

1. Comparison of FSS 2016 and Agrocensus 2000 results

Agricultural holdings and their legal forms

Data for 26 525 agricultural holdings were obtained from the Farm Structure Survey 2016; there were 88.2% of natural persons and 11.8% of legal persons. Out of 23 402 natural persons, there were 18 232 (77.9%) agricultural entrepreneurs. Among legal persons (3 123 holdings in total) the greatest share was represented by limited liability companies (1 836 holdings; 58.8%) followed by joint stock companies (621 holdings; 19.9%) and cooperatives (502 holdings; 16.1%).

The total number of agricultural holdings almost did not change since the year 2000 (-0.1%). The number of natural persons decreased (-1.3%), while the number of legal persons went up (+10.5%). Significant growth was recorded in the number of limited liability companies (+40.2%) while the number of cooperatives declined (-32.2%).

Table 1: Agricultural holdings and their utilised agricultural area

		FSS 2016		AGC 2000		Index 2016/2000
		abs.	(%)	abs.	(%)	
Agricultural holdings, total	Agricultural holdings	26 525	100.0	26 539	100.0	99.9
	Utilised agricultural area (ha)	3 456 646	100.0	3 604 400	100.0	95.9
	Average area (ha)	130	x	136	x	96.0
Holdings of natural persons	Agricultural holdings	23 402	88.2	23 714	89.4	98.7
	Utilised agricultural area (ha)	1 040 124	30.1	923 775	25.6	112.6
	Average area (ha)	44	x	39	x	114.1
Holdings of legal persons	Agricultural holdings	3 123	11.8	2 825	10.6	110.5
	Utilised agricultural area (ha)	2 416 521	69.9	2 680 625	74.4	90.1
	Average area (ha)	774	x	949	x	81.5
Business companies & partnerships	Agricultural holdings	2 507	9.5	1 948	7.3	128.7
	Utilised agricultural area (ha)	1 720 555	49.8	1 578 841	43.8	109.0
	Average area (ha)	686	x	810	x	84.7
Limited liability companies	Agricultural holdings	1 836	6.9	1 310	4.9	140.2
	Utilised agricultural area (ha)	839 877	24.3	783 686	21.7	107.2
	Average area (ha)	457	x	598	x	76.5
Joint stock companies	Agricultural holdings	621	2.3	602	2.3	103.2
	Utilised agricultural area (ha)	862 945	25.0	779 696	21.6	110.7
	Average area (ha)	1 390	x	1 295	x	107.3
Cooperatives	Agricultural holdings	502	1.9	740	2.8	67.8
	Utilised agricultural area (ha)	668 104	19.3	1 059 447	29.4	63.1
	Average area (ha)	1 331	x	1 432	x	93.0

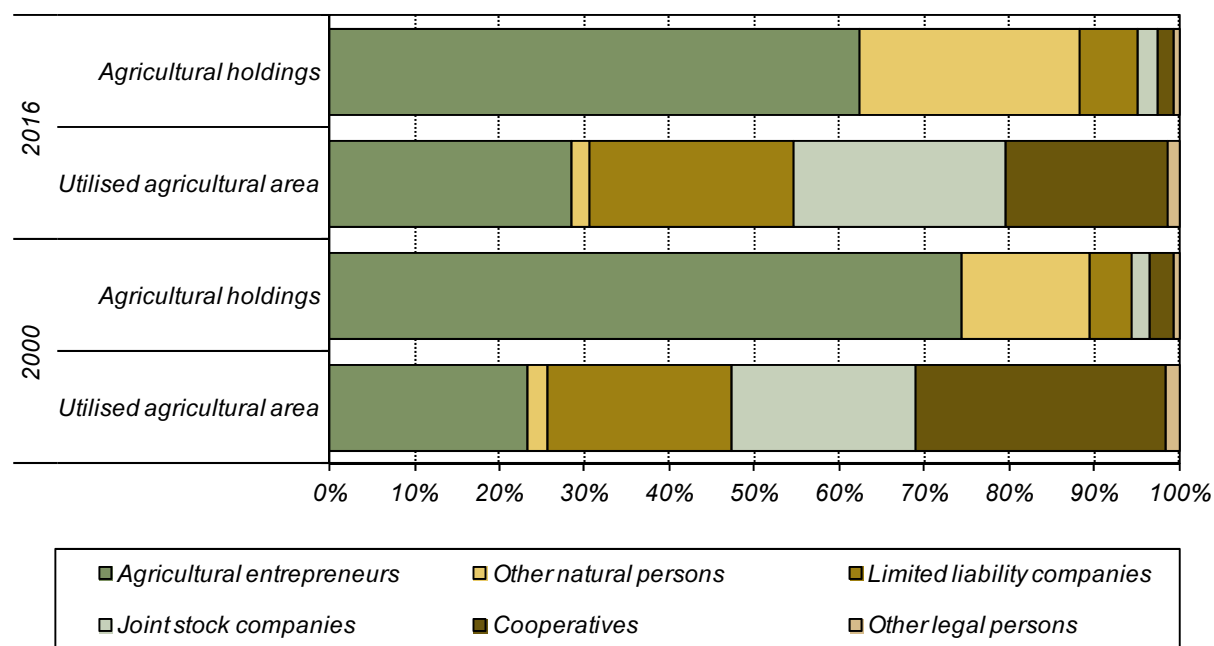
Size structure of agricultural holdings

The utilised agricultural area was concentrated in holdings of legal persons (69.9%); this share decreased since 2000 to the benefit of holdings of natural persons by 4.5 percentage points.

Holdings with 10–50 ha of utilised agricultural area prevailed (34.8% of the total number of holdings), while the smallest share belonged to holdings with more than 2 000 ha of UAA (1.1%), and, on the other side, to holdings without UAA (1.3%). Holdings with more than 500 ha comprised only 6.6%; however, they shared 68.6% of the total agricultural area. On the contrary, holdings with less than 50 ha (73.0%) utilised only 7.5% of the UAA.

Holdings of natural persons utilised usually smaller areas than holdings of legal persons. For example, among holdings with less than 50 ha of UAA, natural persons shared 96.5% of the total number of holdings, whereas legal persons only 3.5% in 2016. On the contrary, category above 500 ha of UAA was dominated by holdings of legal persons (86.1%). Since 2000 the number of holdings decreased in two categories: holdings with less than 50 ha of UAA (-5.3 p. p.) and holdings above 500 ha (-0.5 p. p.)

Graph 1: Structure of agricultural holdings



Average agricultural area per holding

The average utilised agricultural area per holding in the period 2000–2016 decreased from 136 ha to 130 ha. In holdings of natural persons it grew by 14.1% (from 39 ha to 44 ha) and decreased by 18.5% (from 949 ha to 774 ha) in holdings of legal persons. The most distinct decrease occurred in limited liability companies (-23.5%), but as an exception, the average acreage grew by 7.3% in joint stock companies.

Organic farming

In total 2 984 agricultural holdings dealt with organic farming in 2016. Organic production methods were applied on 448 228 ha of the utilised agricultural area (13.0% of the total UAA). In the year 2000 there were only 413 holdings involved in organic production and 132 244 ha of the UAA under organic farming. Therefore, the number of holdings dealing with organic farming grew more than seven times and the utilised agricultural area under organic farming rose almost 3.5 times.

Table 2: Agricultural holdings involved in organic farming and their utilised agricultural area

	FSS 2016		AGC 2000		Index 2016/2000
	abs.	(%)	abs.	(%)	
Agricultural holdings, total	26 525	10.00	26 539	100.0	99.9
of which holdings applying organic methods (certified or in a conversion period)	2 984	11.2	413	1.6	722.5
Utilised agricultural area, total (ha)	3 456 646	100.0	3 604 400	100.0	95.9
of which organically utilised area (certified or in a conversion period) (ha)	448 228	13.0	132 244	3.7	338.9

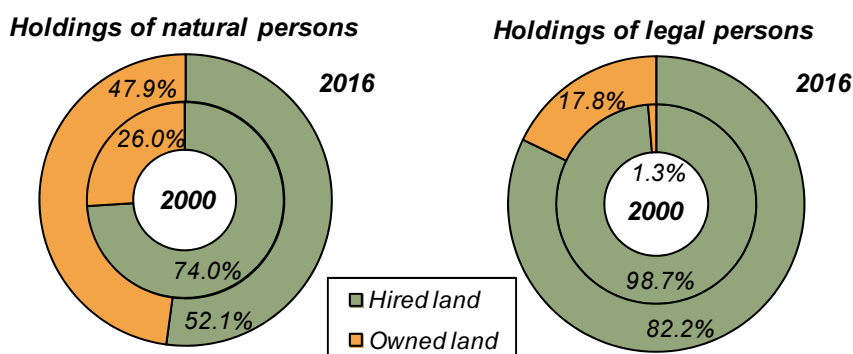
Agricultural land hired and owned

In total 352 agricultural holdings (1.3%) did not possess any agricultural land in 2016. Most holdings with agricultural land farmed on hired land (73.1%), only 26.9% of the utilised agricultural area was owned by holdings. The share of own land decreased with the increasing total UAA: holdings with less than 3 ha of the UAA kept 80.4% of own land whereas holdings with more than 2 000 ha owned only 18.0% of their UAA.

Since 2000, the share of own land in holdings rose; at that time it only achieved 7.6% of the total UAA. The most distinct growth – by 24.2 percentage points – was recorded in the size group 100–500 ha.

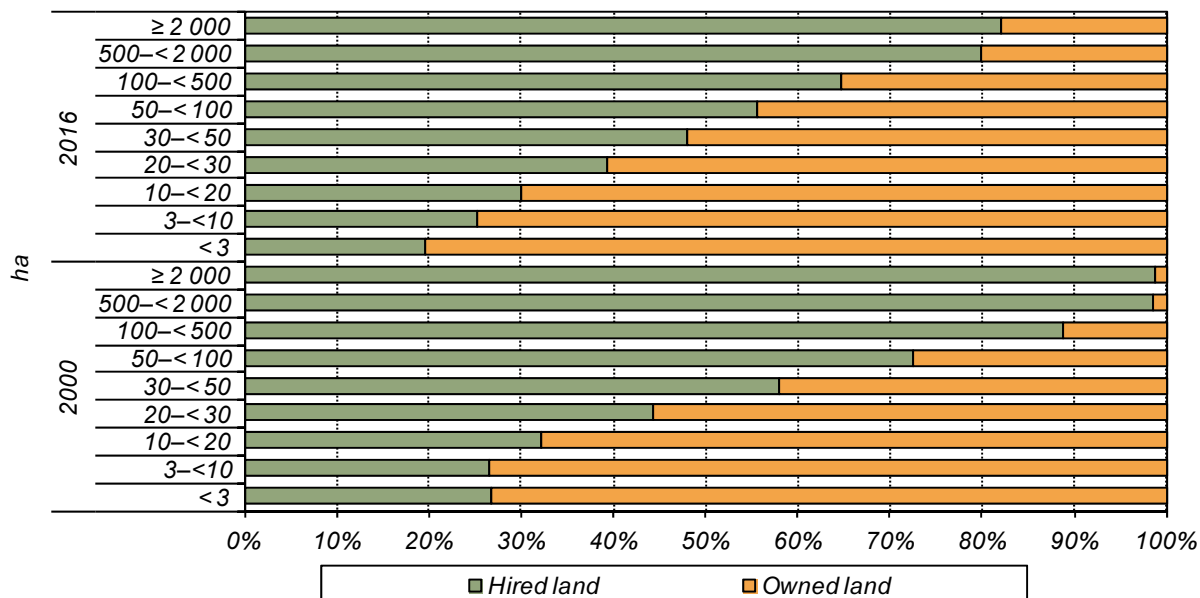
In holdings of natural persons, their own land represented almost one half of the total UAA (47.9%). The smallest share was 23.4% for the size group above 2 000 ha, while in holdings up to 50 ha it was 63.5% and in the smallest holdings up to 10 ha even three quarters of their UAA. On the contrary, holdings of legal persons preferred hiring the agricultural land: their own land represented only 17.8%. Holdings up to 10 ha owned 50.7% of the UAA while holdings with more than 500 ha only 17.2% of the UAA.

Graph 2: Hired and owned land, by legal form



The percentage of hired land distinctly decreased in holdings of both natural and legal persons during the period 2000–2016. This decrease accounted for 21.9 p. p. in natural persons and for 16.5 p. p. for legal persons. The greatest increment of owned land was recorded in holdings of natural persons with 500–2 000 ha (+39.2 p. p.) and holdings of legal persons with 50–100 ha of the UAA (+20.8 p. p.).

Graph 3: Hired and owned land, by size of holding

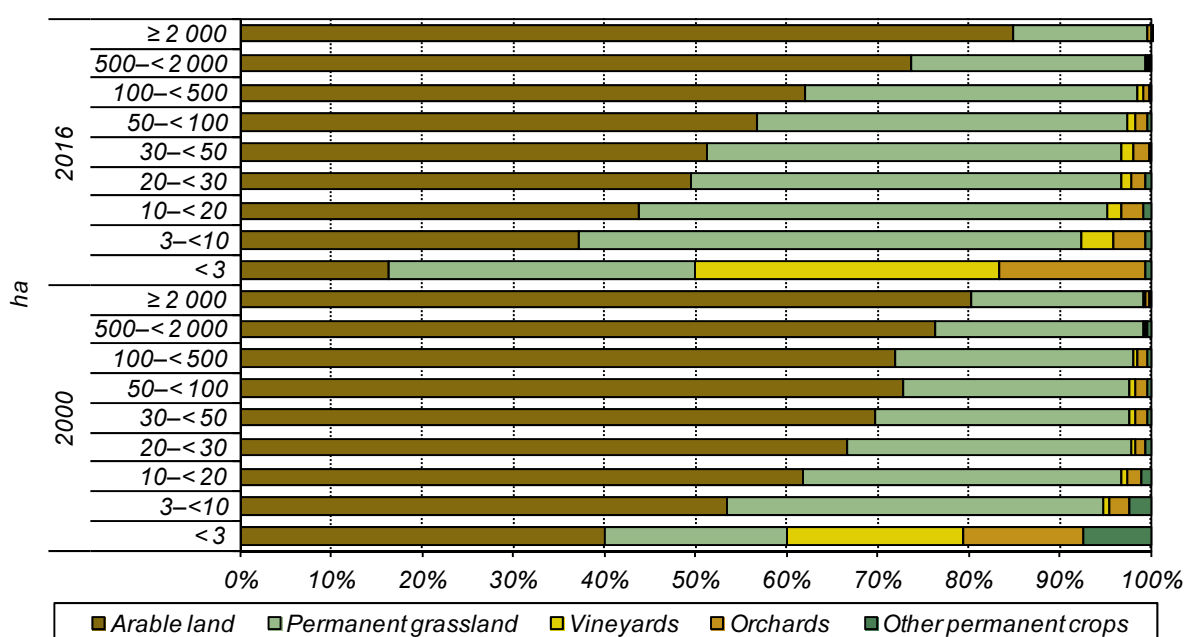


Agricultural land use

In 2016, the utilised agricultural land covered 3 456 646 ha, i.e. 43.8% of the area of the Czech Republic. A loss of 1.9 percentage point occurred since 2000 to the benefit of artificial area or wooded land. The utilised agricultural area went down by 4.1% (i.e. by 147 755 ha) and acreage of arable land even by 9.8% (i.e. by 267 350 ha). The share of arable land decreased during the period 2000–2016 by 4.5 percentage points. A certain part of arable land was grassed as a result of subsidies provided by the European Union and for this reason the area of permanent grasslands rose since 2000 by 15.0%, i.e. by 123 136 ha. Vineyard area increased by 42.0% while area of orchards decreased by 17.7%.

Arable land covered 71.5% of the total utilised agricultural area; more than one quarter of the UAA (27.3%) was covered by permanent grasslands. Other permanent crops (hop-gardens, vineyards, orchards, kitchen gardens, other permanent crops as e. g. short rotation coppices on UAA) represented only 1.2% share in the UAA. In holdings of natural persons the share of arable land (60.5%) was distinctly lower than in holdings of legal persons (76.2%), especially joint stock companies (81.9%) and cooperatives (81.7%).

Graph 4: Share of arable land, permanent grasslands and permanent crops, by size group



Although permanent crops cover only small portion of arable land, they form a considerable part of the crop production in small-size holdings. In holdings of natural persons with less than 3 ha of the UAA, vineyards comprised 33.6% and orchards 15.9% of their area. In holdings of legal persons these shares were 24.6% and 25.1%, respectively.

On the contrary, large agricultural holdings focused mainly on arable land crops: in the size group of 500 ha of the UAA and more their arable land covered 69.6% of the UAA in holdings of natural persons and 78.7% in holdings of legal persons.

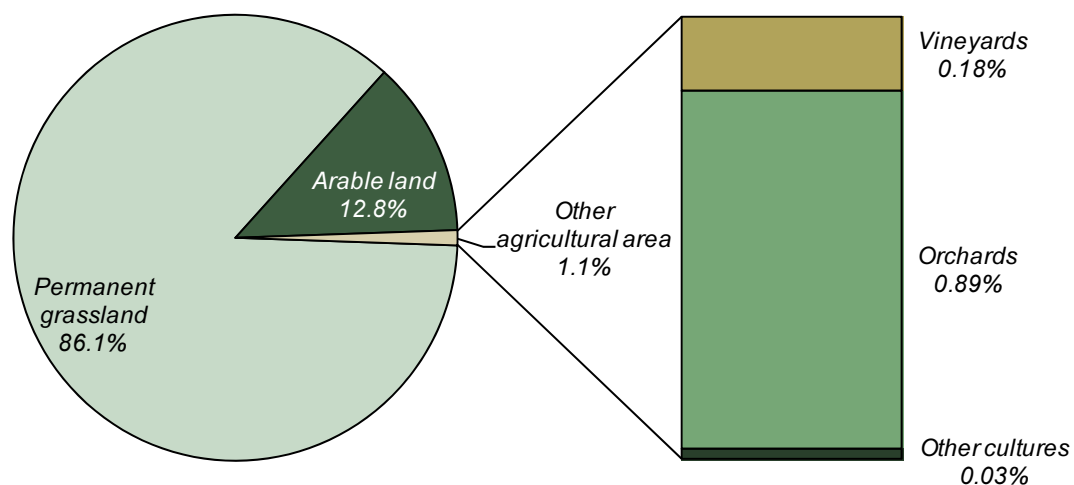
There were differences between holdings of natural and legal persons in shares of permanent grasslands. They were typical for holdings of natural persons with 3–10 ha of the UAA where they shared more than one half of their agricultural land (55.9%) and for holdings of legal persons with 100–500 ha where they covered 41.1% of the UAA.

Table 3: Agricultural land use, by legal form

	Year	Agricultural holdings, total	by legal form						
			Natural persons, total	of which: Agricultural entrepreneur – natural person	Legal persons, total	of which			
						Business companies & partnerships	Limited liability company	Joint stock company	Cooperative
Agricultural holdings	2016	26 525	23 402	18 232	3 123	2 507	1 836	621	502
	2000	26 539	23 714	19 746	2 825	1 948	1 310	602	740
Utilised agricultural area (ha)	2016	3 456 646	1 040 124	945 869	2 416 521	1 720 555	839 877	862 945	668 104
	2000	3 604 400	923 775	842 044	2 680 625	1 578 841	783 686	779 696	1 059 447
Arable land (ha)	2016	2 471 000	629 604	574 067	1 841 396	1 279 372	558 687	706 847	545 564
	2000	2 738 350	633 402	581 846	2 104 948	1 211 058	560 555	639 882	863 284
Hop-gardens (ha)	2016	5 167	679	651	4 488	3 370	2 391	979	1 087
	2000	6 966	1 245	1 048	5 721	3 853	2 717	977	1 788
Vineyards, total (ha)	2016	15 020	5 657	4 590	9 364	8 073	4 543	3 475	1 031
	2000	10 581	2 852	2 077	7 729	6 031	2 518	3 267	1 349
Kitchen gardens (ha)	2016	87	86	46	2	1	1	1	0
	2000	4 617	2 999	2 344	1 618	734	396	328	514
Orchards (ha)	2016	18 220	7 734	6 482	10 486	8 818	6 509	2 243	1 549
	2000	22 130	6 062	5 268	16 068	11 155	5 317	5 707	4 581
Permanent grassland, total (ha)	2016	944 893	395 062	359 343	549 831	420 022	266 912	149 336	118 828
	2000	821 756	277 215	249 461	544 541	346 010	212 183	129 535	187 930

Organic production methods were applied predominantly on permanent grasslands, which formed 86.1% of the total acreage of organically utilised agricultural area. Out of the total permanent grasslands area, 40.8% were utilised organically. Organic production methods were practised also in fruit orchards (21.9% of their area) while for vineyards it represented only 5.4% of their total area and for arable land even only 2.3% of the total area.

Graph 5: Share of particular cultures in organically utilised agricultural area



Areas under crops

In 2016 agricultural holdings utilised 2 471 000 ha of arable land. Cereals comprised the largest share (54.9%), especially wheat with more than one half (62.2%) of cereals' area. Another one quarter (23.6%) was sown with barley. In comparison with 2000 the most remarkable finding is that areas of maize for grain increased almost twofold (+83.9%) while barley areas declined by 28.0%.

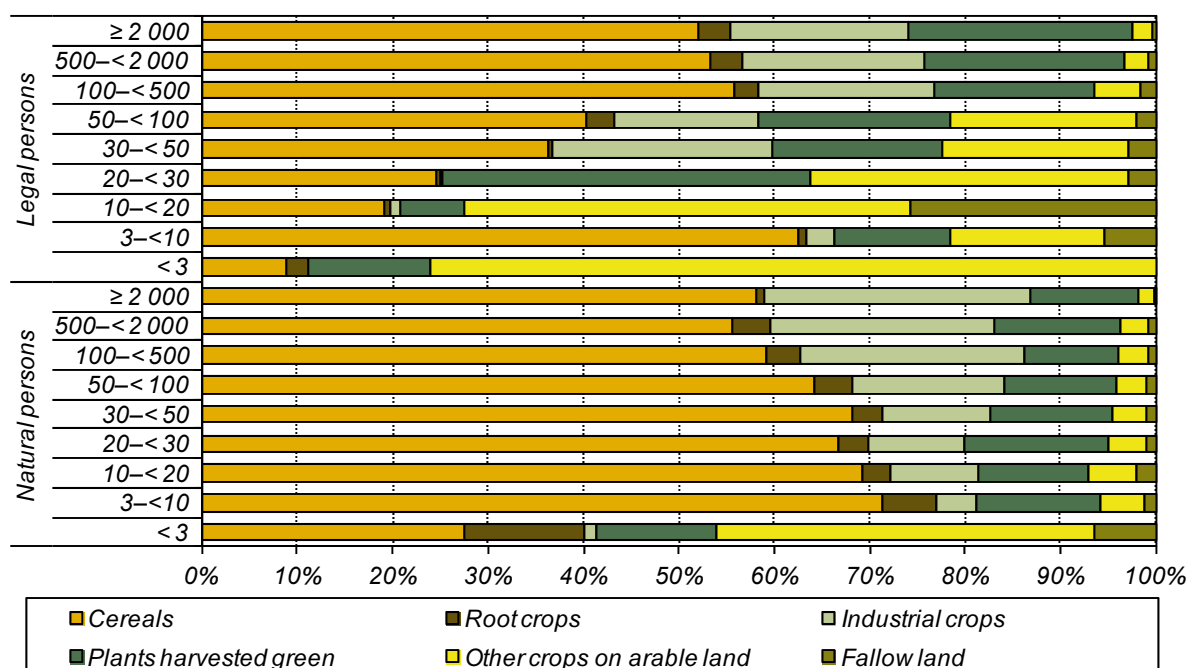
Compared to 2000, areas of industrial crops grew by 48 thousand ha (+11.2%). Planting of rape contributed the most to this increase as its areas grew by 61 thousand ha (+18.5%); in 2000 the rape shared 12.0% of arable land and by 2016 its share grew by 3.8 percentage points. This situation was influenced by a growing demand for rape seed for the production of fatty acid methyl ester – a basic compound of biofuels. Areas of other industrial crops (e.g. energy crops) expanded almost fifteen times from 134 ha to 1 996 ha. Areas of soya grew five times (+438.1%) since 2000.

On the contrary, potatoes are an example of a crop whose acreages declined by two fifth (-40.3%) due to combination of lowered consumption and increased import. Distinct declines were recorded also for vegetables (-18.4%) or green fodder on arable land (-17.6%) affected by a decline in cattle numbers. The greatest plummet (expressed as a percentage) was noted for fibre flax (from 5 691 ha to only 34 ha, i.e. by 99.4%).

Shares of arable land crops in particular legal forms were similar with rare exceptions. On the other hand, there are distinct dissimilarities among size groups of holdings. In all types of holdings growing of cereals is the most frequent production type. However, in holdings of natural persons utilising less than 3 ha of the UAA there was only approximately one fourth (27.6 %) of arable land used for cereals, in size group 3–10 ha it was 71.3%, and for larger holdings it continually slightly decreased up to 55.6% for holdings in size group 500–2 000 ha and 58.1% for holdings with more than 2 000 ha. Holdings of legal persons up to 3 ha planted cereals even on only 8.7% of arable land and in higher categories the share rose to more than one half (the largest proportion was 55.9% for the group with 100–500 ha).

Typical activities for holdings of natural persons with less than 3 ha of the UAA were growing of vegetables (22.4% of their arable land area), potatoes (11.4%), or flowers and ornamental plants (8.9%). Holdings of legal persons in the same size category focused on growing of flowers and ornamental plants (69.4% of their arable land area). Holdings with more than 2 000 ha dealt with growing of rape (25.0% of arable land for holdings of natural persons and 16.1% for holdings of legal persons) or green maize (7.9% for holdings of natural persons and 12.8% for holdings of legal persons).

Graph 6: Shares of selected crops in arable land



Agricultural holdings without agricultural land

A little group of agricultural holdings (232 holdings of natural persons, i.e. 1.0%; and 120 holdings of legal persons, i.e. 3.8%) did not utilise any agricultural land and specialised in animal production. Compared to 2000 the number of such holdings decreased by almost a half (-47.2%); out of them, the number of holdings of natural persons went down by 48.1% and the number of legal persons by 45.5%.

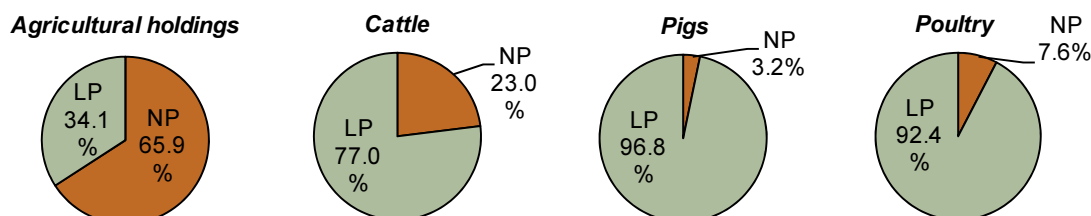
Table 4: Agricultural holdings without agricultural land

	Agricultural holdings, total	by legal form					
		of natural persons, total	of which: Agricultural entrepreneur – natural person	of legal persons, total	of which		
					Business companies & partnerships	of which	
						Limited liability company	Joint stock company
Agricultural holdings	352	232	152	120	109	81	27
Cattle (head)	4 648	1 071	944	3 577	3 559	1 497	2 062
Pigs (head)	429 771	13 952	12 265	415 819	415 309	69 244	332 569
Poultry (head)	13 895 892	1 058 781	967 370	12 837 111	12 766 002	8 077 711	4 688 291
<i>Average number of head per holding without agricultural land</i>							
Cattle (head)	13	5	6	30	33	18	76
Pigs (head)	1 223	60	81	3 465	3 810	855	12 317
Poultry (head)	39 530	4 573	6 367	106 976	117 119	99 725	173 640
<i>Share of legal forms in agricultural holdings without agricultural land (%)</i>							
Agricultural holdings	100.0	65.9	43.2	34.1	31.0	23.0	7.7
Cattle	100.0	23.0	20.3	77.0	76.6	32.2	44.4
Pigs	100.0	3.2	2.9	96.8	96.6	16.1	77.4
Poultry	100.0	7.6	7.0	92.4	91.9	58.1	33.7
<i>Share in total number of agricultural holdings (%)</i>							
Agricultural holdings	1.3	1.0	0.8	3.8	4.3	4.4	4.3
Cattle	0.3	0.3	0.3	0.3	0.5	0.6	0.5
Pigs	27.9	14.0	15.0	28.8	34.8	34.0	34.1
Poultry	55.4	63.9	63.7	54.8	58.0	68.3	46.1

Although agricultural holdings without agricultural land represent only a negligible group of holdings, they share an important part of animal production. In 2016 these holdings raised more than a half (55.4%) of all poultry numbers and more than a quarter (27.9%) of all pig numbers.

The largest proportion of livestock belonged to holdings of legal persons which involved 96.8% of pigs, 92.4% of poultry and 77.0% of cattle. In total 77.4% of pigs and 44.4% of cattle were kept in joint stock companies without agricultural land. Limited liability companies shared 58.1% of poultry. Agricultural entrepreneurs without agricultural land kept 20.3% of cattle, 7.0% of poultry and only 2.9% of pigs.

Graph 7: Share of legal forms in agricultural holdings without agricultural land



NP: holdings of natural persons; LP: holdings of legal persons

In comparison with 2000, concentrations of pigs in holdings without agricultural land rose from 1 088 head per holding to 1 223 head per holding and concentration of poultry went up from 19 593 head per holding to 39 530 head per holding; concentration of cattle decreased from 28 head per holding to 13 head per holding. As for holdings raising pigs, the share of joint stock companies went up (from 67.8% to 77.4%) while share of limited liability companies fell (from 21.6% to 16.1%). Limited liability companies focused on raising of poultry; share of such holdings grew from 38.6% to 58.1%.

Livestock numbers

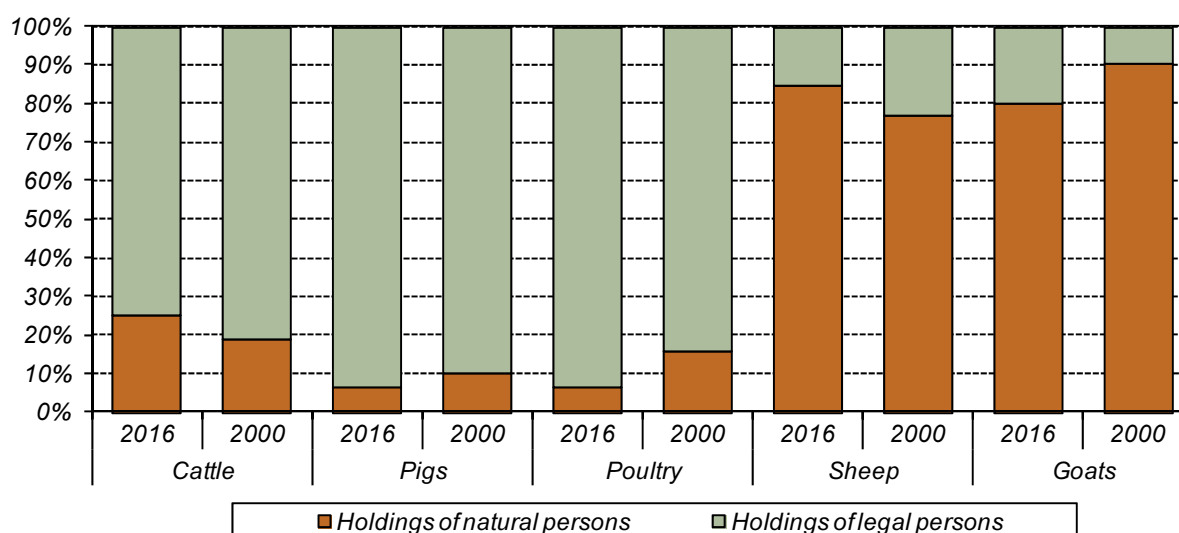
During the period 2000–2016 the number of livestock declined in all principal categories except sheep and goats. The sharpest plummet was recorded for pigs (-55.1%) and less distinct ones for poultry (-17.2%) and cattle (-8.8%). Raising of pigs ceased in 64.6% of holdings, raising of poultry in 33.1% of holdings, and cattle raising in 22.0% of holdings. This fact led to increased concentrations of livestock in particular agricultural holdings. On the contrary, increments were recorded during the abovementioned period for sheep by 250.4%, for goats by 171.3%, and for horses by 35.2%.

However, there were exceptions from abovementioned trends for each livestock category in particular legal forms: they were recorded, for example, for cattle in holdings of natural persons (+21.9), for poultry in limited liability companies (+46.3%), or for goats in cooperatives (-77.7%).

Table 5: Basic characteristics of animal production, by legal form

	Year	Agricultural holdings, total	By legal form						
			of natural persons, total	of which: Agricultural entrepreneur – natural person	of legal persons, total	Business companies & partnerships	of which		
							Limited liability company	Joint stock company	Cooperative
Agricultural holdings	2016	26 525	23 402	18 232	3 123	2 507	1 836	621	502
	2000	26 539	23 714	19 746	2 825	1 948	1 310	602	740
Cattle (head)	2016	1 409 773	357 873	328 608	1 051 900	679 665	272 125	404 046	360 710
	2000	1 545 309	293 522	270 628	1 251 787	658 773	263 431	389 710	574 478
Pigs (head)	2016	1 542 210	99 812	81 542	1 442 398	1 192 050	203 812	974 736	240 408
	2000	3 432 950	355 958	330 876	3 076 992	2 116 380	611 513	1 498 837	931 276
Poultry (head)	2016	25 103 855	1 657 269	1 518 408	23 446 586	21 993 529	11 822 043	10 171 458	1 386 929
	2000	30 321 070	4 815 570	4 191 842	25 505 500	21 762 693	8 081 112	13 681 581	3 609 453
Sheep (head)	2016	230 911	195 863	162 067	35 048	31 842	27 554	3 539	1 771
	2000	65 890	50 799	42 365	15 091	11 851	9 587	2 046	3 094
Goats (head)	2016	21 960	17 546	12 483	4 414	3 934	3 696	236	82
	2000	8 093	7 298	6 052	795	328	317	5	367

Graph 8: Share of holdings in livestock totals, by legal form



Organic production methods were applied mainly in raising of sheep (41.6% of their total number), goats (36.3%) and horses, donkeys and their hybrids (27.4%). In total 17.5% of cattle were ecologically reared. Raising of poultry and pigs using organic production methods is negligible (0.1% and 0.2%, respectively).

Raising of cattle

In 2016 there were 1 409 773 head of cattle reared in 11 619 agricultural holdings. Compared to 2000, the cattle number went down by 8.8% and the number of their breeders by 22.0%. It resulted in increased average number of cattle per holding from 104 head to 121 head. Cattle density declined from 43 head per 100 ha of the UAA to 41 head per 100 ha of the UAA.

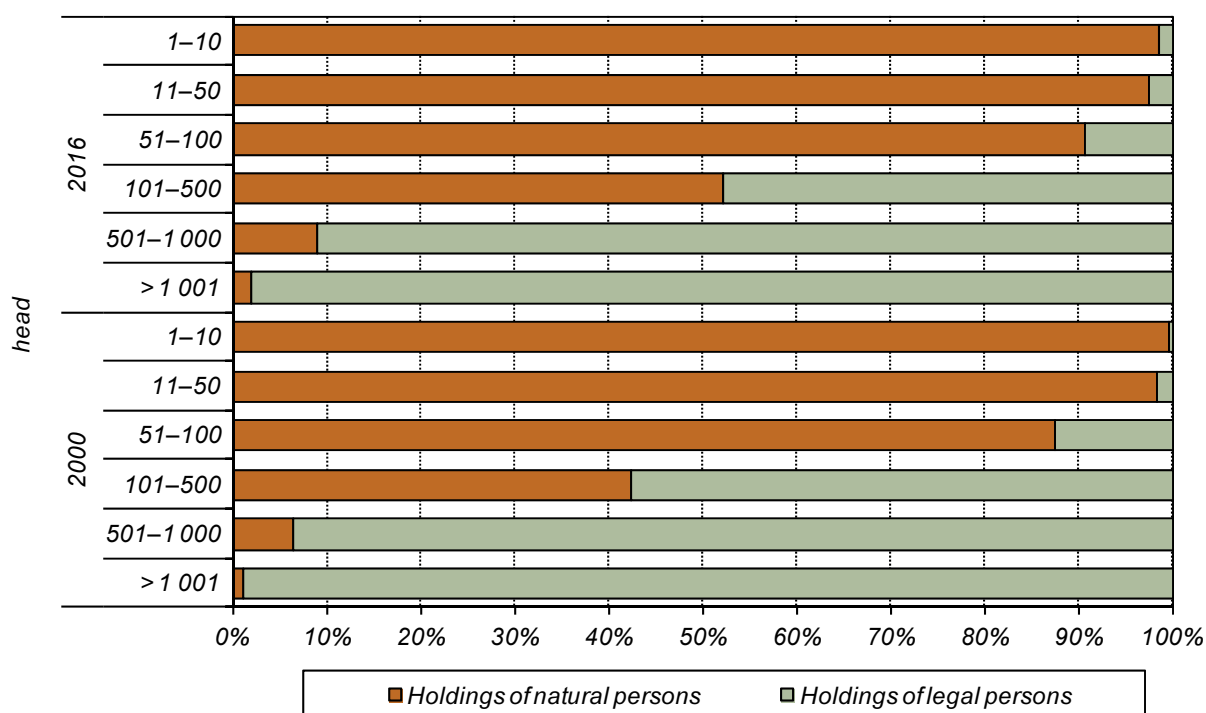
Three quarters (74.6%) of cattle were kept in holdings of legal persons; this share in 2000 was 81.0%. In holdings of natural persons the number of cattle increased by 21.9% and the average number per holding went up from 22 head to 36 head, while in holdings of legal persons the number of cattle declined by 16.0% and the average number per holding went down from 702 head to 619 head.

The largest share in the number of cattle in holdings of legal persons was represented by joint stock companies (28.7%) whose number increased by 3.7% since 2000. The overall decline in cattle breeding was caused mainly by the plummet of cattle numbers in cooperatives (-37.2%); as the share of cooperatives in all cattle breeders was 25.6% it represents more than 200 thousand head decline.

Almost two thirds (63.2%) of cattle were concentrated in large holdings with more than 500 head. However, there were distinct differences between particular legal forms: Holdings of natural persons reared typically small herds; only 18.8% of them reared more than 50 head. Nevertheless, in 2000 this share was only 8.4%. On the contrary, in holdings of legal persons the most typical size category was 101–500 head, recorded in 39.4% of cattle farms. Since 2000 the size structure in holdings of legal persons almost did not change (differences are only by few percentage points).

The number of cows decreased in comparison with 2000 by 5 854 head to 587 283 head; their share in the total number of cattle rose from 38.4% in 2000 to 41.7% in 2016. In 2016 almost two thirds of cows kept in agricultural holdings (62.9%) were dairy cows. In comparison with 2000 the share of dairy cows went down by 20.8 p. p. Raising of dairy cows is influenced by long-term trends in farmers' milk prices which were not favourable during the period 2000–2016. On the contrary, raising of beef cows was supported by subsidies from both national and European Union sources.

Graph 9: Shares of holdings by legal form in categories by cattle number per holding



Raising of pigs

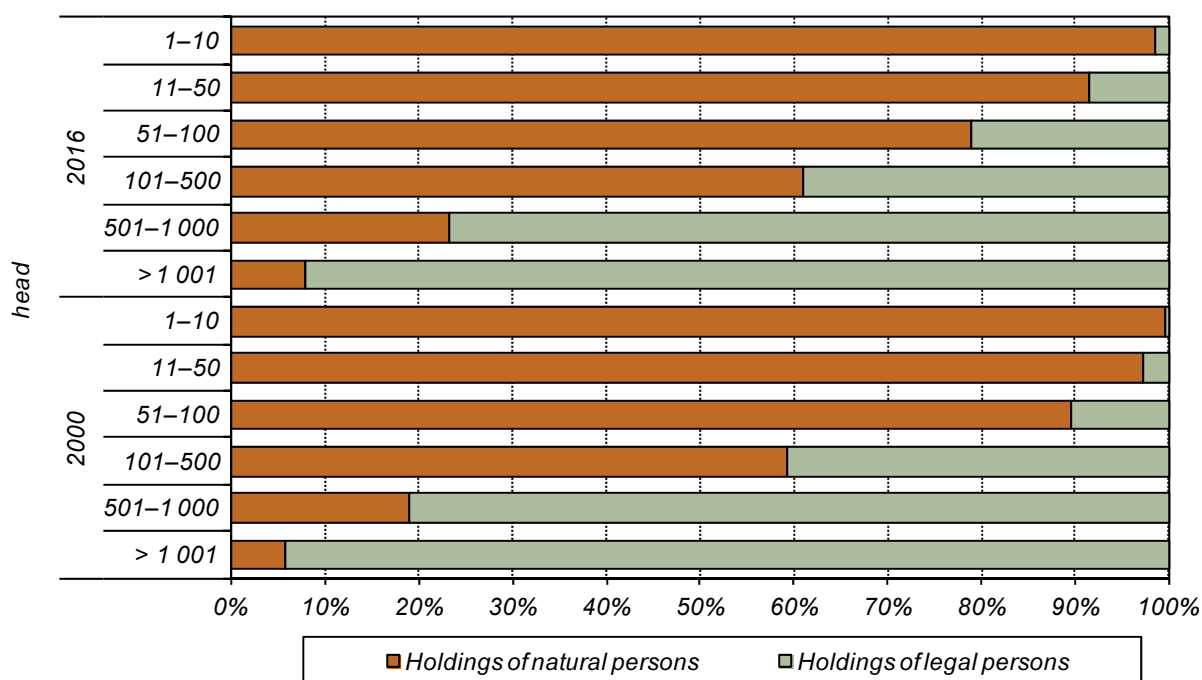
In total 1 542 210 pigs were kept in agricultural holdings in 2016; compared with 2000 their number dropped to less than a half (44.9%). The number of pig farms declined by 64.6% to 4 045 holdings. The number of head per one holding increased (from 299 head to 381 head) while their livestock density went down since 2000 to one half: from 125 head per 100 ha of arable land to 62 head per 100 ha of arable land.

There were 469 holdings of legal persons raising pigs; since 2000 their number decreased to less than one third (31.9%). They reared 93.5% of all pigs. One holding of legal person reared on average 3 074 head; i.e. by 981 head more than in 2000.

Out of 10 001 holdings of natural persons in 2000 only 3 576 did not ceased their activity until 2016. Number of their pigs declined by three quarters (-72.0%) to 99.8 thous. head. There were on average 28 head per one holding, by 8 head less compared to 2000.

The most frequent way of pigs' rearing were large piggeries with more than 1 000 head (90.7% of the total number); only 2.3% of pigs were kept in groups of less than 100 head. Groups up to 10 head prevailed (73.4% of farms) among holdings of natural persons while the most frequent size category of holdings of legal persons was with more than 1 000 head (41.6%). Since 2000 the size structure changed to the benefit of smaller groups, but the difference accounts for only few percentage points.

Graph 10: Shares of holdings by legal form in categories by number of pigs per holding



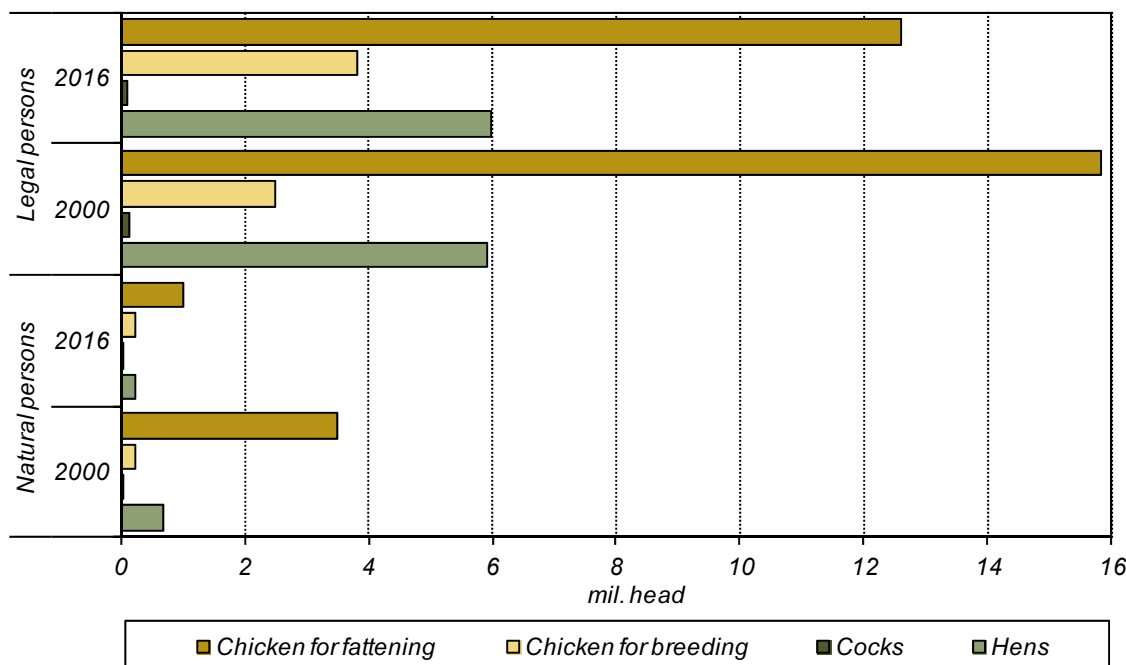
Raising of poultry

In total 7 443 holdings raised more than 25 million head of poultry in the Czech Republic in 2016. More than one half (55.4%) of poultry numbers were kept in agricultural holdings without utilised agricultural land. Holdings of natural persons prevailed (7 179 farms; i.e. 96.5%) but their share of poultry was only 6.6% in the total number of poultry. The remaining 93.4% of poultry were concentrated in 264 holdings of legal persons.

During the period 2000-2016, the number of poultry decreased by 17.2% and the number of their breeders dropped by 33.1%. The average number per holding rose by 648 head to 3 373 head per holding. Poultry density went down from 1 107 head per 100 ha of arable land to 1 016 head per 100 ha of arable land. This decline was caused mainly by reduced number of chicken for fattening (-29.5%) while number of chicken for breeding considerably increased (+49.2%).

In holdings of natural persons the decline amounted to 65.6% for poultry totals and even 68.2% for hens. In holdings of legal persons, the total poultry number went down by 8.1% but the number of hens rose by 1.4%. The number of poultry kept in cooperatives plummeted by almost two thirds (-61.6%) and another large decrement by 25.7% was noted in joint stock companies. On the contrary, limited liability companies recorded an increase by 46.3% to 11.8 million head.

Graph 11: Raising of chickens, by legal form



Out of holdings of natural persons, 96.6% raised less than 100 head of poultry while more than a half (52.6%) of holdings of legal persons had large farms with more than 10 thous. head. The reduction of poultry raising since 2000 influenced all size categories of holdings of natural persons, mainly those with 5–10 thous. head (decline of -74.2% in poultry numbers and -70.7% in the number of holdings). Interesting findings were recorded for holdings of legal persons where a reduction occurred among large farms (size group of 50–100 thous. head; reduction by 61.0% of poultry and by 60.4% of holdings). On the contrary, the number of small farms up to 100 head as well as their poultry numbers rose twofold (+226.1% of holdings; +186.5% of poultry). Although only several tens of holdings are involved, it can be interpreted as a sign of growing interest in poultry raising with respect to animal welfare standards.

The shares of particular poultry species in the total poultry number did not change distinctly during the period 2000–2016. Breeding of chickens predominated: out of the total poultry number, there were 54.3% of chicken for fattening, 24.8% of hens, and 16.0% of chicken for breeding. As for other poultry species, ducks reached 2.6% and turkeys only 1.7% of total poultry. In 2000, raising of chicken for fattening prevailed as well (63.8%), followed by hens (21.8%) and chicken for breeding (8.9%), out of other species turkeys shared 2.9% and ducks 1.6% of the total poultry numbers.

Raising of sheep and goats

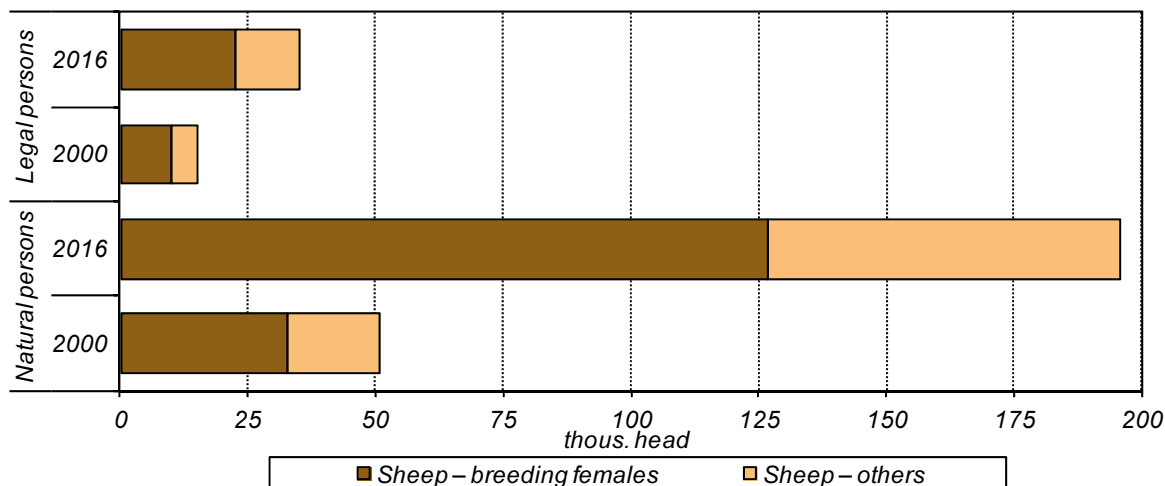
Sheep and goats numbers recorded the highest increment among all livestock categories since 2000. The number of sheep rose by 250.4% to 230 911 head and the number of goats by 171.3% to 21 960 head. In 2016 there were 5 734 sheep breeders and 1 780 holdings raising goats. While number of holdings raising sheep went up by 98.4%, number of goat breeders dropped by 9.8%, compared to 2000.

Raising of both sheep and goats was concentrated in holdings of natural persons; they involved 93.0% of sheep breeders and 91.1% of goat breeders; they kept 84.8% of sheep and 79.9% of goats. In comparison with 2000, there is a positive trend in number of these species among holdings of legal persons:

their sheep numbers rose more than twofold (from 15 091 to 35 048 head) and goats numbers more than fivefold (from 795 to 4 414 head).

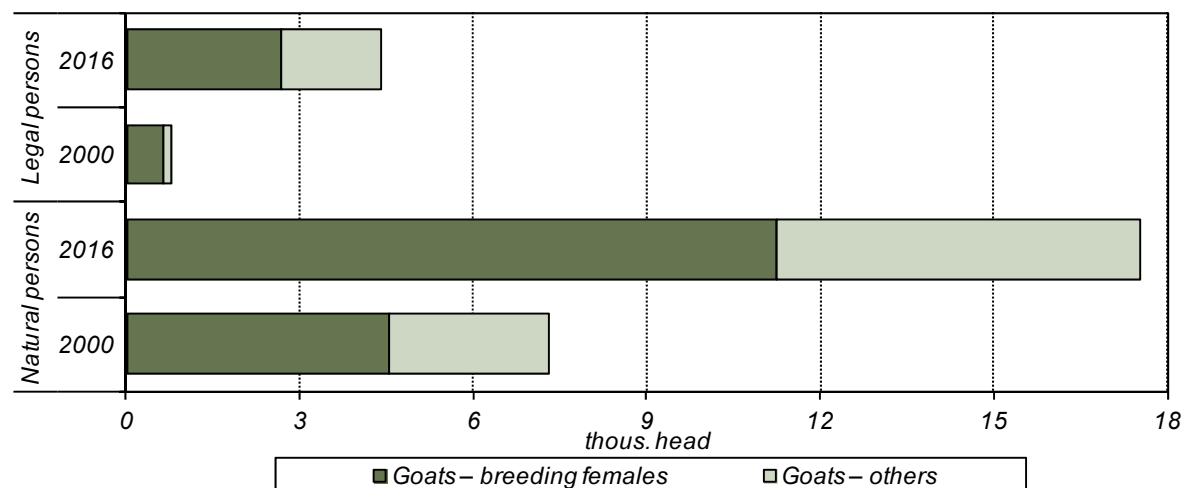
Sheep are kept mostly in flocks of 11–50 head; this size category involves more than one half of farmers (58.3%) and one third of sheep (34.6%); this concerns especially holdings of natural persons. Among holdings of legal persons, this size group represented the largest share of the holdings as well (45.1%) but the largest share of sheep (38.8%) was concentrated in flocks of more than 500 head belonging to only 16 holdings (4.0%).

Graph 12: Raising of sheep, by legal form



As for raising of goats, size group up to 10 head per holding prevailed in both holdings of natural persons (74.9%) and legal persons (50.6%). Flocks larger than 50 head belonged to 49 holdings of natural persons (3.0%) and 20 holdings of legal persons (12.7%).

Graph 13: Raising of goats, by legal form



Labour force in agriculture

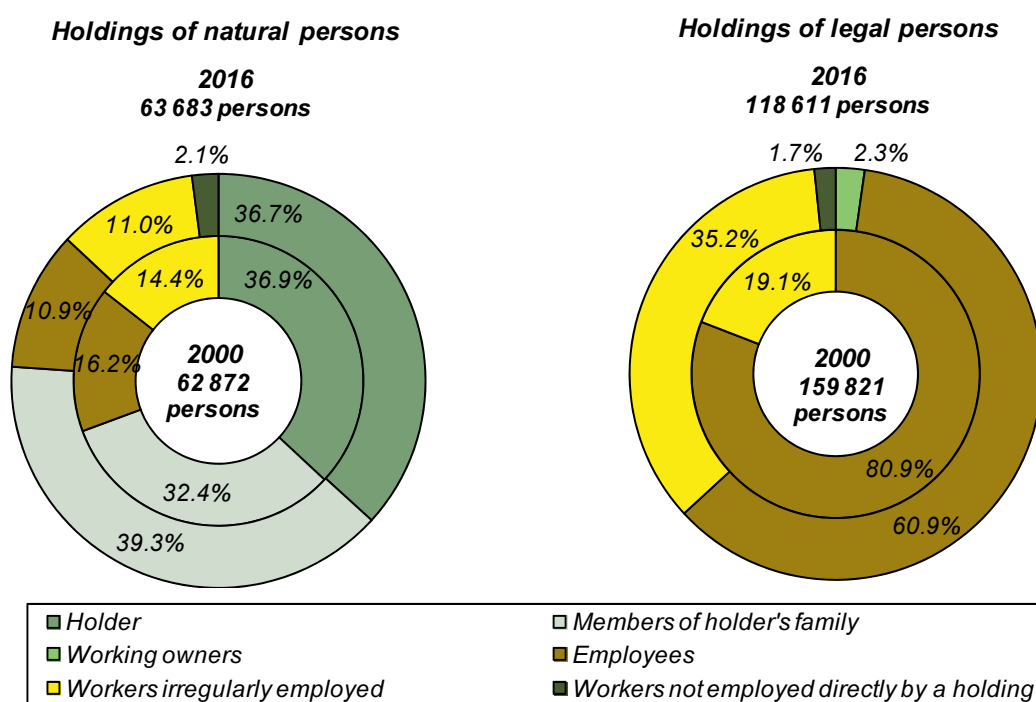
In 2016 in total 182 294 persons were involved in agricultural work; out of them 130 302 persons were regularly employed and 48 714 persons irregularly employed (i.e. working on the basis of contract for work or for services). Other 3 278 persons were employed not directly by agricultural holdings; those were either self-employed persons or employed by job agencies. Because of high seasonality of some agricultural work, this type of employment is widely utilised by agricultural holdings during work peaks.

Labour force regularly employed in agriculture consisted mainly of employees (61.9%). In holdings of natural persons, holders represented 42.3% and members of their families 45.2% of persons regularly employed; in holdings of legal persons 3.6% were working owners.

During the period 2000–2016 the labour force totals decreased by 40 399 persons, i.e. by 18.1%. This decline was observed mainly in holdings dealing with animal production as the consequence of lowered interest in raising of main livestock species.

In holdings of natural persons in total 63 683 persons were working in 2016, i.e. by 1.3% more than in 2000. Compared to 2000 there were more family members involved in the farm work instead of employees and persons working on the basis of contracts. While in 2000 there were 16.2% of employees and 32.4% of holders' family members, in 2016 these shares were 10.9% for employees and 39.3% for family members. Even more distinct decline of labour force occurred in holdings of legal persons during the period 2000–2016. The number of workers decreased by one quarter (-25.8%) to 118 611 and the number of workers regularly employed even by 42.0% to 74 913. Agricultural holdings frequently engaged persons working on the basis of contracts or employed by job agencies for short-term activities with high share of manual work (harvest of vegetables, fruits, or potatoes). In 2016, holdings of legal persons engaged 41 728 persons working on the basis of contracts, 346 self-employed persons, and 1 624 persons employed by job agencies.

Graph 14: Labour force structure in holdings of natural and legal persons



According to standard EU methodology, data on labour force in agricultural sector is expressed in Annual Work Units (AWU). One AWU is the full-time equivalent employment, i.e. the total number of hours worked divided by the average annual number of hours worked in full-time jobs in the country. The annual fund of working hours is set at 1 800 hours in the Czech Republic and is based on the number of working days with 8 working hours a day minus minimum statutory claim for holiday and minus the average number of hours not worked for incapacity for work.

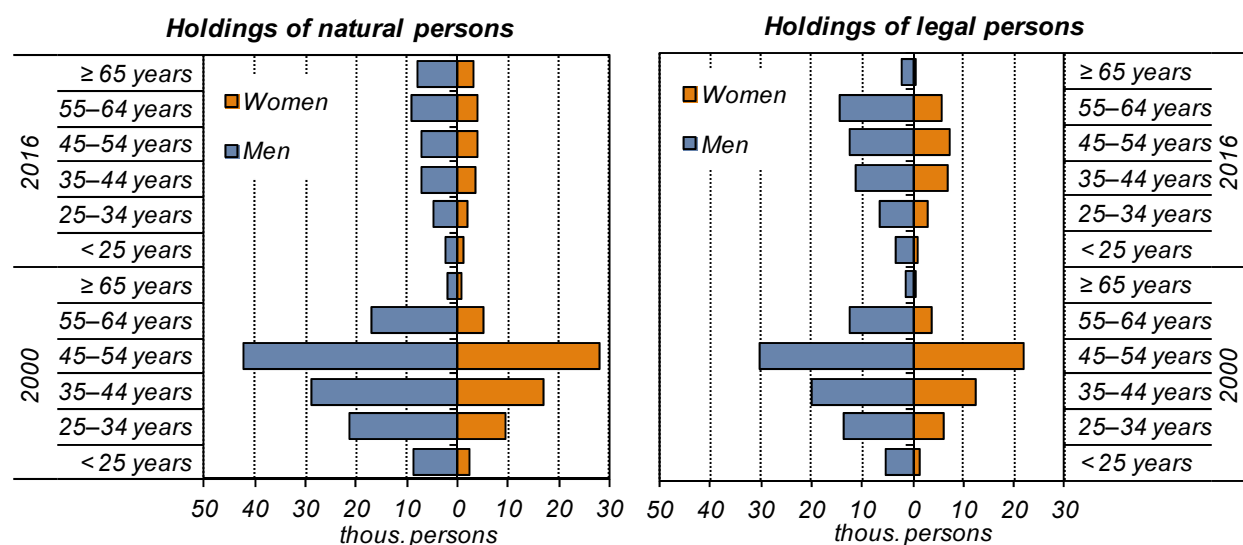
Expressed in Annual Work Units, the labour force number in 2016 was 104 480 AWU, i.e. 57.3% share in the total number of working persons. In 2000 this value accounted for 166 365 AWU (i.e. there was a decline by 37.2% by 2016) and 74.7% share in the working persons total. The decrease of the ratio between the number of persons and AWU shows increasing share of utilisation of part-time and temporary jobs in agricultural holdings. It was more frequent in holdings of natural persons, where the share after recalculation was 54.5% (34 687 AWU) while in holdings of legal persons the share was 58.8% (69 793 AWU).

Age structure of labour force

The agricultural sector of the Czech Republic is negatively influenced not only by labour force loss but also by their ageing. Since 2000 the share of labour force regularly employed in the age group up to 34 years declined from 22.8% to 18.2%. This trend results from low popularity of the agricultural work together with frequently prolonged study and postponed start of work in this age group. The share of middle-age generation (35–54 years) decreased as well, and, therefore, the share of persons in pre-retirement and retirement age (55 years and more) regularly employed grew continually. The share of middle-age generation went down from 63.7% in 2000 to 45.7% in 2016, and the share of employees aged 55 and more rose from 13.5% to 36.1%.

Differences among legal forms in the age structure can be seen during the comparison of holdings of natural persons and of legal persons. Holdings of natural persons, usually small family farms, show more uniform distribution of age groups and there is a larger share of young workers up to 24 years (6.4%) when compared with holdings of legal persons (5.7%). Shares of age group 65 years and more are even more different: 19.9% for holdings of natural persons and only 4.2% for holdings of legal persons. Despite structural supports for young farmers the share of workers up to 34 years in holdings of natural persons went down by 9.9 percentage points since 2000 and the share of workers above 55 years rose by 31.1 p. p. These changes were not so distinct in holdings of legal persons, where the share of the age group up to 34 years declined by 2.4 p. p. and for the group above 55 years it went up by 16.8 p. p.

Graph 15: Age structure of labour regularly employed



Women employed in agricultural sector

The share of women in the total number of labour force regularly employed did not change much since 2000; it decreased from 34.4% to 32.5%. Their share rose distinctly in the age group above 55 years (+22.7 p. p.), while a decrement was recorded for the group up to 34 years (-2.5 p. p.).

The share of women in holdings of natural persons was slightly lower (31.5%) than in holdings of legal persons (33.1%). Since 2000 the trends in both legal forms were different: the share of women in holdings of natural persons rose by 1.2 p. p., probably in connection with increased share of holder's family members working on the farm; on the contrary, their share in holdings of legal persons declined by 3.0 p. p.