

4. The labour force in agriculture

Permanent workers

In 2007, a total of 243,179 people worked in agriculture regardless of the type of employment relations that they had with their employer (i.e. including irregularly employed workers, workers indirectly employed by an agricultural holding and family members assisting on farms). Of that 97,545 (40.1%) of the people worked in holdings of natural persons and 145,632 (59.9%) worked in holdings of legal persons.

The adjustment for workers in full employment provides more precise information about the employment in agriculture¹ and it led to their total number falling significantly. When adjusted for full employment, 138,104 people worked in agriculture regardless of the type of employment with the employer. Of that 44,285 (32.1%) of the people worked in holdings of natural persons and 93,820 (67.9%) worked in holdings of legal persons.

Despite the fact that agriculture is a branch with a large share of seasonal work, the greatest share of the labour force was accounted for by permanent workers (employees and family members assisting on farms, who were also included in the case of holdings of natural persons and self-suppliers regardless of whether they assisted regularly or not at all). In 2007, a total of 191,940 such people were noted or 133,957 people when adjusted for full employment.

Table 4 and 5 set out the numbers of permanent workers. According to the European Union methodology, these are: workers who have their main employment at holdings of legal persons, including employees and working owners, for whom working on the farm is their only or main employment. In holdings of natural persons, this includes working and assisting family members older than 15 years of age and non-family workers who regularly carried out agricultural work in the monitored period.

Tab. 4 - Workers in the period of October 2006 - September 2007: persons

	Number of persons, total	Natural persons	Legal persons	Of which			
				Business companies & partnerships	Of which		Cooperatives
					Limited liability companies	Joint stock companies	
Total	191 940	89 224	102 716	68 535	25 149	43 061	31 691
by hours worked:							
0 - 449	40 807	34 946	5 861	4 024	1 556	2 443	1 638
450 - 899	21 653	16 780	4 873	3 436	1 330	2 087	1 322
900 - 1349	16 546	10 822	5 724	3 922	1 628	2 269	1 689
1350 - 1799	20 217	5 099	15 118	10 480	3 487	6 972	4 377
≥ 1800	92 717	21 577	71 140	46 673	17 148	29 290	22 665

There are not only differences between holdings of natural and legal persons with regard to the numbers of workers, but also with regard to their work loads. During the monitored period, 89,224 workers worked in holdings of natural persons and 102,716 workers worked in holdings of legal persons. Whereas workers mainly worked full-time in holdings of legal persons (71,140 workers), the situation was different in holdings of natural persons. Approximately 40% of the workers in holdings of natural persons worked (assisted) in the agricultural holding up to the maximum amount of one quarter of the work load. The aforementioned fact is reflected during the conversion of the physical number of workers to the number of fully employed workers. Whereas the number falls by 11.9% in holdings of legal persons, it falls by 51.3% in holdings of natural persons.

¹ The information concerning the labour force in agriculture was collected from all of the reporting units for the period of October 2006 to September 2007 according to the Agricultural Labour Input (ALI) statistical method. The agricultural work is measured using so-called annual work units (AWU). The number of hours contained in the annual work unit corresponds to the number of hours actually worked within the framework of full-time work in agriculture. The amount of 1,800 hours has been set as the basis for the annual working hours. This is based on the annual number of workdays with an eight-hour working period after the deduction of the minimum entitlement to paid leave and the average number of unworked days due to incapacity to work. This number of hours corresponds to full-time work.

Tab. 5 - Workers in the period of October 2006 - September 2007: AWU

	AWU, total	Natural persons	Legal persons, total	Of which			
				Business companies & partnerships	Of which		Cooperatives
					Limited liability companies	Joint stock companies	
Total	133 957	43 451	90 506	60 086	21 910	37 897	28 251
by hours worked:							
1 - 449	5 089	4 356	733	503	195	305	205
450 - 899	8 119	6 292	1 827	1 289	499	783	496
900 - 1349	10 342	6 764	3 578	2 451	1 018	1 418	1 056
1350 - 1799	17 690	4 462	13 228	9 170	3 051	6 101	3 830
>= 1800	92 717	21 577	71 140	46 673	17 148	29 290	22 665

Seasonal workers

Agriculture is a branch with a high share of seasonal work. During work peaks (harvest, picking fruit, vegetables, hops and so on), farmers hire an extra labour force to assist them. These irregular workers are employees upon the basis of a work agreement or a temporary work contract. As well as irregularly employed workers, individuals employed by a third party (for example workers assigned by an employment agency and self-employed individuals who worked for an agricultural holding) were also included among the so-called seasonal workers.

In 2007, a total of 51,239 seasonal workers worked in agricultural holdings. Of that, 83.9% of the workers worked in holdings of legal persons. Their lower numbers in holdings of natural persons were also given by the fact that family members assisting on the farm were not included there (according to the European Union methodology). 47,840 irregularly employed individuals were recorded in physical terms or 3,355 people when adjusted for full employment. The remaining 3,399 individuals in physical terms or 793 individuals when adjusted for full employment consisted of workers employed through employment agencies and self-employed individuals carrying out agricultural work for agricultural holdings.

There are no great differences between the composition of seasonal workers in holdings of natural and legal persons: 90.3% of seasonal workers in holdings of natural persons and 94.0% in holdings of legal persons had a concluded work agreement or temporary work contract and the remaining 9.7% in holdings of natural persons and 6.0% in holdings of legal persons were employed through an employment agency or as self-employed individuals upon the basis of an invoice.

Tab. 6 - Seasonal workers working in agricultural holdings in the period of October 2006 - September 2007: persons

Indicator		Natural persons	Legal persons	Of which			
				Business companies & partnerships	Of which		Cooperatives
					Limited liability companies	Joint stock companies	
Total	Number of persons	8 322	42 917	30 733	15 018	15 567	11 018
	Number of hours worked	1 500 999	5 964 324	4 190 229	1 963 067	2 186 329	1 602 094
Persons irregularly employed (contracts for work, contracts for services)	Number of persons	7 515	40 325	28 976	13 847	15 011	10 199
	Number of hours worked	974 425	5 064 170	3 443 284	1 502 855	1 929 446	1 453 580
Persons not directly employed by the holding (employed by third parties, self-employed persons)	Number of persons	807	2 592	1 757	1 171	556	819
	Number of hours worked	526 574	900 154	746 945	460 212	256 883	148 514

The education of managers in the agricultural holdings

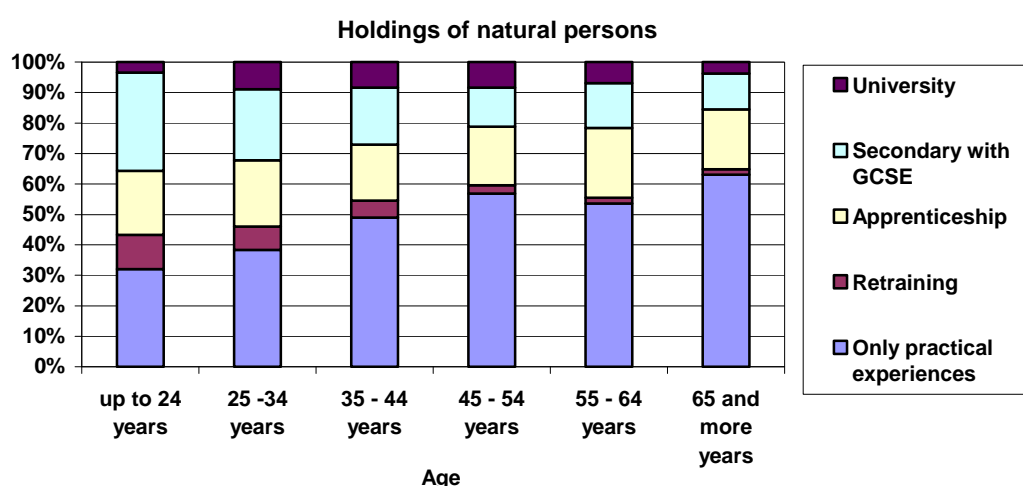
Apart from the volume of work, the survey also ascertained further supplementary indicators such as the education or age of the workers in agriculture. The holdings of natural and legal persons differ in the education structure of the executive employees of the agricultural holdings (Table 7).

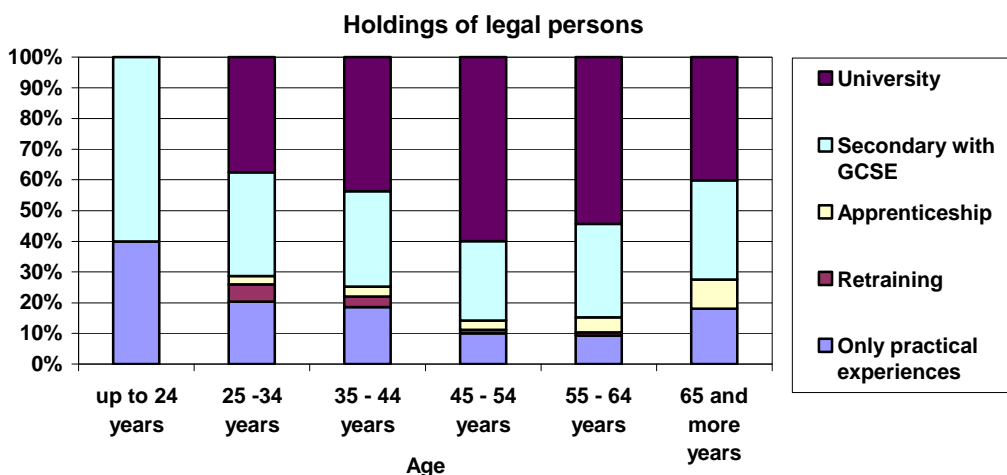
Tab. 7 - Agricultural education (percentage representation) of the managers of agricultural holdings

Agricultural education	Natural persons	Legal persons	Of which			
			Business companies & partnerships	Of which		Cooperatives
				Limited liability companies	Joint stock companies	
Total	100.0	100.0	100.0	100.0	100.0	100.0
Only practical experiences	53.8	12.6	13.8	16.3	7.1	4.7
Retraining	3.3	1.8	2.0	2.6	0.5	0.7
Apprenticeship	20.5	4.0	3.9	4.9	1.4	4.4
Secondary with GCSE	15.2	29.3	29.4	32.0	22.9	32.3
University	7.2	52.4	50.9	44.2	68.2	57.8

The survey only ascertained the agricultural education of managers and it is therefore possible that their highest achieved education may be different. The lower educational level of managers in the holdings of natural persons may be given by the fact that not all of the holdings which are classified among the holdings of natural persons make their living exclusively from commercial activities in agriculture and the professional orientation, which they may have alongside agriculture, may be completely different. This is also born out by the fact that 53.8% of managers of holdings of natural persons have only practical experience of agriculture. In general, the situation is more favourable in the holdings of legal persons. Whereas only 7.2% of managers in holdings of natural persons have a university education and only 15.2% have a secondary school education completed with the school leaving examination, the number of managers in holdings of legal persons with upper secondary and tertiary education amounts to 52.4%, while 29.3% have a secondary school education completed with the school leaving examination. The most university educated managers in the structure of the individual legal forms can be found in joint stock companies where they accounted for 68.2% of managers. This increased number of university educated managers in joint stock companies corresponds to the lower number of secondary school educated managers in such companies in comparison with the structures of the other legal forms of legal entities.

Graph 4 – Education of managers in agricultural holdings: by age groups in 2007





The age structure of the workers

Due to the method of data acquisition, the age structure of the workers in agriculture in 2007 is stated for all permanent workers regardless of how many hours they work and in the case of holdings of natural persons regardless of the existence of a labour law relationship with the holder of farm.

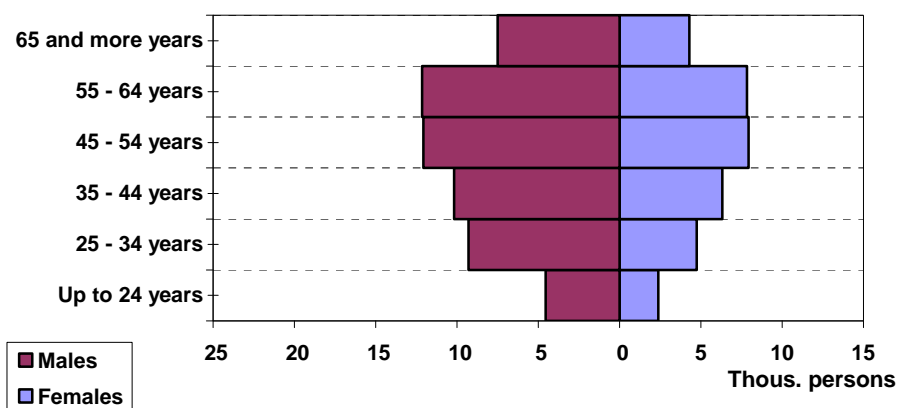
Tab. 8 - Workers in agriculture: by age group, 2007

Indicator	Workers, total		Workers in holdings			
			of natural persons		of legal persons	
	abs.	%	abs.	%	abs.	%
Number of persons, total	191 939	100.0	89 224	100.0	102 715	100.0
Age group:						
=< 24	11 338	5.9	6 927	7.8	4 411	4.3
25 - 34	27 985	14.6	14 039	15.7	13 946	13.6
35 - 44	37 253	19.4	16 488	18.5	20 764	20.2
45 - 54	52 971	27.6	20 002	22.4	32 969	32.1
55 - 64	47 364	24.7	19 984	22.4	27 380	26.7
>= 65	15 028	7.8	11 783	13.2	3 245	3.2

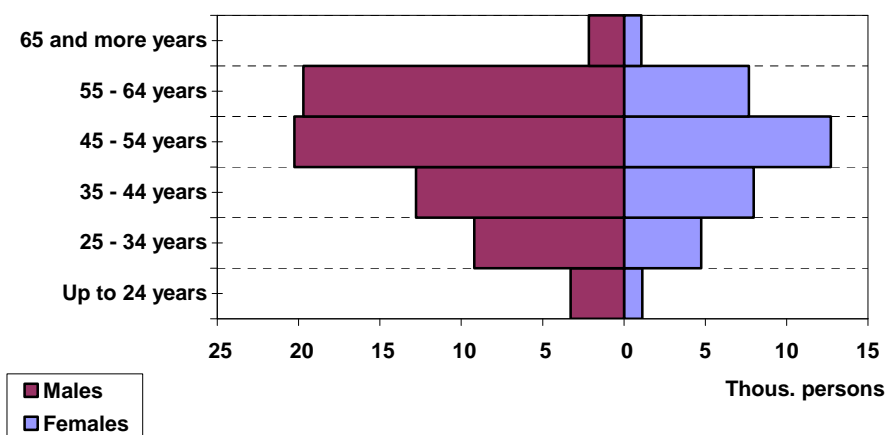
The main group of workers in the age structure of the workers in agriculture is made up of workers in the age categories of 45 to 54 and 55 to 64, i.e. workers in the pre-retirement to retirement age. And this is true both in holdings of legal and natural persons. The low share of workers in the lower age categories is associated with the extension of the education period and the later entry into employment. The absence of workers in the medium age category is caused by, amongst other things, low wages and the commercial uncertainty in agricultural production. Despite the fact that wages in agriculture have risen as a result of the rise in the prices for agricultural products, their level continues to be low in comparison with other branches (the second lowest). In 2007, the average gross wage in agriculture was 19,441 CZK and most people received 14,001 – 16,000 CZK (14.83% of employees) and 12,001 – 14,000 CZK (12.39% of employees). By way of comparison, the average wage in industry, for example, was 23,432 CZK, in the construction industry it was 24,569 CZK and in education it was 22,978 CZK. Moreover, the agricultural sector is marked by the low differentiation of wages which is the second lowest apart from the public sector (variation coefficient 0.45).

Graph 5 – Age structure of workers in agriculture in 2007

Holdings of natural persons



Holdings of legal persons



The labour force according to the production orientation of the holdings

The numbers of workers in agricultural holdings also differ according to their production orientation. Table 11 shows the percentile representation of workers according to the predominant production of the agricultural holdings.

Tab. 9 - Share of females and males workers on holdings: by principal agricultural production

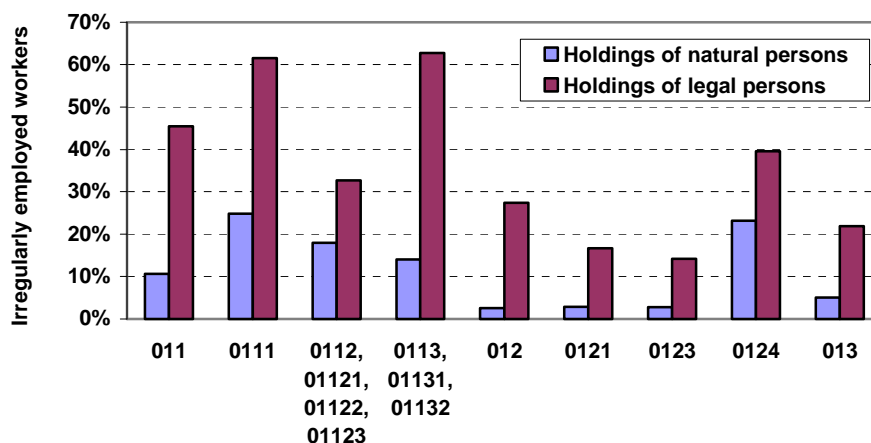
Principal agricultural production (NACE)	Natural persons		Legal persons		Of w hich							
					Business companies & partnerships		Of w hich				Cooperatives	
	Females %	Males %	Females %	Males %	Females %	Males %	Limited liability companies	Joint stock companies	Females %	Males %		
011	25.1	74.9	70.1	29.9	71.1	28.9	73.6	26.4	68.0	32.0	71.7	28.3
0111	22.8	77.2	71.9	28.1	71.3	28.7	73.8	26.2	65.4	34.6	74.6	25.4
0112, 01121, 01122, 01123	48.6	51.4	47.9	52.1	48.2	51.8	48.4	51.6	47.6	52.4	43.9	56.1
0113, 01131, 01132	35.2	64.8	56.7	43.3	56.2	43.8	58.2	41.8	50.1	49.9	61.6	38.4
012	32.6	67.4	63.1	36.9	60.7	39.3	67.3	32.7	58.4	41.6	69.3	30.7
0121	29.3	70.7	72.4	27.6	72.4	27.6	74.8	25.2	68.4	31.6	72.1	27.9
0123	32.7	67.3	62.1	37.9	62.6	37.4	64.6	35.4	61.6	38.4	51.2	48.8
0124	42.4	57.6	48.7	51.3	48.9	51.1	50.5	49.5	47.8	52.2	100.0	0.0
013	30.5	69.5	68.7	31.3	68.9	31.1	72.0	28.0	67.7	32.3	68.5	31.5

More men work in the holdings of natural persons of all orientations. On the contrary, more women work in the holdings of legal persons of almost all orientations. The only exceptions involve the animal production of holdings of legal persons specialising in poultry breeding where men account for 51.3% of the regularly employed workers and in the crop production of holdings of legal persons involved predominantly in growing vegetables, garden specialities, mushrooms, flowers and ornamental woods, in which men account for 52.1% of the regularly employed workers.

Tab. 10 - Share of workers employed on non-regular basis in total number of workers: by principal agricultural production

Principal agricultural production (NACE)	Natural persons	Legal persons	Of which			
			Business companies & partnerships	Of which		Cooperatives
				Limited liability companies	Joint stock companies	
011	10.6	45.4	45.2	47.6	42.2	49.7
0111	24.8	61.5	62.0	63.8	57.6	58.5
0112, 01121, 01122, 01123	18.0	32.7	33.3	37.8	16.4	-
0113, 01131, 01132	14.0	62.7	62.6	66.7	43.3	66.5
012	2.6	27.4	31.5	19.6	34.8	13.0
0121	2.9	16.7	17.2	17.1	17.6	15.0
0123	2.8	14.2	14.4	15.0	13.9	9.2
0124	23.1	39.6	39.5	48.6	31.3	-
013	5.0	21.9	20.9	18.8	21.8	22.7

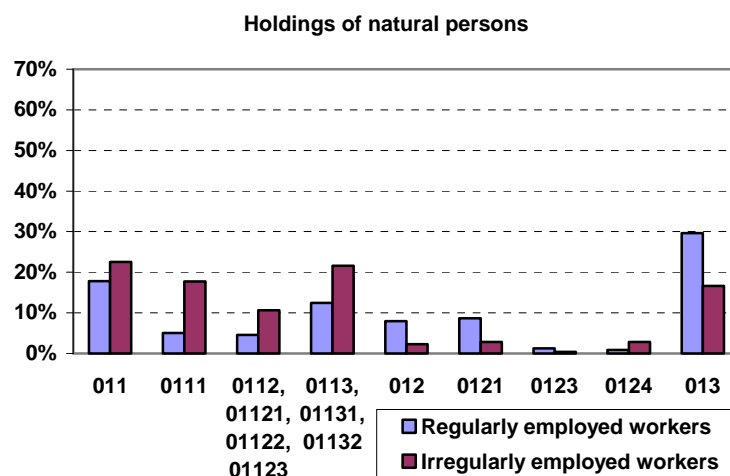
Graph 6 – Share of irregularly employed workers in total number of workers: by the orientation of agricultural production



Even though the category of irregularly employed workers upon the basis of labour law relations in the case of holdings of natural persons is deprived of the assisting family members, the demanding nature of agricultural production according to its orientation does not differ in the trend between holdings of natural and legal persons. Crop production is by its very nature more labour intensive in the seasonal peaks than animal production. The cultivation of fruit and grapes, for example, requires a high amount of seasonal work.

The work demands of the individual production orientations (the share of irregularly employed workers) do not correspond to the actual share of irregularly employed workers in the overall number of workers. For example, the production of vegetables is marked by its high demands on seasonal work, but its share of the overall work force in agriculture is low. The share of the individual production orientations in the total number of irregularly employed workers is depicted in graph 7 and table 11.

Graph 7 – Shares of workers in agriculture: by the orientation of production



In both holdings of legal and natural persons, the most regularly employed workers are found in holdings operating combined production which are better able to cope with the fluctuations in crops and animal production. This share is more substantial in holdings of legal persons and it amounts to 67.2% of regularly and 45.2% of irregularly employed workers.

Tab. 11 - Share of workers in agriculture, by principal agricultural production

Principal agricultural production (NACE)	Natural persons		Legal persons	
	Workers employed on regular basis	Workers employed on non-regular basis	Workers employed on regular basis	Workers employed on non-regular basis
Total	100.0	100.0	100.0	100.0
11	17.8	22.6	8.8	17.6
111	5.0	17.7	3.4	13.0
0112, 01121, 01122, 01123	4.5	10.6	2.3	2.7
0113, 01131, 01132	12.4	21.6	2.0	7.9
12	7.9	2.2	6.6	6.0
121	8.6	2.8	3.2	1.5
123	1.3	0.4	2.5	1.0
124	0.9	2.8	2.7	4.2
13	29.6	16.6	67.2	45.2
Other	9.1	2.6	1.3	1.0

**Graph 8 – Average number of regularly employed workers per 1 holding of legal persons:
by the production orientation**

