wheat, dairy cow or vineyard), a **standard gross margin (SGM)** is estimated, based on the area (or the number of heads) and a regional coefficient. The sum of such margins in a farm is its **economic size**, expressed in **European Size Units (ESU)**. 1 ESU is equal to 1200 euros.

Due to differences in the coverage of units of less than 1 ESU across Member States, these data are not comparable between countries. That is why the present analysis and graphs focus on the holdings of at least one ESU.

Each farm is classified in the community typology by its economic size and its **type of farming**, depending on the share of each enterprise in its economic size. For instance, a farm where breeding sows account for more than 2/3 of the economic size is classified as *specialist pig rearing* (type 5011). Depending on the level of aggregation, farms are grouped into 8 to 70 types.

Annual working unit (AWU) means the labour force working yearly like a worker employed on full time basis, it is 2200 hours (275 working days of 8 working hours per day).

➤ REFERENCE PUBLICATIONS

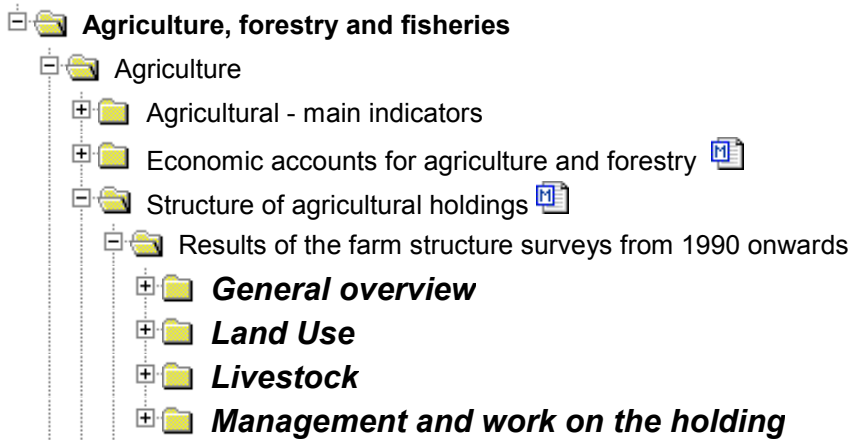
Preliminary results, first semester of 2005

Final result, second half of 2005

Website of the National Statistical Service of Greece: www.statistics.gr

Further information:

Databases: [EUROSTAT Website/Theme: Agriculture and Fisheries/Data](#)



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