

PREFACE



This elaboration includes basic results of the Agricultural Census conducted in May 21st - June 8th 2002 jointly with the National Population and Housing Census 2002. Agricultural Census covered all private farms exceeding 1ha of agricultural land, private farms from 0.1 to 1ha of agricultural land, public sector farms and other units undertaking agricultural activity were included.

This elaboration is a final result of the present stage aggregate data computations. Further work is aimed at achieving data in structural, correlation, spatial approach, with regard to typology matters and the classification of agricultural holdings. Wide classifications and groupings, which will allow thorough understanding of Polish agriculture within important structural approaches, as well as providing necessary information for the national, the European Union and other international organisations needs, shall be used during the elaboration of that work.

According to work progress next census publications will be issued successively. It is foreseen to publish, yet in 2003, 13 countrywide publications and 4 publications by each of the voivodships. Moreover in the Regional Data Base (RDB) the information for the particular levels of the Poland's territorial breakdown will be included.

The General Census Commissioner - The President of The Central Statistical Office wish to thank all, who took part in conducting the censuses and elaboration of their results.

Tadeusz Toczyński

The General Census Commissioner
The President of the Central Statistical
Office

Warsaw June 2003

REPORT ON THE AGRICULTURAL CENSUS 2002



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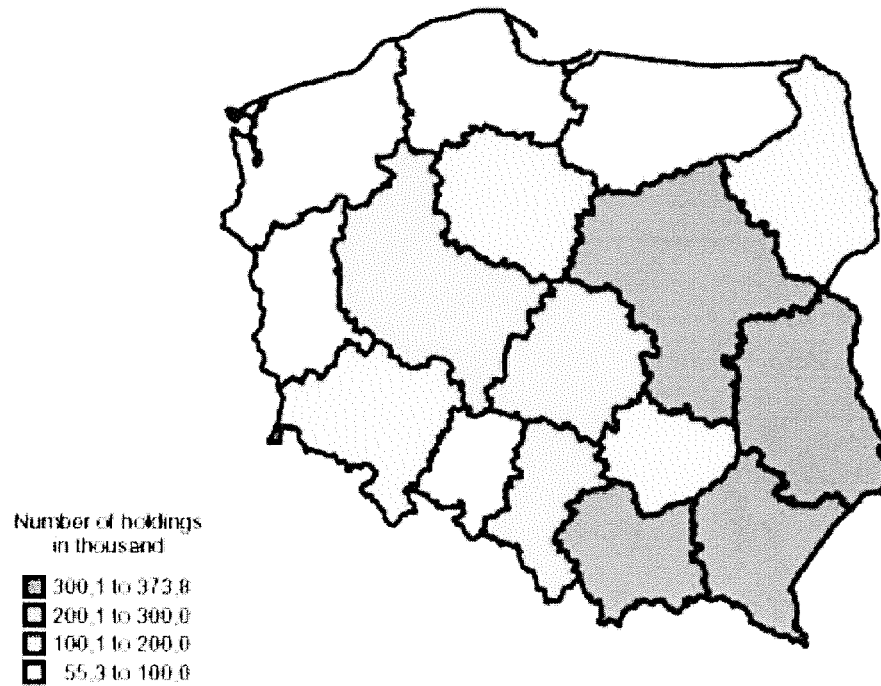
Number of agricultural holdings equipped with tractors, trucks and trailers by area groups of agricultural land in 1996 and 2002

Tractors, trucks and trailers by holders in 2002

Tractors, trucks and trailers and specified machines by voivodships in 2002

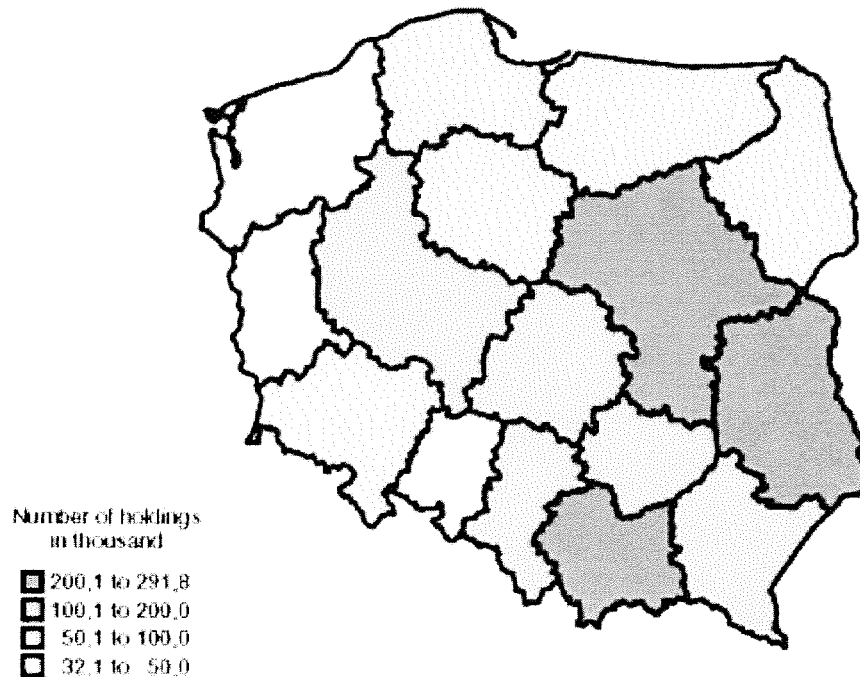
Number of agricultural holdings equipped with specified machines by area groups of agricultural land in 1996 and 2002

TOTAL NUMBER OF AGRICULTURAL HOLDINGS



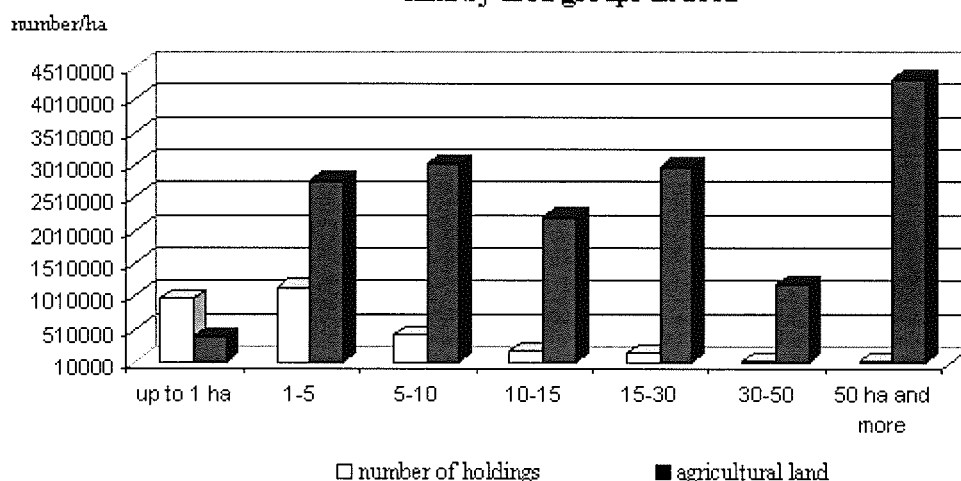
OF WHICH:

NUMBER OF AGRICULTURAL HOLDINGS EXCEEDING 1 HA OF AGRICULTURAL LAND



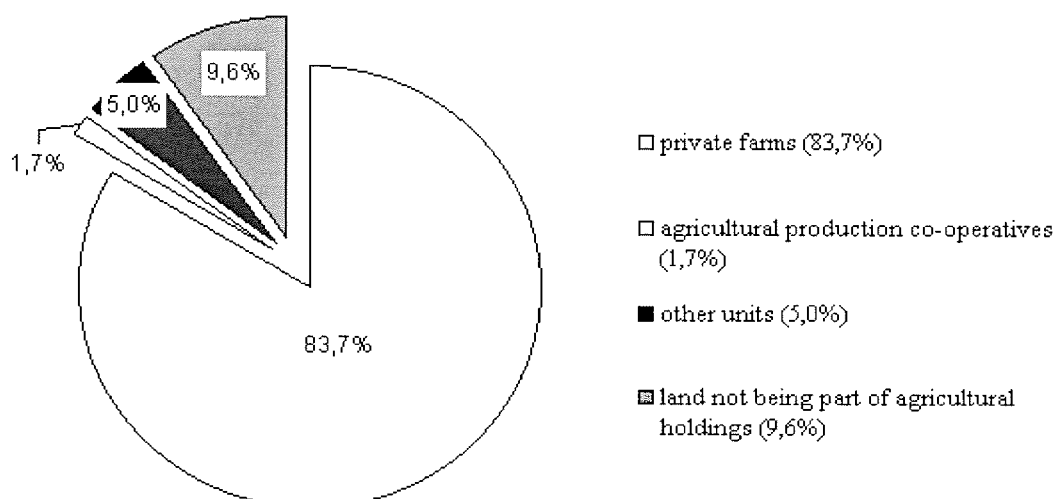
Farms with the agricultural land up to 5 ha were the biggest group, of the total number of farms (in 1996 - 70.2%, and in 2002 - 72.4%). However in 2002 in those farms the area of agricultural land constituted barely 18.7 % of total agricultural land area in agricultural holdings.

Drawing 2. Number of agricultural holdings and area of agricultural land by area groups in 2002



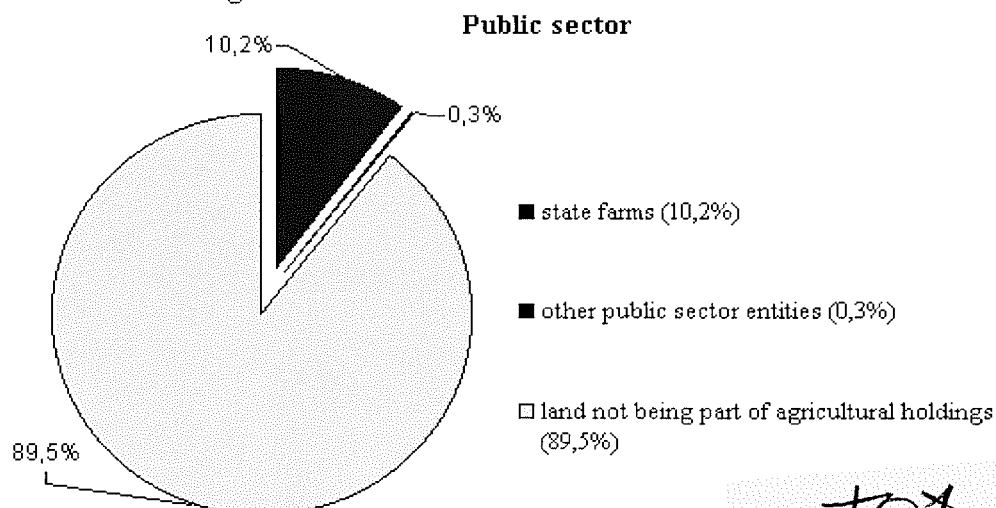
The results of the Agricultural Census showed considerable decrease of land area utilised in agricultural holdings, however, the increase of land area possessed by non-agricultural entities both in private and public sector. It means that, year by year, the share of land area for agricultural disposal was decreasing in favour of building recreation and non-agricultural activity areas.

**Drawing 3. Structure of total land utilisation in 2002
Private sector**



In 2002, the total area of agricultural holdings, comparing to 1996, decreased. In the structure of utilisation, share of private sector decreased by 3.4 points, and public - by 1.2 points, instead, area of land not being part of the agricultural holdings was bigger, and its share increased by 4.6 points. Area of agricultural land in agricultural holdings decreased that time by 982.5 thousand ha (by 5.5%).

Drawing 4. Structure of total land utilisation in 2002



The share of agricultural land area remaining in use by private sector, including total area of agricultural land in agricultural holdings in 2002, amounted respectively 55.5% and 5.5%.

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Table 1. Total land area by holders in 1996 and 2002

Specification	1996		2002	
	in thousand ha	total=100	in thousand ha	total=100
Total .	31268.5	100.0	31268.5	100.0
Agricultural holdings	20764.7	66.4	19324.8	61.8
private sector	19193.1	61.4	18143.7	58.0
of which private farms	17492.3	55.9	16792.4	53.7
of public sector	1571.6	5.0	1181.1	3.8
Other land, not being part of agricultural holdings of private and public sector in total	10503.8	33.6	11943.7	38.2

In particular voivodships, the share of agricultural land area of private sector farms in the total area of agricultural land of farms, constituted as follows:

- up to 95.0% - lubuskie, warmińsko-mazurskie, zachodniopomorskie, dolnośląskie, pomorskie, opolskie, podkarpackie and wielkopolskie,
- 95.1% - 98.0% - śląskie, lubelskie, kujawsko-pomorskie and podlaskie,
- more than 98.0% - małopolskie, mazowieckie, świętokrzyskie and łódzkie.

In particular voivodships, the share of agricultural land area of private farms in total area of agricultural land of farms, constituted as follows:

- up to 75.0% - zachodniopomorskie, lubuskie and opolskie,
- 75.1% - 90.0% - dolnośląskie, warmińsko-mazurskie, pomorskie, wielkopolskie and kujawsko-pomorskie,
- more than 90.0% - śląskie, podkarpackie, lubelskie, podlaskie, małopolskie, mazowieckie, świętokrzyskie and łódzkie.

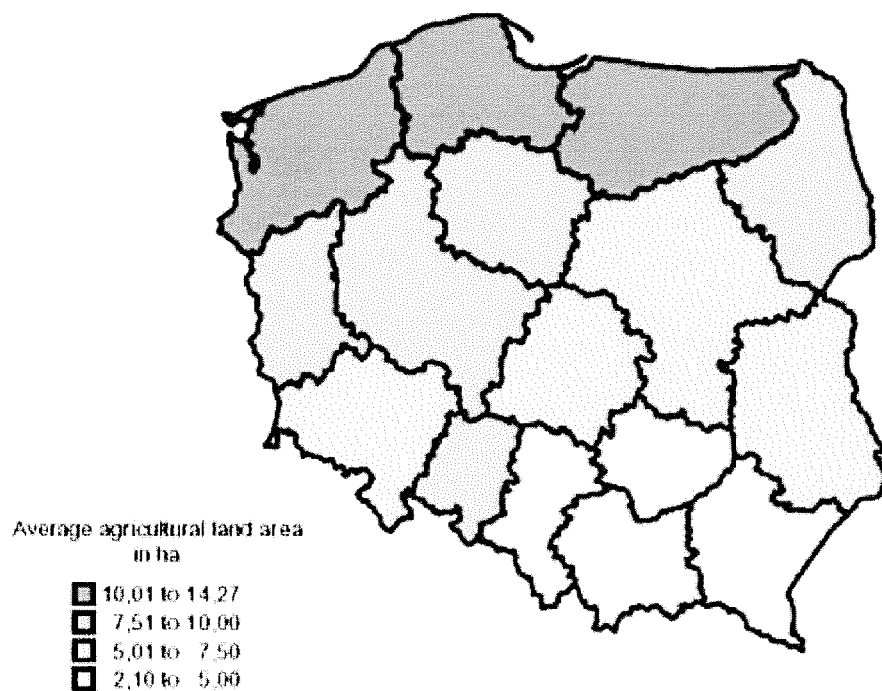
In particular voivodships, the share of agricultural land area of public sector farms in total area of agricultural land of farms, constituted as follows:

- up to 5.0% - łódzkie, świętokrzyskie, mazowieckie, małopolskie, podlaskie, kujawsko-pomorskie, lubelskie and śląskie,
- 5.1% - 10.0% - wielkopolskie, podkarpackie, opolskie, pomorskie and dolnośląskie,
- more than 10.0% - warmińsko-mazurskie, zachodniopomorskie and lubuskie.

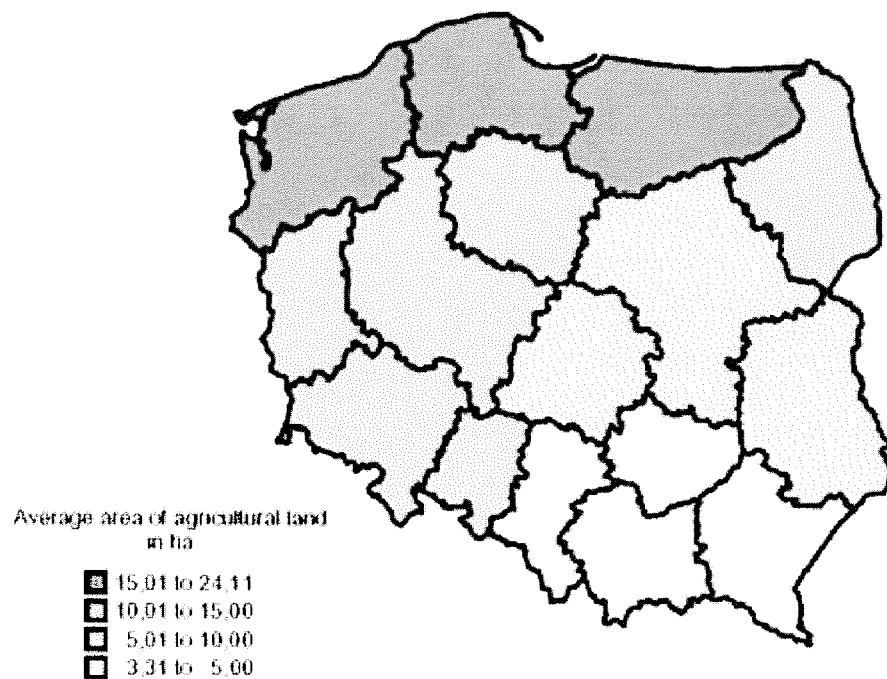
In our country, the average agricultural land area of 1 agricultural holding in 2002 was 5.76 ha and was bigger by 1.8% than in 1996, including area of 1 agricultural holding with agricultural land more than 1 ha - 8.44, i.e. more by 1.8%.

In territorial cross-section, the biggest average value of agricultural land in agricultural holding was noted in zachodniopomorskie (14.27 ha) and warmińsko-mazurskie voivodship (14.00 ha). The smallest agricultural holdings were localised in małopolskie and śląskie voivodships (respectively 2.10 and 2.15 ha of agricultural land).

AVERAGE AGRICULTURAL LAND AREA IN AGRICULTURAL HOLDINGS



AVERAGE AGRICULTURAL LAND AREA IN AGRICULTURAL HOLDINGS EXCEEDING 1 HA OF AGRICULTURAL LAND



POPULATION AND HOUSEHOLDS CONNECTED WITH AGRICULTURE

Population, connected to individual agriculture, includes persons who are members of households: with the holder of agricultural holding exceeding 1 ha of agricultural land, with the holder of agricultural holding with agricultural land from 0.1 ha to 1 ha inclusively, and livestock owner without agricultural land or with agricultural land less than 0.1 ha.

The Agricultural Census and the National Population and Housing Census conducted in May 2002 showed, that in the households with the holder of agricultural holding, 10 474.5 thousand people were living and that states 27.4% of the country's population. Among them, more than 80%, i.e. 8 504.9 thousand, were rural areas inhabitants, who constituted 58.2% of the whole rural population. Only just every fifth person of the whole population connected to agriculture was residing in city - their population constituted 8.3% of urban population. Within the total rural population almost sex equilibrium occurred - 50.4% were men, and women 49.6%. Percentage of men and women in the population of those living in the rural areas was similar, respectively it constituted: 50.6 % and 49.4%.

In comparison to the results of the agricultural census 1996, when number of population connected to agriculture amounted 11 559.2 thousand (29.9% of total Poland's population), decrease of number of population connected to agriculture is noted by 1 085.6 thousand people, i.e. almost by 10%. In rural areas, the decrease by almost 13%, however in urban areas the growth by 10 % of population in households with the holder of agricultural holding was noted.

Population in households with the holder of private farm exceeding 1 ha of agricultural land

In 2002, 7457.7 thousand people connected to the households of holders of agricultural holdings, were enumerated - by 787.1 thousand people less in comparison to 1996. Most of the persons in households with the holder of agricultural holding – 6 484.8 thousand (87%) were living in rural areas (in 1996 – 91%), constituting 44.4% of total population in rural areas amounting 14 619.7 (in 1996 such proportion was 50.9%).

In 2002 more than half of the population (54.7%), including population in rural areas (51.1%) was connected with agricultural holdings up to 5 ha (in 1996 such proportion was respectively 51.3% and 48.7%).

The structure of the population, connected with agricultural holdings, according to the economic age groups in 2002 differs in all groups from the results in 1996. Decrease of population at pre-working age (0-17 years old) is noted by 1.4 percentage point (in rural areas by 1.1 point included). However, the number of population at working age increased by 4.2 percentage point, including mobile age (18-44 years old) by 1.8 percentage point, non-mobile (45-59/64 years old) by 2.4 points. Instead, population of older people, i.e. at post-working age (women - 60 years old and more, and men 65 years old and more) by 2.8 points, decreased.

Table 2 . Population in households with the holder of agricultural holding by economic age groups and area of agricultural land in 2002

Specification	Grand total	At the age ^{af}				
		Pre-working age	Working age			Post-working age
	total		mobile	non-mobile		
	in thousand	in percentage				
GRAND TOTAL						
Total	7457.7	26.7	60.0	39.3	20.7	13.3
1 - 2 ha	1764.1	25.3	61.1	39.2	21.9	13.7
2 - 3	1005.1	25.3	60.4	39.1	21.2	14.3
3 - 5	1306.5	25.6	60.1	39.2	20.9	14.2
5 - 7	845.2	26.4	59.8	39.1	20.8	13.8
7 - 10	854.9	27.3	59.8	39.3	20.6	12.9
10 - 15	784.1	28.7	59.1	39.3	19.8	12.2
15 - 20	378.2	30.0	58.3	39.6	18.7	11.7
20 - 50	446.9	31.4	57.6	39.9	17.7	11.0
50 - 100	54.3	32.8	58.5	41.0	17.6	8.7
100 ha and more	18.5	30.6	63.0	40.9	22.2	6.4
of which rural areas						

Total	6484.8	27.1	59.1	39.1	20.0	13.8
1 - 2 ha	1337.5	26.0	59.7	39.1	20.5	14.3
2 - 3	829.1	25.7	59.2	38.9	20.3	15.1
3 - 5	1148.6	25.8	59.3	38.9	20.3	14.9
5 - 7	773.1	26.5	59.2	38.9	20.4	14.3
7 - 10	799.4	27.3	59.4	39.1	20.3	13.3
10 - 15	744.3	28.7	58.8	39.2	19.6	12.4
15 - 20	362.3	30.1	58.0	39.5	18.5	11.9
20 - 50	425.8	31.5	57.3	39.9	17.4	11.3
50 - 100	49.5	33.2	57.8	40.9	16.9	9.0
100 ha and more	15.0	31.2	61.9	41.1	20.8	6.9

a/ People at unknown age included only to "grand total".

Taking into consideration decrease of total young population at the age of 0-17, growth of share of that population group in households possessing larger area of agricultural land is observed. The highest share of young people is noted among population using great-size households (more than 50 ha), where nearly almost every third person is at the pre-working age (with the simultaneous very low share of older people).

Results of censuses show, that for total number 7457.7 thousand people who are members of household with an holder of agricultural holding, 49.1% constituted female and 50.9% male. In 2002 for 100 male connected with an holder of agricultural holding, account for 99 female in cities, however 96 in rural areas. To comparison in 1996 for 100 male account for 101 female in cities, 97 in rural areas.

Level of education

Level of education in 2002 was fixed for people at the age of 13 and more. More than 4% of the population, connected with the holder of agricultural holding, had university education, nearly half of the population had secondary education (with secondary vocational included), primary education declared almost 40%, and not finished primary and without primary education - 5%. The structure of population taking part in households of agricultural holdings by the level of education, changed considerably in comparison to 1996.

Table 3. Population at the age of 13 and more in households with the holder of agricultural holding by sex and level of education in 2002

Specification	Grand total			including rural areas		
	total	male	female	total	male	female
in thousand						
Grand total	6158.4	3133.1	3025.3	5324.9	2716.5	2608.4
in percentage						
High	4.3	3.6	5.1	3.0	2.3	3.7
Post-secondary	2.0	0.9	3.1	1.6	0.8	2.6
Secondary total	49.0	53.4	44.5	48.2	52.6	43.6
vocational	16.6	16.2	17.0	15.4	14.7	16.1
general	4.7	2.6	6.9	3.9	2.0	5.8
basic vocational	27.8	34.7	20.6	28.9	35.9	21.6
Primary completed.	39.3	37.7	40.9	41.5	39.8	43.2
Primary uncompleted and with no school education	5.0	4.0	6.1	5.4	4.2	6.6
Unknown	0.3	0.3	0.3	0.3	0.3	0.3

The share of people with university education increased by almost 3 percentage points, and with post-secondary, post-secondary vocational and general secondary jointly by 7 percentage points.

The decrease of share of people with primary education and people, who haven't finished primary school, needs to be noted (by 6.8 percentage points).

Sources of maintenance

In the National Population and Housing Census 2002 the main and additional sources of maintenance for particular people and separately for households, were established. Information on the income sources, where means for financing consumer and other living needs of people were coming from, concerned the whole year (12 months) previous to census and was established independently from state of people's economic activity.

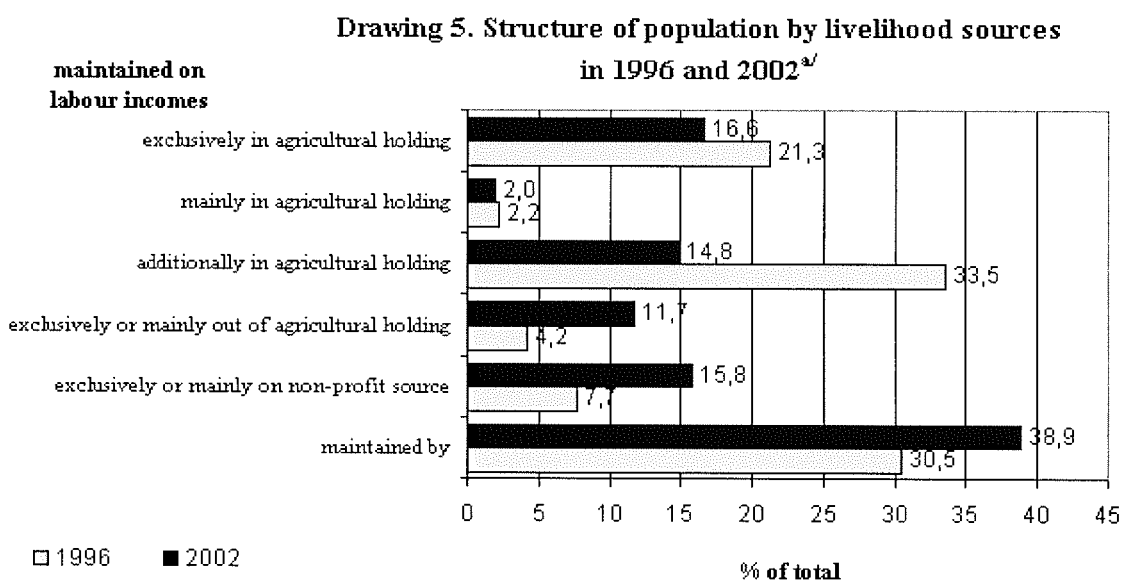
The main source of maintenance is a source bringing the biggest income. If a person had, during the year previous to census, only one income source - it was his/her main, and also exclusive source of maintenance.

Among the whole population, connected to private farms, 60.8% had their own sources of maintenance, however nearly 40% were maintained.

Population, maintaining exclusively, mainly or additionally on the basis of farming agricultural holding and persons maintained by incomes from that job, constituted less than 48% of the total population connected to agricultural holdings.

Only 1385.1 thousand (18.6%) i.e. less than every fifth person maintained exclusively or mainly on the basis of her/his agricultural holding incomes, while for 14.8% of the population, that job was additional source of maintenance during whole, previous to censuses, year. For people covering maintenance costs additionally by work in their agricultural holding, the main source of incomes for 42.3% was a hired work on own account - 6.1%, whereas for more than half (51.6%) there were non-profit sources of incomes, among them retirement pension 16.5% and disability pension - 16.2% were dominating. Children at the age of 0-14, maintained mainly by agricultural holding incomes, constituted 61.8% of the total population of dependant people.

More than half of the population 3 860.3 thousand (i.e. 51.8%) connected to agricultural holdings covered maintenance costs (was maintained) by other sources than agricultural holding work incomes. Among that population 2 051.9 thousand (53.1%) had their own sources of maintenance, where non-profit sources were dominating, other people were maintained (including 908.6 thousand people who were at the age of 0-14).



a/ For 2002 unknown sources of maintenance wasn't taken into consideration, for 1996 without people absent for more than 12 months.

During the last 6 years from the full agricultural census, the considerable changes of sources of maintenance of the population related to the holder of agricultural holding were noted. Among people, who have their own sources of maintenance, barely by 30 % decreased the number of people covering maintenance costs mainly or exclusively by their own agricultural holding incomes. The decrease of number of people, treating labour income as an additional maintenance source, by almost 60% is noted, however the increase of share of people with non-profit maintenance sources or dependants is observed.

Households with the holder of private farm exceeding 1 ha of agricultural land

The criterion, separating those households from the households' aggregate, was the fact that the holder of an agricultural holding existed in those households, independently from the fact whether in the holding agricultural business (or other) activity was conducted or not, or whether the labour income from holding was the livelihood source of the holding.

A household is understood as a group of related (akin) persons commonly living and covering maintenance costs. Related people living together, but covering maintenance costs separately establish different households. Households may be established by not related people, if they are living together and cover maintenance costs jointly. Single people, self-maintained, establish one-person households.

In little more than every seventh household in Poland (by total amount 13337.0 thousand), there is a person using more than 1 ha of agricultural land. The strong majority (85.1%) of households with the holder of an agricultural holding was found in the rural areas. Among the whole of households in the rural areas – holdings related to agriculture constituted little more than half (51.1%), and without private holdings up to 1 ha of agricultural land – barely 37.0%.

Among the whole of households, connected with the holder of an agricultural holding, 10.0% are one-person households, 15.3% - two-people, and 18.0% - three-people households. Four-people households, which share was 21.4%, dominated.

In comparison to 1996 the number and the share of one-person households decreased (by 1.3 percentage point), slightly decreased two-people households and as many as by 5 points big households – 6 and more people. However, the share of three, four and five people increased – in case of 4 people by 4 percentage points.

Average number of people in households of agricultural holding users decreased. In 1996, the average number was 4.05 people (in rural areas 4.09), and in 2002, respectively 3.92 and 4.0. Considerable differences in the average number of people in household appeared, regarding to the area of utilised agricultural holding and place of residence. In holdings up to 5 ha average number of people fluctuated between 3.5 (3.6 in rural areas) and 3.8 (3.9 in rural areas). However, in households, where big agricultural holdings were cultivated, the average number of people approached to 5.

Holders of private farms exceeding 1 ha of agricultural land

In 2002, 1896.1 thousand users of private farms exceeding 1ha of agricultural land were separated. Regarding to the methodological provisions concerning population, the number of households with the holder of an agricultural holding was bigger than the number of holders. Holders, absent more than 2 months at the moment of census in their permanent place of residence, living in other city in the country because of initiated job, education, housing and family conditions, were counted as citizens of their temporary stay place, not as citizens belonging to their permanent place of residence. If in a household of the long period absent person, there was at least one person left, but she/he didn't declared herself/himself as a "substitute" holder, that household was counted as a household connected with agriculture. For such households, the full information concerning demographic and social-economic features of other members of household was obtained, as well as household and agricultural holding features. If the holder was permanently absent and hadn't left any person in his household – his agricultural holding was enumerated to the total number of agricultural holdings.

Among the holders of agricultural holdings, men were dominating constituting 71.3% (including 72.5% in rural areas), and women – 28.7% (27.5% in rural areas).

Table 4. Structure of holders of private farms exceeding 1 ha of agricultural land by sex and age groups in 2002

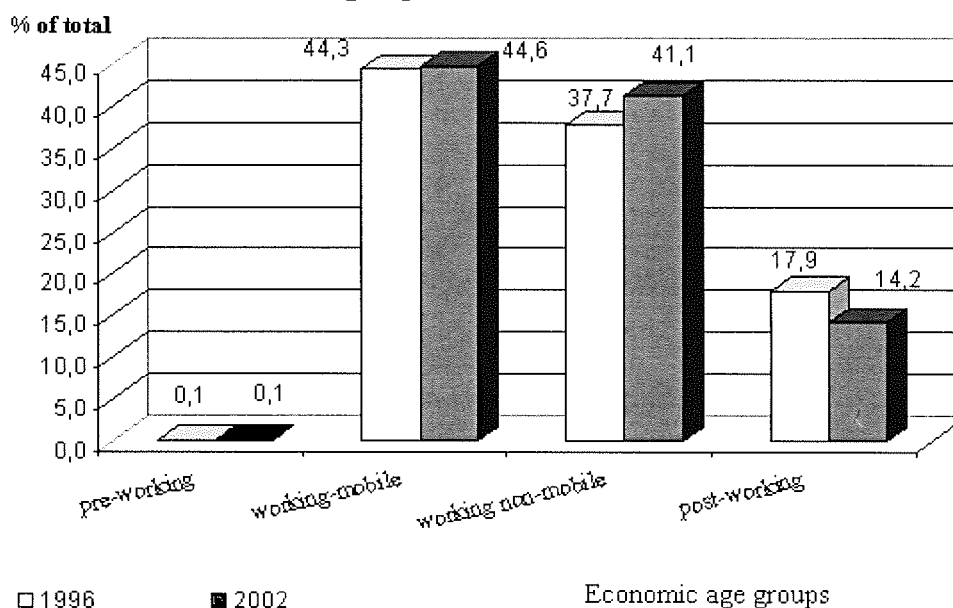
Specification	Grand total	At the age						
		15-19	20-29	30-39	40-49	50-59	60 - 64	65 and more
		in percentage						
GRAND TOTAL								
Grand total	100.0	0.3	8.4	20.6	31.5	21.1	5.8	12.3
Male.....	100.0	0.3	9.1	22.2	32.9	21.1	5.3	9.1
Female	100.0	0.3	6.8	16.8	27.8	21.2	6.9	20.2
of which rural areas								

Total	100.0	0.3	8.8	21.2	31.1	20.7	5.7	12.2
Male	100.0	0.3	9.5	22.8	32.7	20.6	5.2	8.9
Female	100.0	0.3	7.1	17.0	26.8	20.9	7.0	21.0

Young users, up to 29 years old – constituted small percentage, amounting barely 8.7%, similarly to 1996. Almost 1/3 of holders were people at age of 30-59.

Comparing to 1996, the share of people at the age of 30-59 increased by 5.7 percentage points. In 2002 older people, at the age of 60 and older, constituted 18.1% holders of agricultural holdings – in 1996 23.7%. The very high percentage of women should be taken into account in group of holders at the age of 60 and more amounting 43.2% (in 1996 - 40.7%).

Drawing 6. Holders of agricultural holdings by economic age groups in 1996 and 2002



Level of education of holders of private farms exceeding 1 ha of agricultural land

The structure of holders of agricultural holdings by the education level may be found interesting. In comparison to the results of agricultural census 1996, distinct improvement of education structure is observed.

Among holders, more people with university education appeared, they constituted in 2002 5.1%, however in 1996 only 2.6%. Men were dominating within that group with the percentage of 66.3%.

Holders with secondary education (basic vocational was also included to that level in 2002) constituted among the whole population of users 58.2%. In comparison to 1996, growth of percentage of people with secondary vocational education is noted by 4.9 percentage point and 5.7 percentage point – holders with basic vocational education.

It is seen, that in 2002 comparing to 1996, considerable decrease of number of holders with primary education was close to 9 percentage points. Presently, they constitute 32.2% of the whole of holders.

Table 5. Holders of private farms exceeding 1 ha of agricultural land by level of education in 1996 and 2002

Specification	Grand total	Holders - level of education						
		higher	post-secondary	vocational	general - secondary	basic-vocational	Primary completed	primary uncompleted and with no school education

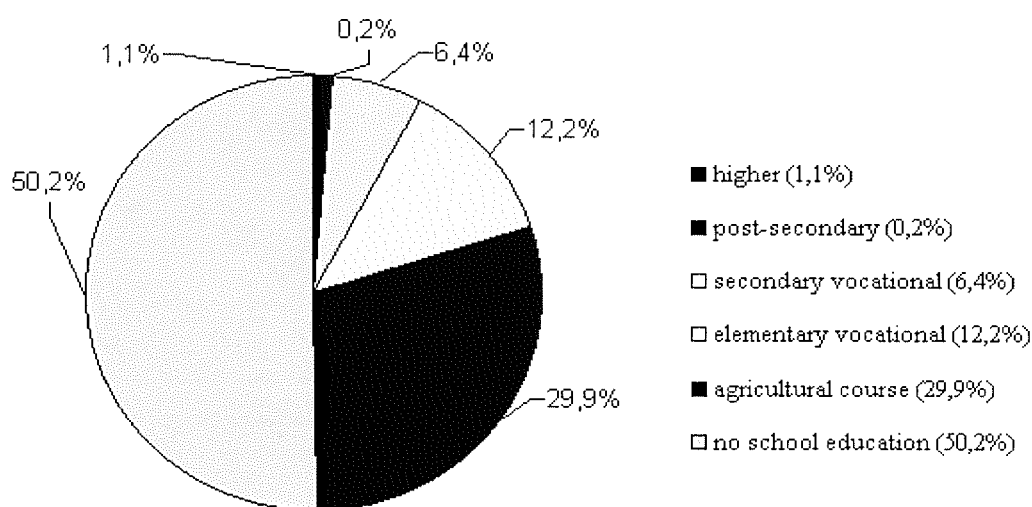
	in percentage							
GRAND TOTAL – 2002								
Grand total	100.0	5.1	1.8	18.8	3.2	36.2	32.2	2.6
Male.....	100.0	4.7	1.1	18.6	1.9	41.3	30.5	1.6
Female	100.0	5.9	3.7	19.1	6.3	23.3	36.5	5.1
of which in rural areas								
Total	100.0	3.1	1.4	16.9	2.5	38.0	35.1	2.9
Male	100.0	2.8	0.8	16.7	1.5	43.0	33.2	1.8
Female	100.0	3.7	2.8	17.3	5.1	24.9	40.2	5.8
GRAND TOTAL – 1996								
Grand total	100.0	2.6	1.0	13.9	2.3	30.5	43.9	5.8
Male.....	100.0	2.6	0.6	13.8	1.4	35.1	42.5	4.1
Female.....	100.0	2.8	2.0	14.2	4.8	18.4	47.5	10.3
of which in rural areas								
Total	100.0	1.9	0.8	12.6	2.0	31.0	45.6	6.1
Male.....	100.0	1.8	0.5	12.5	1.2	35.5	44.3	4.3
Female	100.0	2.1	1.8	13.1	4.1	18.8	49.3	10.8

Percentage of holders with primary unfinished education (and with no school education) decreased from 5.8% in 1996 to 2.6% in 2002. It should be taken into account, that in spite of holders education level improvement, still the women are worse educated.

In 2002 for a person managing agricultural holding, i.e. holder, or in the case when he wasn't managing agricultural production personally – other person (from holder's household or out of it), level of agricultural education was enumerated. Agricultural education wasn't enumerated for people who didn't perform agricultural activity. Among people managing agricultural holding – 98.7% were at the same time holders of that holdings.

Agricultural education has almost every fifth person managing the holding (19.9%). Comparing to 1996, considerable growth of people who had agricultural education was noted (by 7.6 percentage point), share of people who completed only agricultural course was 29.9% (in 1996 – 29.1%). People with no agricultural education background still constituted high percentage (50.2%).

Drawing 7. Structure of agricultural education of persons managing individual farm in 2002



Population in households with holder of private farm up to 1 ha of agricultural land inclusively

Population in households, with holder of private farm up to 1 ha of agricultural land inclusively, constituted in 2002 28.8% of total population connected to agriculture. That population, in majority, lived in rural areas (66%), and every third person in urban areas. Among urban population, connected to agriculture, more than 50% were people connected

to private farms up to 1 ha of agricultural land inclusively (of which 2/3 with the smallest holdings – up to 50 are of agricultural land).

The share of people at working age was similar, both in private farms up to 1 ha of agricultural land inclusively and in agricultural holdings exceeding 1 ha of agricultural land. However, the higher percentage (by 2 percentage points) of people at mobile working age and lower share of people at non-mobile age is observed. The share of people at post-working age (by 3.5 percentage points) was much higher, in comparison to population connected to holdings exceeding 1 ha of agricultural land.

Population related to individual farms up to 1 ha of agricultural land inclusively, had better structure of education level, first of all, because of the considerable share of population living in urban areas. People with post-primary education level constituted 61.9% of population at the age of 13 and older. In confrontation, the percentage of population related to agricultural holdings with post-primary education constituted 55.4%. In 1996 those structures were presented as follows; for holdings up to 1 ha of agricultural land inclusively - 59.4%, whereas for private farms exceeding 1 ha of agricultural land - 48.2%. It shows strong improvement of education level of population related to agriculture.

Labour income in agricultural holding up to 1 h of agricultural land inclusively, was, in a small part, the maintenance base. Exclusively or mainly on labour incomes from those holdings almost 2% people were maintained, and additionally – 12.4%.

Population maintained by other sources than work in private farm up to 1 ha of agricultural land was dominating, constituting 84.3%. Within that group, the highest percentage constituted people maintained on other non-profit income sources 23.8%, and than people maintained on incomes from hired work 19.7%. People, provided for by other sources than agricultural holding incomes constituted 37.9% of total population related to private farms up to 1 ha of agricultural land inclusively. Households of holders of private farms up to 1 ha of agricultural land were smaller in comparison to households of private farms exceeding 1 ha of agricultural land and were composed of average 3.2 persons (3.3 in rural areas).

Users of private farms up to 1 ha of agricultural land inclusively

In 2002, every third holder of private farm up to 1 ha of agricultural land inclusively was rural areas inhabitant. In comparison to holders of private farms exceeding 1 ha of agricultural land, much higher share of women was noted – 43.1% of total holders of private farms up to 1 ha inclusively. There was also higher percentage of older people at the age of 65 and more and it amounted 25.8% (of which more than half constituted women).

METHODOLOGICAL BACKGROUND

Introduction

The Agricultural Census and the National Population and Housing Census were conducted in the whole country during May 21st - June 8th 2002 (as of May 20th 2002 0 a.m.) according to below mentioned law issued by The Parliament of the Republic of Poland:

- law on the National Population and Housing Census in 2001 dated on December 2nd 1999 (Journal of Laws No.1, item 1) with later amendment (Journal of Laws No. 93, item 1026),
- law on the Agricultural Census in 2002 dated on September 9th 2000 (Journal of Laws No. 99, item 1072),
- law on official statistics dated on June 29th 1995 (Journal of Laws No. 88, item 439 with later amendments).

In the above mentioned law the due date and the subject scope of censuses, rules of organisation and realisation of census work, binding citizens to provide information and the way of information collection were established.

The aim of the Agricultural Census in 2002 was, among others:

- to ensure the basic information database on agricultural holdings and households connected with them which is necessary for the realisation of national, regional and local agricultural and social policy in the rural areas,
- provide indispensable information for finalising of integration processes with The European Union (UE), as well as to ensure the information bases in the first years of Polish membership to the EU, according to the EU requirements and fulfilment of the Poland's obligations in the scope of providing information for the international organisations (FAO, OECD, EUROSTAT etc.) needs,
- establish and actualise the statistical multipurpose sampling frames for the sample surveys.

The subject matter scope of the Agricultural Census 2002 was very comprehensive and concerned nearly 3 million agricultural holdings.

Besides the report, the results of the census will be presented in the 17 national publications elaborated successively under the following titles:

- "Land use, sown area and livestock population",
- "Livestock",
- "Lands use and their quality",
- "Agricultural crops",
- "Horticultural crops",
- "Buildings and technical infrastructure in agricultural holdings",
- "Agricultural tractors, machines and other means of transport in agricultural holdings",
- "Non-agricultural activity of agricultural holdings",
- "Systematic and characteristics of agricultural holdings",
- "Selected elements of economic situation of agricultural holdings",
- "Agrarian changes",
- "Methodology of the Agricultural Census 2002 ",
- "Agriculture in mountain and less favoured areas",
- "Aims of production in agricultural holdings",
- "Characteristics of agricultural holdings performing farm accountancy",
- "Labour expenditure in agricultural holdings",

and in 5 publications at the voivodship level:

- "Land use, sown area and livestock population",
- "Buildings and technical infrastructure in agricultural holdings",
- "Selected elements of economic situation of agricultural holdings",
- "Systematic and characteristics of agricultural holdings",
- "Aims of production in agricultural holdings".

It is also planned to elaborate the publication at the commune level in the form of compilation of tables, which include

information on agricultural holdings within commune area, production possibilities of agricultural holdings, scale of agricultural and horticultural crops, livestock population, livelihood sources of agricultural holdings, non-agricultural activities etc., and on commune position in voivodship by basic agricultural parameters.

Moreover, in the Regional Database (RDB), held by The Regional Statistical Office in Jelenia Góra, information from the census for particular levels of the country's territorial division, which means voivodship, sub-region, powiat and gmina (commune) will be included.

The scope and subject of the Agricultural Census

The Agricultural Census covered:

- private farms exceeding 1 ha of agricultural land,
- private farms with agricultural land from 0.1 ha to 1 ha inclusive,
- natural persons owning livestock, with no agricultural land or with agricultural land less than 0.1 ha,
- other agricultural holdings farmed by legal persons or units without legal personality.

The list of private farms was prepared on the framework of the statistical tax register (SPGC system), which was updated during pre-census circuits by census enumerators and supplemented by the list of livestock owners with no agricultural land or with agricultural land less than 0.1 ha. Index of agricultural holdings, farmed by legal persons or units without legal personality, was established on the basis of Statistical Units Database (BSJ).

For the agricultural holdings, which holders refused to participate in the Agricultural Census 2002 or holders were out of contact, the data were imputed.

The subject of the Agricultural Census 2002 was implemented into census questionnaire divided by following sections:

- Surface area of the holding,
- Ownership structure of agricultural land on the holding,
- Structure of incomes,
- Economic activity of the holding,
- Family labour force on the private farm,
- Sown area,
- Other land,
- Livestock,
- Disposal of agricultural production,
- Infrastructure of farms,
- Buildings and structures,
- Storage on the holding,
- Fertilisers and pesticides,
- Agricultural machines and equipment,
- Selected expenditures in the holding.

Within the census framework in private farms exceeding 1 ha of agricultural land the following data was collected:

- 1) data about people being holders of agricultural holdings:
 - a. name and surname of the farm holder,
 - b. education level of the farm holder,
 - c. labour contribution to agricultural holding during 12 months previous to survey - number of working hours in a farm,
- 2) number of permanent employees and casual workers employed in agricultural holding,
- 3) land use, in particular:
 - a. total land area including agricultural land (arable land, orchards, meadows, permanent pastures), forests and forest land, other land and unused land,
 - b. sown area of main crops,

- 4) livestock by species and productive-utilisation groups and number of beehives,
- 5) disposal of agricultural production,
- 6) buildings, infrastructure and technical equipment of agricultural holdings, including:
 - a. types of buildings and constructions and their area,
 - b. number of agricultural tractors and other means of transport and agricultural equipment,
 - c. water supply sources, ways of sewage and waste disposal,
 - d. electricity supply and telephones,
 - e. types of drainage devices,
- 7) using of fertilisers and pesticides in a holding during 12 months period previous to the survey,
- 8) indebtedness of agricultural holdings,
- 9) business activity of agricultural holdings (agricultural and non-agricultural) performed by holder or adult person living together with the holder,
- 10) more important expenditures spent during 12 months period previous to the survey including expenditures for:
 - a. land purchase,
 - b. building or modernisation of the buildings,
 - c. increasing of the basic herd,
 - d. purchase of agricultural tractors and other means of transport and agricultural machines.

Information on age, sex, level of basic education, main and additional livelihood sources of the holder and other members of his household and also people working exclusively or mainly in agricultural holdings were obtained from the National Population and Housing Census 2002, which was conducted together with the Agricultural Census 2002. For natural persons farming private farm with agricultural land from 0.1 ha to 1 ha inclusive, and for livestock owners above mentioned information was collected, with the exclusion of those mentioned in points 8 and 10, and within the scope of points 3b, 6b and 7, where the data was collected in the limited subject scope.

Within the census framework, information mentioned in points 2-10 was collected from legal persons and units without legal personality.

According to the law on National Population and Housing Census 2002 from December 2nd 1999 (Journal of Laws No.1, item 1 and No. 93, item 1026) and Regulation of The Council of Ministers of May 22nd 2002 on sampled divisions covered by control census (Journal of Laws No. 66, item 597), after termination of the Agricultural Census and National Population and Housing Census control census in sampled 903 divisions was conducted, and it stood for 0.5 % of the grand total number of census divisions.

More important definitions, census notions and rules of enumeration

An **agricultural holding** is understood as an agricultural area, including forest land, buildings or their parts, equipment and stock, if they constitute or may constitute an organised economic unit as well as rights and obligations related to running a holding.

A **private farm** is understood as an agricultural holding from 0.1 ha of agricultural land, being exclusive property or used by natural person or group of persons.

An **owner of livestock** is understood as a person having no agricultural land or with agricultural land less than 0.1 ha who has at least: 1 head of cattle or (and) 5 heads of pigs or 1 sow or (and) 3 heads of sheep or goats or (and) 1 horse or (and) 30 heads of poultry or (and) 5 females of fur animals (rabbits included) or (and) 1 beehive.

A **holder of an agricultural holding** is understood as a natural person or group of persons, who actually use land, irrespectively if they own, lease it, or use land under different title and irrespectively of whether the land is located in one or many communes.

A **household** of agricultural farm holder (owner of livestock) is understood as a group of persons living and cover the livelihood costs jointly, if among them there is a person farming a private farm (owner of livestock).

To the population **of self-employed in agriculture** the following people were included, working exclusively or mainly in:

- private farms exceeding 1 ha of agricultural, with the exclusion of agricultural holdings producing exclusively for self consumption,
- the private farms with the agricultural land up to 1 ha inclusive, with exclusion of agricultural holdings producing exclusively or mainly for self consumption,

- as the owners of livestock, with exclusion of agricultural holdings producing exclusively or mainly for self consumption.

To the **total land area** of agricultural holding all lands without exception being part of a holding were included, which means: all farmed land (agricultural land, orchards, meadows and pastures), all connected with them used non-agricultural land, as forests, yards, land under buildings or designated for construction, ornamental gardens, land under water, roads, moorland, quarries, gravel-pits etc. and uncultivated areas, with no respect to a legal right (ownership, leased on the basis of agreement or without agreement, used on the basis of other right).

Private farms were enumerated in the living place of a holder, and there the whole area was enumerated, independently of land locations.

Main groupings and scope of published data

Data on livestock were divided into two basic forms of ownership i.e. into public and private sector.

In **private sector** the basic forms of ownership are: private national properties (private farms, co-operative farms and private companies), foreign properties and mixed properties.

To **public sector** the following entities were included: state-owned farms (of The State Treasury and national legal persons), self-government owned farms (of communes) and mix-owned farms (companies with dominant state ownership).

All information on livestock population, concerning legal persons and units without legal personality within the framework of private and public sector, consider only animals owned by those entities (i.e. without animals held on plots owned by state-owned farms employees and members of co-operatives).

Within the scope of private sector, the data was elaborated for farms:

- national private ownership, including:

- private farms,
- co-operatives of agricultural production, which covers agricultural co-operatives, co-operatives of agricultural collectives and other co-operative farms with dominant agricultural activity,

- foreign ownership,

- mixed ownership.

Private farms cover:

- farms with the agricultural land exceeding 1 ha of agricultural land,

- farms with the agricultural land from 0.1 ha to 1 ha inclusive,

- natural persons owning livestock, with no agricultural land or with agricultural land less than 0.1 ha.

Within the framework of public sector, the data concerning farms is presented:

- for state-ownership, Treasury farms included,

- for self-government ownership,

- mixed ownership.

Numerical information, determined by interests, is presented with the one digit after point and, taking into consideration electronic technique of rounding, they may not sum up at 100%. Those numbers are correct in essence.

The segregation of agricultural holdings for: owning livestock in general and by number of species and without animals, was performed on the basis of information on maintaining the population of **at least one out of four basic species of livestock, which means: cattle, pig, sheep and horse.**

In order to enumerate animal population by physical units into big converted units (concerns 4 basic species of livestock - cattle, pig, sheep and horse) – the following coefficients were used:

cattle - 0.8,

pig - 0.15,

sheep - 0.08,

horse - 1.0.

Except of above summary groupings - macroeconomic operations by the groups of users – the data from Agricultural Census 2002 according to subject was elaborated by following classification:

- area groups of total land, determining following groups: up to 1 ha (0.00-0.10, 0.10-0.20, 0.20-0.50, 0.50-1.00), 1-2, 2-3, 3-4, 4-5, 5-7, 7-10, 10-15, 15-20, 20-30, 30-50, 50-100, 100-200, 200-300, 300-500, 500-1000, 1000 ha and more;
- area groups of agricultural land, determining following groups: up to 1 ha (0.00, 0.01-0.10, 0.10-0.20, 0.20-0.50, 0.50-1.00), 1-2, 2-3, 3-5, 5-7, 7-10, 10-15, 15-20, 20-30, 30-50, 50-100, 100-200, 200-300, 300-500, 500-1000, 1000 ha and more;
- area groups of agricultural land by types of agricultural land, determining following groups: up to 1 ha, 1-2, 2-3, 3-5, 5-7, 7-10, 10-15, 15-20, 20-30, 30-50, 50 ha and more;
- area groups under buildings: up to 0.1 ha, 0.1-0.2, 0.2-0.5, 0.5-1, 1-2, 2 ha and more;
- area groups under crops by types of crops determining following groups: less than 1 ha, 1-2, 2-3, 3-5, 5-7, 7-10, 10-15, 15-20, 20-30, 30-50, 50 ha and more;
- land quality index: up to 0.4, 0.4-0.7, 0.7-1, 1 and more;
- surface area of vegetables under cover in ha: up to 0.05, 0.05-0.1, 0.1-0.2, 0.2-0.3, 0.3-0.5, 0.5-0.7, 0.7-1.0, 1.0 and more;
- area under edible mushrooms in m²: up to 100, 100-200, 200-300, 300-500, more than 500;
- draft force equipment: without live and mechanical draft force, with live draft force, with live and mechanical draft force, exclusively with tractors;
- capacity of engine in tractor in KW: up to 15; 15-25; 25-40; 40-60; 60-100; 100 and more;
- aim of production, and value of sold production: farms without production, farms producing for self consumption, producing mainly for self consumption, producing mainly for market, in which value of sold production was: less than 3 thousand zł, 3-5, 5-15, 15-25, 25-50, 50-100, 100 thousand zł and more;
- scale of breeding of particular livestock species;
- number of people living in the household jointly with the holder of agricultural holding by livelihood sources,
- features of holders of agricultural holding and members of their families working in farm by age and sex, men - younger than 25 years old, 25- 34, 35-44, 45-64, 65 and older, and women younger than 25 years old, 25-34, 35-44, 45-64, 65 and older;
- working time in agricultural holding according to full-time job norm (annual working unit): 0. 0 -1/4, 1/4-1/2, 1/2-3/4, 1 regular job (full-time job);
- level of agricultural education of a holder;
- other groupings of farms by features included in census, not mentioned above.

In successive publications farms will be presented, according to above mentioned classifications and relations between groups of agricultural holdings features.

LABOUR FORCE

According to the National Population and Housing Census 2002 with connection to the Agricultural Census, number of working exclusively or mainly in agriculture amounted 2192.9 thousand people, in which 2016.0 thousand in private farms. For the total number of persons employed in private farms 1967.0 thousand members of households worked in their own agricultural holding, and 49.0 thousand were permanently employed in those holdings. People, working exclusively or mainly in their own agricultural holding (1967.0 thousand), constituted almost 90% of total number of employed in agriculture, and in connection with above the further part of this chapter concerns the features of that population.

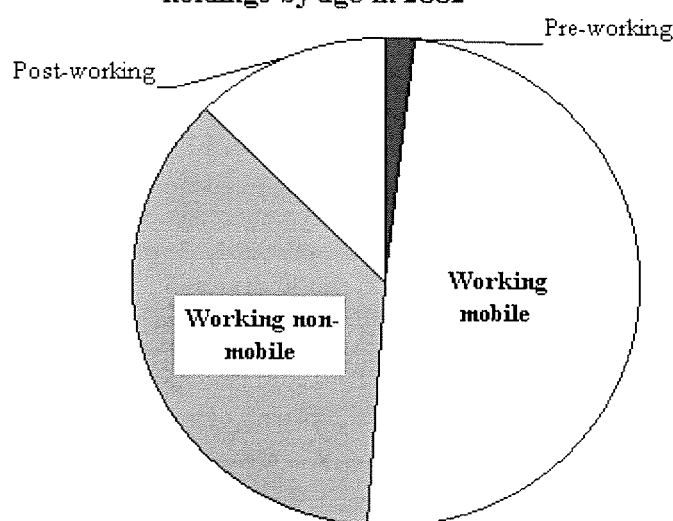
Strong majority of described population – 96% - constituted people, for whom work in their own agricultural holding was an exclusive job. The percentage of women working exclusively in agricultural holding was a little bit higher - 98.3% than men – 95.1%. Among working people the share of men was higher; they constituted 54.8% of employees.

Table 6. Persons working in their own agricultural holding in 2002

Specification	Total	of which rural areas	Working persons			
			exclusively	of which rural areas	mainly	of which rural areas
			in thousand			
Total	1967.0	1868.0	1899.3	1804.9	67.7	63.1
Male	1076.5	1019.5	1024.0	970.5	52.5	49.0
Female	890.5	848.5	875.3	834.4	15.2	14.1

In comparison to the results of censuses 2002 and 1996, concerning populations working exclusively or mainly in their own agricultural holdings differentiated on the basis of similar methodological frameworks, it results that the considerable decrease of that population occurred. It results mainly from lower – than in 1996 – number of people, who declared work in their agricultural holding. Partly, that decrease results from change of definition of self-employed person in his private farm. To the people self-employed in private farms the following ones are not included: persons working in private farms producing exclusively for self consumption, and working in private farms up to 1 ha of agricultural land inclusively producing mainly for self consumption.

Drawing 8. Structure of labour force working exclusively or mainly in their own agricultural holdings by age in 2002



The age structure of people working exclusively or mainly in the private farms was still less favourable, in comparison to those, working in non-agricultural sector of national economy. People at the working age constituted 85.4% of working in private farms, and 12.6% workers were at the post-working age (for that people working in a farm was mostly exclusive job). However, in the population of people working outside the agricultural sector, share of people in the working age was estimated at 98.2% level, and people at the post-working age – at the level of 1.6%.

Table 7. Persons employed exclusively or mainly in their own agricultural holding by age^{a/} in 2002

Age	Total	Working persons	
		exclusively	mainly
in thousand			
Total	1967.0	1899.3	67.7
in % of total			
Pre-working	2.0	2.1	0.2
Working.....	85.4	85.0	98.2
mobile	49.2	48.7	63.2
non-mobile.....	36.2	36.3	35.0
Post- working	12.6	12.9	1.6

a/ Pre-working age – 15–17 years old; working mobile – 18-44 years old; working non-mobile - female: 45-59 years old, male: 45-64 years old; post-working – female: 60 years old and more, male: 65 years old and more.

The educational structure of people working in agricultural holdings was also less gainful in comparison with those working in the nonagricultural sector. The biggest share among those working exclusively or mainly in their agricultural holding had people with the vocational and primary education – 78.0%, and people with secondary or high education constituted 21.9%. For persons working outside agriculture the percentages constituted as appropriate 35.3% and 64.4%.

The population of persons working in the agricultural holdings is differentiated in education depending on the size of the agricultural holding. People working in the biggest agricultural holdings (with area of land bigger than 50 ha) were much better educated than those, working in the average and small agricultural holdings. In the first group it was stated that there was more than twice higher percentage of people with at least secondary education – 47.5%, whereas in the agricultural holdings with the area up to 50 ha – 21.4%.

People, who have only primary, or those without any, education constituted, amongst those working in the biggest agricultural holdings, 19.3%, and in the small and average one – 42.5%.

A little bit gainful than average educational structure had also the population of people working in the individual farms up to 1 ha of land inclusive; smaller share of people with primary or without education (33.3%) characterised it in favor of bigger than average for the whole working population; share of people with at least secondary education (36.2%).

The more gainful educational structure can be observed amongst women.

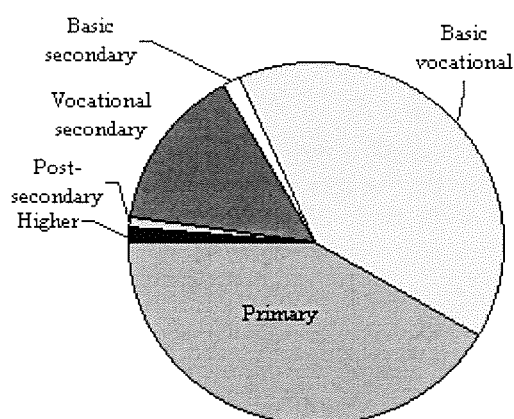
Table 8. Persons employed exclusively or mainly in their own agricultural holding by the level of education in 2002.

Education	Total	People working	
		exclusively	mainly
in thousand			
Tota	1967.0	1899.3	67.7
in % of total			
Higher	1.4	1.3	4.2
Post-secondary	1.3	1.2	2.2

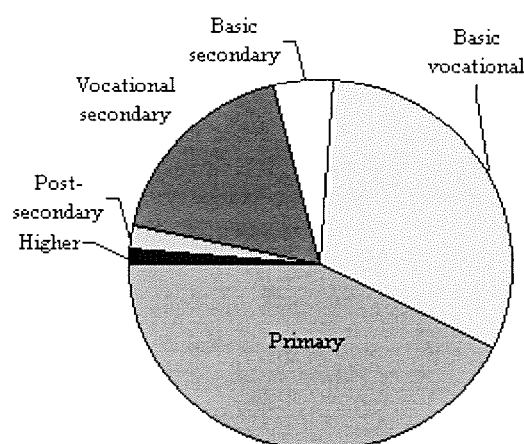
Vocational secondary	16.1	15.7	26.6
Secondary general	3.1	3.1	3.5
Basic vocational	36.0	35.8	42.7
Primary and unfinished primary	42.0	42.8	20.7
Not defined level of education	0.1	0.1	0.1

Drawing 9

Structure of male working exclusively or mainly in their own agricultural holding by education level in 2002



Structure of female working exclusively or mainly in their own agricultural holding by education level in 2002



The structure of education was definitely more gainful among people, who found additional employment outside the agricultural holding. The percentage of people having only primary education was in this group twice smaller than among people working exclusively in their own agricultural holding and was as appropriate: 20.7% and 42.8%, however the bigger share of people having at least secondary education was noted, and was as appropriate: 36.5% and 21.3%.

Among people working exclusively or mainly in the individual farms the biggest group (29.0%) constituted people from agricultural holding with the agricultural land of 5-10 ha. In the biggest agricultural holdings – with the agricultural land larger than 50 ha, there was only 1.5% of people working.

With the growth of the area of agricultural land, the share of female among those working in the agricultural holding was systematically decreasing; when in small agricultural holdings (with agricultural land of 1-2 ha) female constituted a half of workers (50.2%), in the biggest – only a little bit more than one third (36.5%).

The work in the agricultural holding lasted in average 7.5 hours a day. Men worked in average one hour longer (8 hours a day) than women (less than 7 hours).

Clear dependence of the work time on the area can be observed. People working in the individual farms with the area of up to 7 ha were working in average 5-7 hours a day, excluding the agricultural holdings with the area 1-2 ha, where people were working the shortest (4,3 hours a day). The average daily time of work of people from the agricultural holdings with the area larger than 20 ha was the longest, amounted almost 10 hours a day.

Similar relations could be observed both in men and women population.

Table 9. Persons employed exclusively or mainly in their own agricultural holding by annual work share ^{a/} in 2002.

The number of months	Total	Average daily amount of working hours						Lack of data
		till 3	4-5	6-8	9-10	11-12	above 12	
	in thousand							
Total	1962.4	416.6	251.7	435.4	383.3	237.7	222.7	15.0
10-12	1520.7	105.2	173.4	395.2	377.9	236.6	222.5	9.9
7-9	158.3	59.9	53.6	36.7	5.3	1.1	0.2	1.4
4-6	173.7	143.9	24.3	3.4	0.1	0.0	-	2.0
till 3	109.7	107.7	0.4	0.0	-	-	-	1.7
Male	1074.6	197.4	118.2	217.4	230.9	152.2	149.0	9.5
10-12	848.7	44.9	76.1	193.5	227.4	151.5	148.8	6.4
7-9	83.2	28.4	27.9	21.7	3.4	0.8	0.1	0.9
4-6	87.6	70.3	13.9	2.2	0.1	0.0	-	1.2
till3	55.2	53.9	0.3	0.0	-	-	-	1.0
Female	887.8	219.2	133.5	218.0	152.5	85.5	73.7	5.5
10-12	672.0	60.3	97.3	201.7	150.5	85.1	73.6	3.5
7-9	75.2	31.5	25.7	15.1	1.9	0.4	0.1	0.5
4-6	86.1	73.6	10.4	1.2	0.0	-	-	0.8
till 3	54.5	53.8	0.1	-	-	-	-	0.7

a/ The data in a table concern people, who declared at least 1 whole month of work in an agricultural holding.

More than three quarter (77.6%) of people were working in the agricultural holding from 10 to 12 months in a year. Almost 60% of those people worked more than 6 hours a day, which can be recognised as a considerable work share, and can be compared with the full time work outside the agriculture.

5.6% of working population was characterised by relatively small commitment to work in the agricultural holding (up till 3 months a year) (5.1% men and 6.1% women). In majority those people worked in average up to 3 hours a day.

AGRICULTURAL HOLDINGS CONDUCTING AGRICULTURAL AND NON-AGRICULTURAL ECONOMIC ACTIVITY

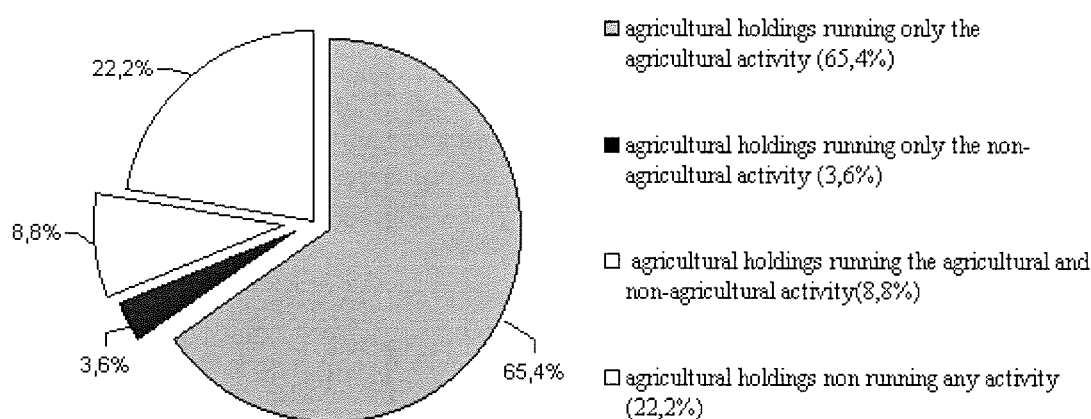
The Agricultural Census in 2002 provided the information, both about general number of agricultural holdings, and about the number of units running the agricultural and non-agricultural economic activity.

Table 10. Number of agricultural holdings by kind of economic activity and holders in 2002.

Specification	Total	Activity of agricultural holdings			Agricultural holdings not conducting any activity
		only agricultural activity	only non-agricultural activity	both agricultural and non-agricultural activity	
in thousand					
TOTAL	2933.2	1918.2	104.0	259.4	651.6
Private sector	2932.0	1917.8	103.6	259.0	651.6
of which individual farms.	2928.6	1916.6	103.3	257.4	651.3
Public sector	1.2	0.4	0.4	0.4	0.0

Economic activity on own account (agricultural and non-agricultural) was run in 2002 by 2281.6 thousand of agricultural holdings, which constitutes 77.8% of the total. In comparison with the data obtained from the full census in 1996, there was a decrease in the number of agricultural holdings running the economic activity by 605.1 thousand of agricultural holdings, which is by 21.0%.

Drawing 10. Structure of agricultural holding by economic activity in 2002



Among the whole listed entities realising the economic activity – there was 2280.4 thousand of agricultural holdings, which belonged to the private sector, including 99.9% individual farms.

There were 651.6 thousand of agricultural holdings not conducting any economic activity, which constitutes 22.2% of whole listed entities. The holders of those agricultural holdings lied fallow the whole agricultural land, did not maintain livestock and did not confirm the conducting of non-agricultural activity.

Within the entities, whose holders declared the conducting of the economic activity – 1918.2 thousand (65.4% of the total listed agricultural holdings) was running only agricultural activity, 259.4 thousand (8.8% of the total of agricultural holdings) conducted both agricultural and non-agricultural activity and 104.0 thousand (3.6% of the whole) was conducting only non-agricultural activity by suspended or stopped agricultural activity.

From the agricultural holdings, which holders declared the conducting of the agricultural activity (realised only and

simultaneously with non-agricultural activity) – 25.5% (556.4 thousand) have the agricultural land up to 10 ha. The biggest percentage, more than 40%, constituted the agricultural holdings with the agricultural land from 0.2 ha to 0.5 ha.

From the other entities conducting the agricultural activity (1621.2 thousand), i.e. exceeding 1 ha of agricultural land, the biggest percentage (24.2%) was of the agriculture holdings belonging to the area group of 5-10 ha and the agricultural holdings with the agricultural land of 1-2 ha (21.6%).

In 2002 there were altogether 363.4 thousand of agricultural holdings (i.e. 12.4% of totally enumerated), which holders declared conducting of non-agricultural activity. In comparison with the results of the full census from 1996, the number of agricultural holdings running the non-agricultural activity increased by 114.5 thousand, i.e. about 46%. The entities conducting the non-agricultural activity with the agricultural land up to 1 ha, constituted 29.8% (in 1996 – 39.3%), and were found the most in the area group of 0.2 – 0.5 ha (12.3%) and 0.5 – 1.0 ha (10.6%).

Among the agricultural holdings, running the non-agricultural activity exceeding 1 ha of agricultural land, the biggest percentage was noted in the area group of 1-3 ha – 30.9% (in 1996 – 37.4%).

The holders of agricultural holdings, who declared conducting the specific type of non-agricultural activity, pointed out mostly the activity connected with trade (retail and wholesale), food and agriculture manufacturing, building and transport.

LAND USE

The results of the Agricultural Census 2002 point out at considerable changes in the use of land by holders.

The area of the land belonging to agricultural holdings decreased in 2002, not being the agricultural holdings, described as other land, increased in those entities, as not used agriculturally, in the land balance was put

tot. Area
Land Use

tions of
entities
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Table 11. Land area and the structure of land use by holders in 2002

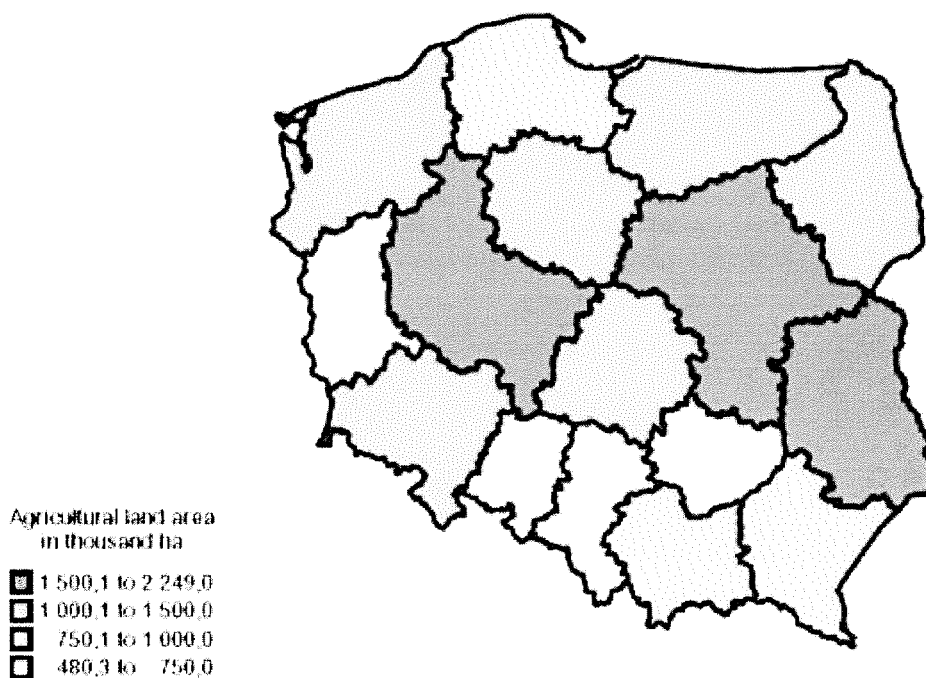
Specification	Total area	Agricultur							
		total	arable land	orchar					
in thousand hectares									
Grand total	31268.5	16899.3	13066.5	271.0	2531.3	1030.5	9089.5	5279.7^{a/}	
Agricultural holdings:	19324.8	16899.3	13066.5	271.0	2531.3	1030.5	1201.2	1224.3	
of the private sector	18143.7	15965.8	12446.4	268.6	2334.2	916.6	1103.8	1074.1	
of which private farms	16792.4	14858.4	11485.6	264.0	2245.1	863.7	1076.5	857.5	
of the public sector	1181.1	933.5	620.1	2.4	197.1	113.9	97.4	150.2	
Land not being part of agricultural holdings of the private and public sector	11943.7	-	-	-	-	-	7888.3	4055.4 ^{a/}	
in percentage									
Grand total	100.0	54.0	41.8	0.8	8.1	3.3	29.1	16.9^{a/}	
Agricultural holdings:	100.0	87.4	67.6	1.4	13.1	5.3	6.3	6.3	
of the private sector	100.0	88.0	68.6	1.5	12.9	5.0	6.1	5.9	
of which private farms	100.0	88.5	68.4	1.6	13.4	5.1	6.4	5.1	
of the public sector	100.0	79.0	52.5	0.2	16.7	9.6	8.3	12.7	
Land not being part of agricultural holdings of the private and public sector	100.0	-	-	-	-	-	66.0	34.0 ^{a/}	
in % of total									
Grand total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0^{a/}	
Agricultural holdings:	61.8	100.0	100.0	100.0	100.0	100.0	13.2	23.2	
of the private sector	58.0	94.5	95.3	99.1	92.2	88.9	12.1	20.4	
of which private farms	53.7	87.9	87.9	97.4	88.7	83.8	11.8	16.2	
of public sector	3.8	5.5	4.7	0.9	7.8	11.1	1.1	2.8	
Land not being part of agricultural holdings of the private and public sector	38.2	-	-	-	-	-	86.8	76.8 ^{a/}	

^{a/} In the position of "other land" 1445.5 thousand ha of land not used agriculturally was included (building areas, recreational areas, etc.).

The area of agricultural holdings in 2002 was 19.3 million ha and in comparison with 1996 was smaller by 1.5 million ha, i.e. by 6.9%. The acreage of agricultural land in the agricultural holdings in 2002 was 16.9 million ha and in comparison with 1996 was smaller by 1.0 million ha, i.e. by 5.5%. The area of arable land in the agricultural holdings

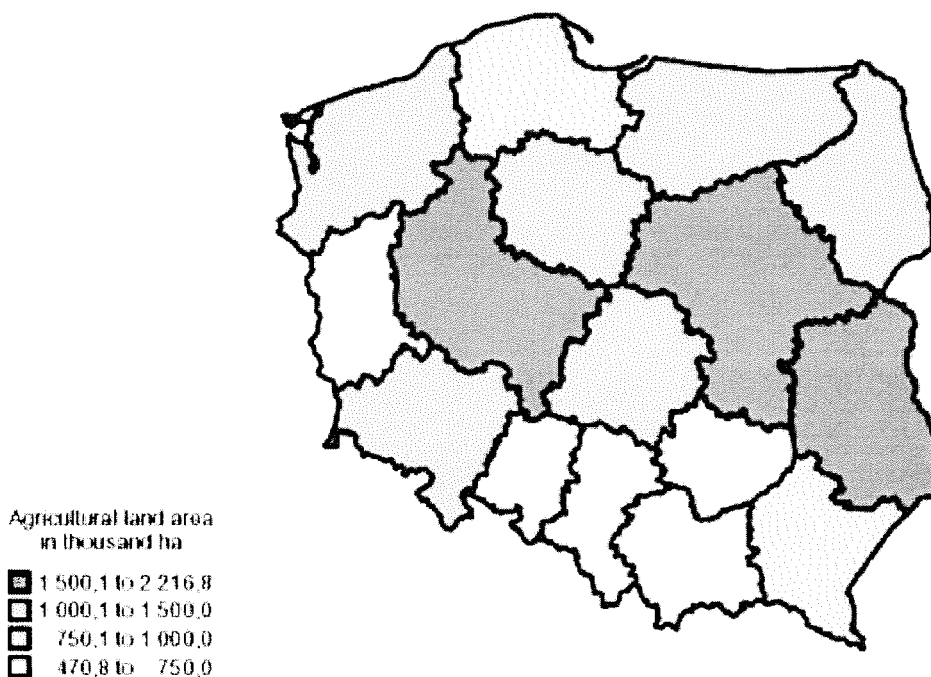
was 13.1 million ha and in the comparison with the previous agricultural census was smaller by 0.7 million ha, i.e. by 5.1%. The sown area in the agricultural holdings was 10.8 million ha and in the comparison with 1996 was smaller by 1.5 million ha, i.e. by 12.5%. The area of orchards in the agricultural holdings was 271.0 thousand ha and in the comparison with 1996 was bigger by 21.7 thousand ha, i.e. by 8.7%. The area of meadows in the agricultural holdings was 2.5 million ha and in the comparison with 1996 was smaller by 0.1 million ha, i.e. by 4.7%. The acreage of permanent pastures in the agricultural holdings was 1.0 million ha, i.e. by 0.2 million ha (by 14.9%) less than in 1996. When analysing the structure of the land use in 2002 in the country, it needs to be pointed out, that the area of other land not being part of the agricultural holdings was 11.9 million ha, which was 38.2% of the country area, so in comparison with 1996 it was more by 4.6 points.

**AREA OF AGRICULTURAL LAND
IN AGRICULTURAL HOLDINGS**



OF WHICH:

**AREA OF AGRICULTURAL LAND
IN AGRICULTURAL HOLDINGS EXCEEDING 1 HA OF AGRICULTURAL LAND**



In 2002 the structure of the land use considerably differed from the one noted in 1996, because the share of agricultural land decreased by 3.2 points, the share of forests increased by 0.9 points and the share of other land increased by 2.3 points.

The area of forests and forest land increased as a result of wooding activities connected with realisation of the National Program for The Increase of Forests Coverage. Those afforestations were realised, among others, on the "other lands".

In the structure of the land use, which belongs to the agricultural holdings, the area of the fallow and set aside land increased – from 1.5 million ha in 1996 to 2.3 million ha in 2002.

The area of the fallow and set aside land in the agricultural holdings of the private sector in 2002 was 1.9 million ha, of which the fallow land covered almost 1.5 million ha (they were found in 909.8 thousand of the agricultural holdings of private sector), and the set aside land around 0.4 million ha (they were found in 294.2 thousand of those agricultural holdings); however the area of the fallow and set aside land in the agricultural holdings of the public sector was 0.4 million ha, where the fallow land occupied 386.4 thousand ha, and the set aside land – 12.6 thousand ha.

The results of the Agricultural Census in 2002 indicated, that with the increase of total area of the agricultural holdings, the share of agricultural and arable land in those holdings also increased. Relatively big was the share of other lands in the smallest and the biggest agricultural holdings. Also the biggest share of fallow and set aside land was observed in the largest agricultural holdings – above 1000 ha, and small up to 7 ha.

The structure of the sown area

The results of the Agricultural Census conducted in 2002 showed, that within the last 6 years, i.e. since the agricultural census conducted in 1996, the total sown area has considerably decreased and the sowing structure has changed. In 2002 the total sown area was 10764.3 thousand ha and in comparison with 1996 decreased by 1532.4 thousand ha, i.e. by 12.5%.

Table 12. Sown area and sown structure by holders in 1996 and 2002.

Specification	1996	2002			
	Grand total	Private sector		Public sector	
		total	of which private farms		
in thousand ha					
Sown area in grand total	12296.7	10764.3	10543.2	9650.6	221.1
cereals in grand total ^{a/}	8720.1	8293.7	8160.9	7523.3	132.8
of which: basic cereals with mixed cereal	8609.3	7939.0	7820.0	7259.0	119.0
edible pulses for grains	46.0	45.4	44.4	42.3	1.0
potatoes	1341.9	803.4	799.7	789.6	3.7
industrial crops	757.2	757.5	717.3	553.3	40.2
fodder crops ^{b/}	1016.2	562.1	525.0	458.8	37.1
other crops	415.3	302.2	295.9	283.3	6.3
in % of total					
Sown area in grand total	100.0	100.0	100.0	100.0	100.0
cereals in grand total ^{a/}	70.9	77.1	77.4	78.0	60.1
of which: basic cereals with mixed cereal	70.0	73.8	74.2	75.2	53.8
edible pulses for grains	0.4	0.4	0.4	0.4	0.5
potatoes	10.9	7.5	7.6	8.2	1.6
industrial crops	6.2	7.0	6.8	5.7	18.2
fodder crops ^{b/}	8.2	5.2	5.0	4.8	16.8
other crops	3.4	2.8	2.8	2.9	2.8

a/ Cereals in total including maize for grain b/ including muslin

The sown structure in 2002 was as follows:

- basic cereals with mixed cereal and buckwheat, millet, other cereals including maize for grain occupied the area near 8.3 million ha, which was 77.1% of total sown area,
- potatoes occupied the area of over than 0.8 million ha, i.e. 7.0%,
- the group of industrial plants - around 0.8 million ha, i.e. 7.0%,
- fodder plants including maize for green forage – almost 0.6 million ha, i.e. 5.2% of the total sown area,
- other crops – 0.3 million ha, i.e. 2.8% of the sown area.

In comparison to the total agricultural census from 1996 there was a considerable decrease in the cultivated area of:

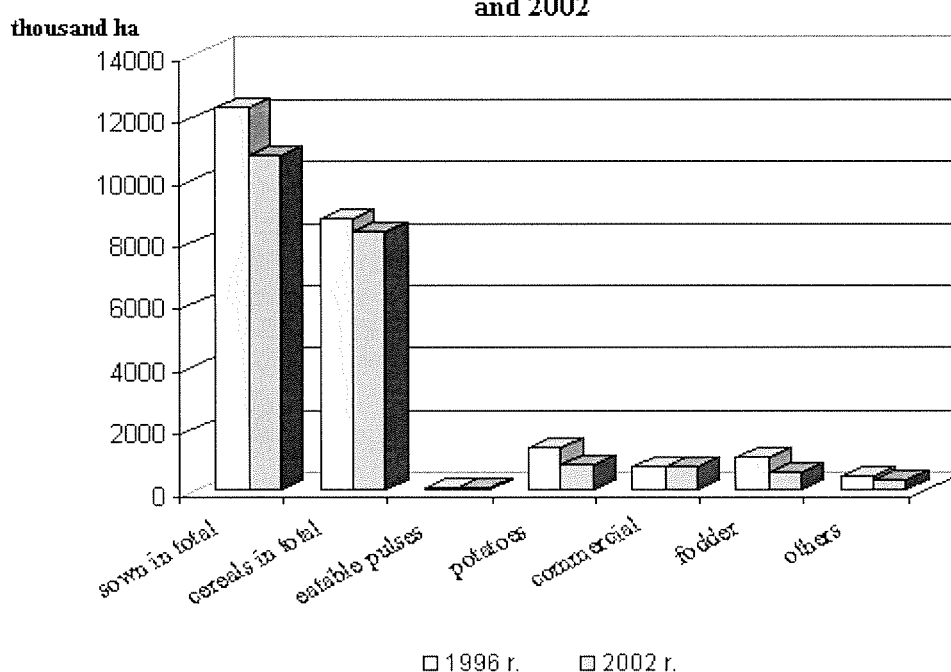
- cereals (with maize for grain) by 426.4 thousand ha, i.e. by 4.9%, but their share in the total sown area increased by 6.2 points,
- potatoes– by 538.5 thousand ha, i.e. by 40.1% with the decrease of their share in total sown area by 3.4 points ,
- fodder plants (with maize for green forage) by 454.1 thousand ha, i.e. by 44.7% with the simultaneous decrease by 3.0 points of their share in the total sown area,
- other crops – by 113.1 thousand ha, i.e. by 27.2 %, with the inconsiderable decrease of their share in the total sown area (by 0.6 points).

In the total sown area the increase of the private sector share was observed, which constituted 97.9%; however the share of public sector was 2.1% and in comparison with 1996 decreased by 1.8 points.

The results of the Agricultural Census showed the important changes in the sown structure of certain groups of crops, and also the changes of share of the certain plants in the frames of crop groups.

The cultivate land of cereals allocated for compound feedingstuffs, namely maize for grain, triticale and mixed cereal has increased.

Drawing 11. Sown area by agricultural products groups in 1996 and 2002



It needs to be noticed, that in comparison with 1996:

- the acreage of rye considerably decreased – by 854.7 thousand ha, i.e. by 35.4%,
- surface area of maize for grain increased by almost 249.4 thousand ha, i.e. by 359.9%,
- triticale sown area increased by 247.4 thousand ha, i.e. by 35.5% ,
- the sown area of sugarbeet amounted to 303.0 thousand ha decreased in 2002 by 149.6 thousand ha, i.e. by 33.1%,
- sown area of rape and turnip increase in 2002 by 156.4 thousand ha, i.e. by 55.3%,
- sown area of field vegetables decreased by 65.3 thousand ha, i.e. by 27.6%,
- area of strawberry plantation decreased by 15.6 thousand ha, i.e. by 29.2%,
- with the decrease of cattle stock there was further decrease in the acreage of fodder crops by 454.1 thousand ha, i.e. by 44.7%,

The decrease of total sown area results from, above all, considerably smaller number of agricultural holdings occupied with the crop production.

In 2002 total number of agricultural holdings occupied with the crop production were 2006.9 thousand, which constitutes 68.4% of the total number of the agricultural holdings (in 1996 2717.0 thousand, i.e. 88.6% of the total number of agricultural holdings), however the number of agricultural holdings dealing with particular agricultural

products was:

- winter wheat - 849,6 thousand of agricultural holdings, i.e. 29.0% of the total number of agricultural holdings and in comparison with the results from 1996 by 100.1 thousand (10.5%) holdings less,
- spring wheat – 387.1 thousand (13.2%), i.e. by 37.7 thousand (by 10.8%) more than in the previous census,
- rye – 792,1 thousand (27,0%), i.e. by 238,3 thousand (by 23.1%) less,
- winter barley– 155.3 thousand (5,3%), i.e. by 49.9 thousand (by 47.3%) more,
- spring barley – 501.5 thousand (17.1%), i.e. by 34.4 thousand (by 7.4%) more,
- oats – 560.4 thousand (19.1%), i.e. by 3.2 thousand (by 0.6%) more,
- winter triticale – 473.2 thousand (16.1%), i.e. by 71.0 thousand (by 17.7%) more,
- spring triticale – 122.7 thousand (4.2%), i.e. by 65.1 thousand (by 113.0%) more,
- maize for green forage and grain altogether – 205.0 thousand (7.0%), i.e. by 59.9 thousand (by 41.3%) more,
- potatoes – 1555.2 thousand (53.0%), i.e. by 668. 0 thousand (by 30.,0%) less,
- sugarbeet – 101.3 thousand (3.5%), i.e. by 157.4 thousand (by 60.8%) less,
- field vegetables – 617.1 thousand (21.0%), i.e. by 1014.4 thousand (by 62.2%) holdings less,
- strawberries – 196.2 thousand (6.7%), i.e. by 228.9 thousand (by 53.9%) holdings less, than it was shown in the year 1996.

The number of agricultural holdings dealing with the winter mixed cereals was 96.4 thousand, i.e. 3.3% of the total number of agricultural holdings, spring mixed cereals – 697.9 thousand (23.8%), maize for green forage– 100.5 thousand (3.4%), maize for grain – 110.4 thousand (3.8%), winter rape and turnip – 39.9 thousand (1.4%) and spring rape and turnip – 4.0 thousand, i.e. 0.,1% of the total number of agricultural holdings.

LIVESTOCK

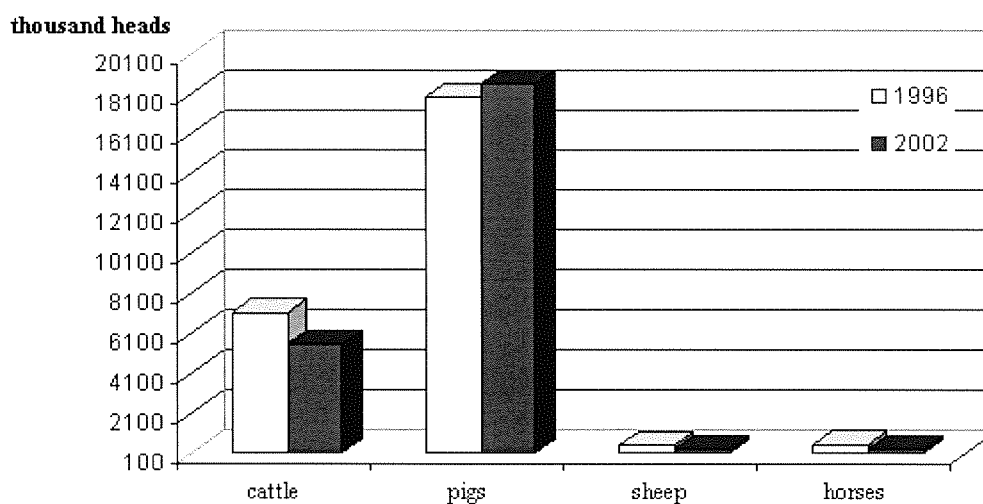
According to the results of the Agricultural Census in 2002 the populati

- cattle – 5532.7 thousand heads, of which cows – 2873.2 thousand
- pigs – 18628.9 thousand heads, of which sows – 1918.4 thousand
- sheep – 345.3 thousand heads,
- horses – 329.6 thousand heads,
- goats – 193.4 thousand heads,
- rabbits (breeding females) – 870.4 thousand heads,
- other fur animals (breeding females) – 257.3 thousand heads,
- poultry in total – 198783.5 thousand heads.

Besides, 562.4 thousand of beehives were registered.

Livestock

Drawings 12. Livestock in 1996 and 2002

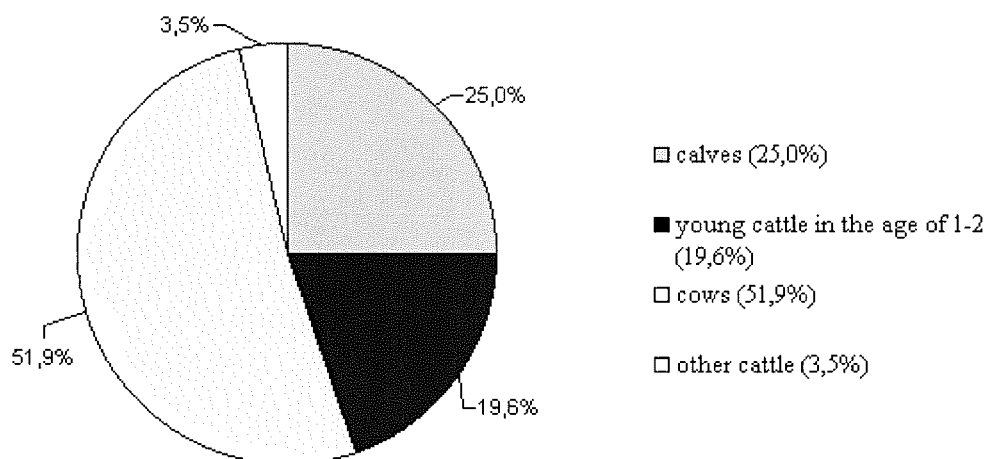


In comparison with the information obtained from the full census in 1996, the data of the Agricultural Census in 2002 showed the decline of the population of the following livestock species: cattle by 22.5%, of which cows – by 17.0, sheep – by 37.4%; horses - by 42.1% and rabbits (females) – by 20.2%. However, the increase, within last 6 years, in the number of heads was noted: pigs – by 3.7%, of which sows for breeding – by 14.4%; goats – by 7.8%; females of other fur animals – by 77.3%; beehives – by 16.8% and the poultry in total – by 23.5%.

Registered in the Agricultural Census 2002 cattle stock in total, including cows, in comparison with the results form the survey conducted in June 2001, showed the decrease in the stock in one year period, suitably by 3.5% and by 4.4%, and in the case of sheep stock – increase in the number of herd in the year scale by 0.6%. The pigs stock, including sows for breeding, showed in the Agricultural Census 2002, in comparison with the results of the pigs stock survey, as of the end of July 2001, increased in the discussed period suitably by 8.9% and by 18.0%.

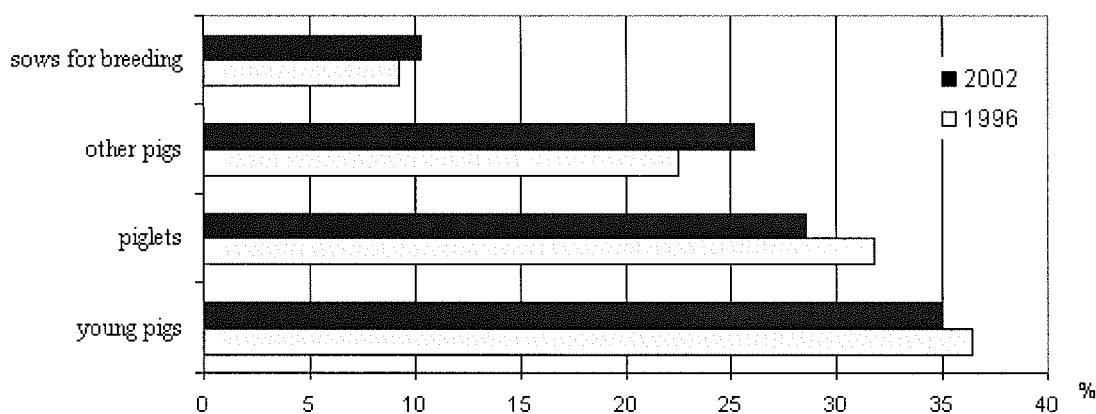
According to the results of the Agricultural Census 2002 the share of the private sector, including private farms in the agriculture in general, in relation to cattle herd was on the level of 98.2% and 94.5% in comparison with 96.7% and 92.4% according to the data from the full census in 1996, for pigs – 98.9% and 92.5% in comparison with 96.0% and 85.9% in 1996, and for sheep – 94.5% and 90.2% in comparison with 88.7% and 77.4% in 1996. Noted in the animal breeding the increase of the share of the private sector in agriculture in general, in the period from the previous full census, shows the constant proprietary changes in the agricultural holdings, strengthening of the private propriety and marginalisation of the public sector.

Drawing 13. Cattle structure in 2002



In the structure of the cattle stock in total, in comparison with the information from the full census in 1996, the share of basic cows herd considerably increased – by 3.4 point, which with the big reduction of the cattle herd by 22.5% and simultaneously, with the considerable in 2002, share of the milky cows in the heads of cows in total (99.2%), can indicate the directioning of the cattle breeding towards, above all, the milk production.

Drawing 14. Pigs structure in 1996 and 2002



In the pigs herd structure, in comparison with the results of the full census from 1996, the decrease of the piglets (by 1.4 points), young pigs ((20-50 kg)(by 3.2 points)), and the increase of the share of sows for breeding (by 1.0 point) and fattening pigs (by 3.6 points).

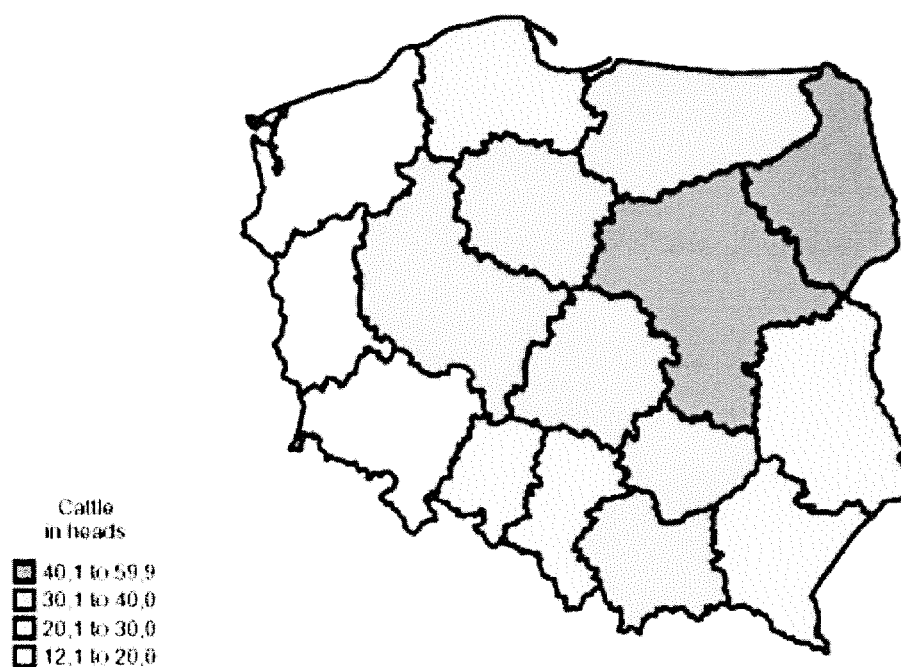
On the average in the country the cattle stock per 100 ha of agricultural land (without non-farm land) in 2002 amounted 32.7 heads and was lower by 7.2 heads than the one noted in 1996. Sheep stock per 100 ha of agricultural land in 2002 was 2.0 heads against 3.1 heads in 1996, and the pigs stock per 100 ha of arable land was 142.6 heads against 130.5 heads in 1996.

Table 13. Livestock heads per 100 ha of agricultural /arable land in 1996 and 2002.

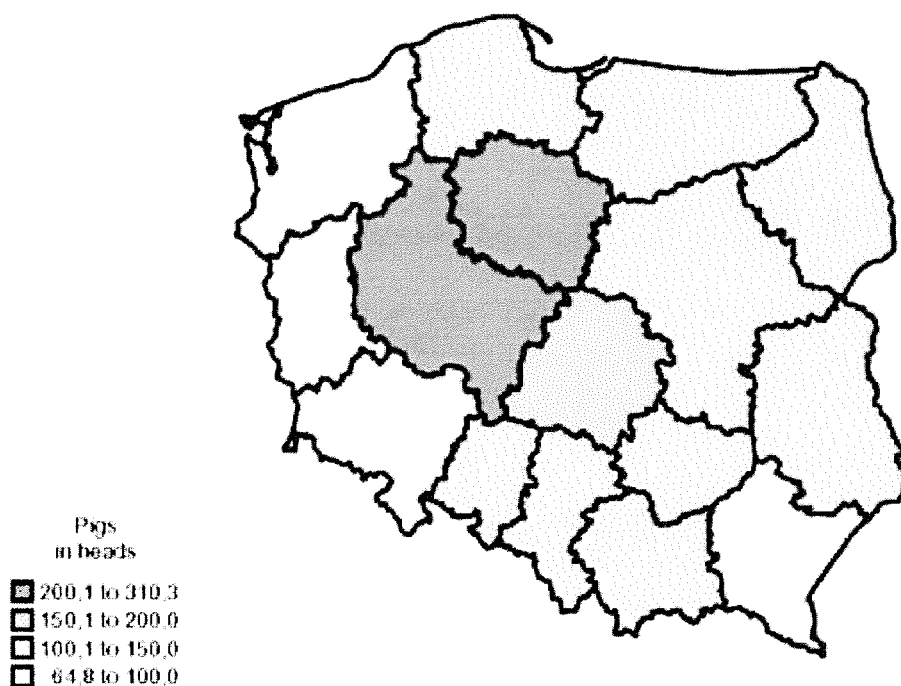
Years	Cattle	Sheep	Horses	Goats	Pigs
	in heads per 100 ha of agricultural land				in heads per 100 ha of arable land
1996	39.9	3.1	3.2	1.0	130.5

2002	32.7	2.0	1.9	1.1	142.6
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CATTLE PER 100 HA OF AGRICULTURAL LAND



PIGS PER 100 HA OF ARABLE LAND



The results of the Agricultural Census 2002 showed, that the agricultural holdings with the agricultural land of 1 ha and less kept: 1.1% of the domestic cattle stock, 1.0% of the total pigs stock, 4.4% of the sheep population, 4.5% of the horse stock and 15.2% of the total poultry stock. In the other agricultural holdings (i.e. by area larger than 1 ha) the biggest escalation of the cattle and pigs breeding characterised the middle size agricultural holdings with the agricultural land of 10 – 15 ha, sheep – big agricultural holdings with the area of 100 ha and more, horses – the

agricultural holdings with 3-5 ha of agricultural land, poultry – small agricultural holdings – with 1 – 2 ha of agricultural land.

In 2002 in the country in 1 registered agricultural holding there was in average:

- cattle – 1.9 heads (in 1996 – 2.3 heads),
- pigs – 6.4 heads (in 1996 – 5.9 heads),
- sheep and horses – 0.1 heads (in 1996 – 0.2 heads),
- poultry in total – 67.8 heads (in 1996 – 52.5 heads).

In the registered agricultural holdings, in the approach by the area groups of agricultural land, the average stock of animals in heads per 1 agricultural holding in 2002 was:

- up to 5 ha:

- cattle – 0.3
- pigs – 0.7
- sheep – 0.0
- horses – 0.1
- poultry in total – 42.5

- 5 – 10 ha:

- cattle – 2.5
- pigs – 7.6
- sheep – 0.1
- horses – 0.2
- poultry in total – 69.9

- 10 ha and more:

- cattle – 9.8
- pigs – 36.1
- sheep – 0.5
- horses – 0.3
- poultry in total – 206.0.

BUILDINGS AND CONSTRUCTIONS

In 2002 the buildings and constructions (i.e. cowsheds, pigsties, poultry – houses, shelters, garages, multifunctional buildings and other buildings) were owned by 2199.7 thousand agricultural holdings (75.0% of the total of agricultural holdings). In those holdings 5373.6 thousand buildings, including 1659.1 thousand inventory buildings and 3714.5 thousand farm-buildings were registered. Most of the buildings were found in the private farms exceeding 1 ha of agricultural land (83.3%), of which inventory – 86.9% and farm-buildings – 81.7%. In 1654.6 thousand of private farms exceeding 1 ha of agricultural land (by 11.5% less than in 1996) there was 4477.1 thousand buildings, of which 1441.4 thousand inventory ones (more by 6.2% than in 1996) and 3035.7 thousand farm-buildings (more by 6.9% in comparison with 1996).

In the total number of buildings the biggest share had barns (23.5%), cowsheds (18.2%) and multifunctional buildings (17.1%), the other buildings were in average about 7% of the total amount of the buildings.

The share of the agricultural holdings having the inventory and farm-buildings in the total number of the agricultural holdings was considerably differentiated depending on the kind of building and area group of the agricultural land.

The agricultural holdings owning the cowsheds made up in average in the country 39.7% of the total of agricultural holdings (in 1996 – 27.2%), where for the agricultural holdings with more than 5 ha of agricultural land this share was clearly increasing till 50-60%.

The poultry-houses were found in average in 13.0% of the total of agricultural holdings. Depending on the size of the agricultural holding this indicator was increasing, reaching the worth of 30-34%, in the area groups of 10-100 ha of agricultural land and then (in the agricultural holdings above 100 ha of agricultural land) gradually decreasing till about 9%.

The agricultural holdings owning the pigsties constituted in the country 10.7% of the total number of the agricultural holdings (in 1996 – 8.2%) and their number was systematically increasing along with the increase of the agricultural land area of the holding. In the group of agricultural holdings with the area of 7 – 10 ha, the share of the agricultural land was 20%, and with the area of 10 – 15 ha – around 30%, reaching the value of 42 – 50% in the agricultural holdings with the agricultural land of more than 20 ha.

The share of the agricultural holdings owning the barns in the average in the country was 39.5% (in 1996 – 37.1%) of the total number of agricultural holdings, and was the biggest in the area groups: with the agricultural land of 15 – 30 ha (75%) and 5 – 10 ha and 30 – 50 ha (70%).

Table 14. Buildings and constructions by holders in 1996 and 2002.

Specification	1996	2002			
	Grand total	Private sector		Public sector	
		total	of which private farms		
in thousand units					
Cowsheds	842.3	919.6	917.3	913.5	2.3
Pigsties	264.0	345.8	344.1	339.6	1.7
Poultry-houses	273.8	393.7	393.4	391.8	0.3
Barns	1145.6	1197.4	1195.2	1192.3	2.2
Shelters	213.1	309.0	307.2	304.0	1.8
Garages	527.2	837.4	834.8	828.3	2.6
Multifunctional buildings	987.3	1019.6	1017.0	1012.2	2.6
Other constructions	126.4	351.1	345.5	337.5	5.6

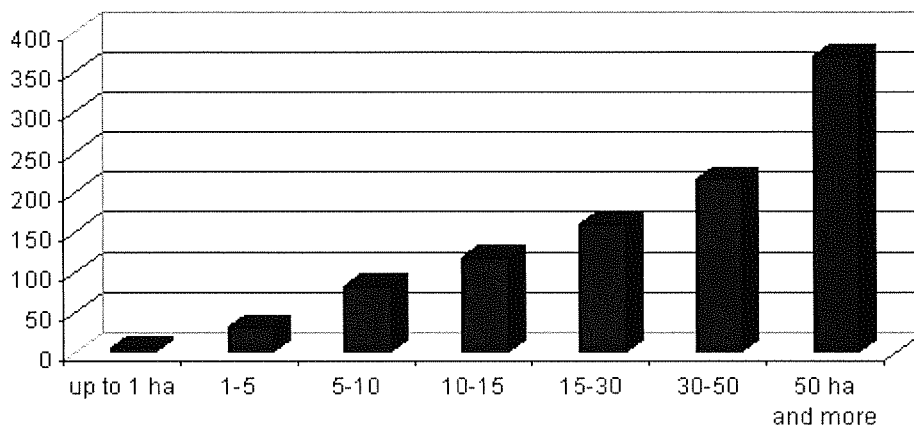
The multifunctional buildings were found in 32.4% of the agricultural holdings, which took part in the census (in 1996 – in 31.4%). Their biggest share (45-50%) was registered in the agricultural holdings with agricultural land of 300 ha and more.

TRACTORS AND TRUCKS

In 2002, in the agricultural holdings, there were 1364.6 thousand tractors, i.e. by 4.7% more than in 1996. In the private sector the increase was 5.5%, of which in private farms – 6.9%. In the public sector the amount of tractors was systematically decreasing, which was connected with the change of proprietary structure in the agriculture. In comparison with previous census, the number of tractors decreased in the described sector by 56.6%.

The number of tractors was increasing proportionally to the growth of the area of agricultural land of agricultural holdings. In the group of agricultural holdings up to 5 ha it reached the number of 50 units per 100 agricultural holdings, in the group of 10 – 15 ha there were more than 100 units, in the agricultural holdings with the area of agricultural land 100 – 300 ha – 400 units, and in the group of agricultural holdings of 1000 ha and more the amount of the tractors was 1750 units.

Drawing 15. Number of tractors per 100 agricultural holdings by area groups of agricultural land in 2002



Per 1 tractor in 2002 there was around 12.4 ha of agricultural land (in 1996 – 14 ha).

In the structure of tractors the vehicles with the medium power dominate: up to 25 KW -24.4%, up to 40 KW – 34.7%, up to 60 KW – 27.6% of the total number of tractors

In 2002, in comparison with 1996, the number of agricultural holdings owning the tractors increased by 2.1% and was 1075.6 thousand, which made up 36.7% of the agricultural holdings in total.

Per 100 agricultural holdings there were 46.5 tractor units (in 1996 – 42.5) as resulting from the shown data, 30.1% of tractors in total was found in the group of agricultural holdings with agricultural land of 7 – 15 ha.

In 2002, 114.5 of agricultural holdings owned 144.5 trucks, in which in 77.1 thousand of agricultural holdings there were 85.4 thousand trucks with the tonnage up to 2 tonnes. In average per 100 agricultural holdings owning the trucks falled 126.3 units.

The number of trucks per 100 agricultural holdings in total was increasing with the increase of the agricultural land area. In the holdings with the area up to 10 ha the number of cars was from 3 to 10 units, and in the group of agricultural holdings bigger than 500 ha the number of cars was larger than 100 units per 100 agricultural holdings , reaching the largest number – 326 units in the agricultural holdings with the area of 1000 ha and more.

The number of trailers in 2002 was 726.4 thousand units, in which in the private farms exceeding 1 ha of agricultural land – 699.6 thousand unit. In comparison with the state from 1996 this quantity was bigger by 8.7% in total, and in the private farms exceeding 1 ha of agricultural land, by 14.3%. In average in the country per 100 agricultural holdings there were 37.2 trailer units.

The number of trailers per 100 agricultural holdings was increasing, with the increase of the agricultural land area, and was around 10 units in the agricultural holdings up to 3 ha, and up to 1837 units in the agricultural holdings with the area more than 1000 ha.

AGRICULTURAL MACHINES

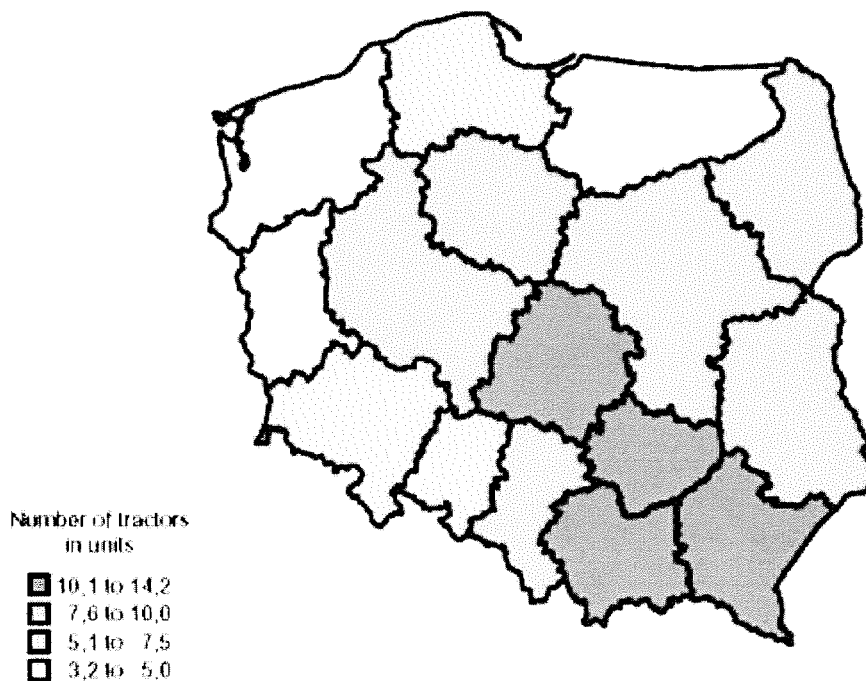
In 2002 in comparison with 1996 the number of agricultural machines increased in the whole agriculture (exception: forage harvesters, collector trailers and can-milkers, which amount inconsiderably decreased). The biggest, because by around 50%, increase was in the amount of collector presses and piping-milkers, and around 30% of canvas milk coolers, grab-loaders, cereal combine-harvesters and tractor-sprayers. The number of other machines increased in the frames of 4% to 17%.

Table 15. Specified machines and agricultural equipment by holders in 1996 and 2002.

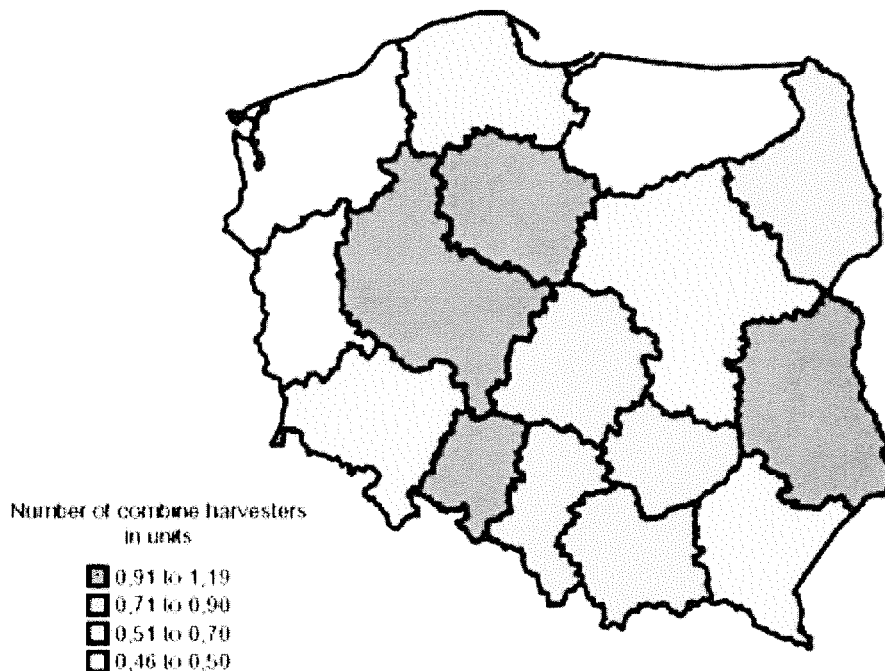
Specification	1996	2002			
	Grand total	Private sector		Public sector	
		total	of which private farms		
in thousand units					
Cereal combine-harvesters	97.1	123.8	123.0	119.1	0.8
Potato combine-harvesters	76.5	81.4	81.2	80.8	0.2
Beet combine-harvesters..	27.0	32.5	32.3	31.8	0.2
Fertiliser sprayer	442.7	540.8	539.3	534.4	1.5
Manure spreaders	484.2	504.2	502.8	499.1	1.4
Mowing tractors	439.7	522.5	521.4	519.0	1.1
Potato diggers	332.0	401.5	401.2	400.5	0.3
Potato planters	344.8	404.8	404.4	403.4	0.4
Collector trailers	98.0	96.2	95.6	94.6	0.6
Collector presses	104.7	147.6	147.0	144.9	0.6
Field tractor sprayers	372.2	473.2	472.1	469.0	1.1
Orchard tractor sprayers	35.7	45.7	45.5	45.2	0.2
Piping milkers	7.4	10.7	10.3	9.5	0.4
Canvas milk coolers	128.3	170.6	170.6	170.6	0.0

In 2002 more than 97% of agricultural machines were used in the private farms exceeding 1 ha of agricultural land. The share of individual farms owning cereal combine-harvesters made up in average in the country 5.9%, whereas in the area group of 50 – 100 ha of agricultural land was the biggest and made up 65.6% (similar to the 1996). Potato combine-harvesters were owned by 80.2 thousand private farms exceeding 1 ha of agricultural land, which made up 4.1% of total individual farms. The biggest amount (27.3%) of the potato combine harvesters had the agricultural holdings in the area group of 30 – 50 ha of agricultural land. Beet combine-harvesters were found in 31.4 thousand private farms exceeding 1 ha of agricultural land, which made up 1.6% of total number of agricultural holdings, and the biggest amount of mentioned above combine-harvesters had the agricultural holdings in the frame of 50 – 100 ha of agricultural land (18.0%). More than 141.0 thousand private farms exceeding 1 ha of agricultural land disposed 144.7 thousand of the collector presses, which means that their share in the individual farms in total constituted 7.6%. In the holdings with the area of 30 – 50 ha of agricultural land there was 50% of those machines.

**NUMBER OF TRACTORS
PER 100 HA OF AGRICULTURAL LAND**



**NUMBER OF COMBINE HARVESTERS FOR CEREALS
PER 100 HA OF AGRICULTURAL LAND**



GENERAL NOTES

Polish agriculture is characterised by permanent process of changes taking place in ownership structures as well as directions of land use. The results of the Agricultural Census 2002 in comparison with data collected in full agricultural census 1996 indicate:

- decrease of total land area used by agricultural holdings from 20.8 million ha to 19.3 million ha, that is by 1.5 million ha, i.e. by 6.9 %, of which reduction of agricultural land from 17.9 million ha to 16.9 million ha, i.e. by 1.0 million ha (by 5.5 %);
- reduction of number of agricultural holdings from 3066.5 thousand to 2933.2 thousand, which means by 133.3 thousand (by 4.3%), of which farms exceeding 1 ha of the agricultural land from 2046.8 thousand to 1956.1 thousand (by 4.4%);
- changes in agricultural holdings structure, i.e. increase of share of farms with the agricultural land up to 5 ha from 70.2% to 72.4% and units with the agricultural land of 20 ha and more from 2.8% to 4.1%, i.e. respectively by 2.2 points and by 1.3 points, however decrease of share of units with the agricultural land of 5-20 ha from 27.0% to 23.7%, i.e. by 3.3 points;
- changes in structure of population connected with agricultural holdings by age groups in 2002, in all groups in relation to results from 1996. Decrease of population in pre-working age is noted (0-17 years old) by 1.4 percentage point (of which in rural areas by 1.1 points). However, the number of population in working age increased by 4.2 percentage point, of which in mobile age (18-44 years old) by 1.8 percentage point, non-mobile age (45-59/64 years old) by 2.4 point. However number of older population decreased, i.e. in post-working age (women - 60 years old and older, and men - 65 years old and more) by 2.8 point;
- considerable differentiation of persons employed in private farms, regarding to education and respectively to the size of agricultural holding. Persons employed in the biggest farms (with agricultural land more than 50 ha) were much higher educated than those, who were employed in small and middle agricultural holdings. In the first group more than two times higher percentage of people with at least secondary education - 47.5 %, while in farms with agricultural land up to 50 ha - 21.4 % was noted;
- decrease by 21 % of the total number of agricultural holdings performing business activity (agricultural and non-agricultural), however that decreasing results from timely suspended or totally waived performing of agricultural activity by farm holders according to remaining long term poor economic-productive situation in agriculture;
- considerable growth (by 46%) of the number of agricultural holdings, where holders or adult people, remaining in common household with the user, conducted non-agricultural business activity. Undertaking of the non-agricultural activity by increasing number of agricultural holdings, with simultaneous remaining of poor business cycle on many agricultural markets, was connected with finding the new sources of main or additional incomes by holders or members of their household. The most often performed type of non-agricultural activity was trade, agricultural-food processing, building construction and transport;
- decrease of total sown area from 12.3 million to 10.8 million ha, i.e. 1.5 million ha (by 12.5%). In comparison to full agricultural census 1996, total grain sown area considerably decreased from 8.7 million ha to 8.3 million ha, i.e. by 0.4 million ha (by 4.9%), potato area from 1.3 million ha to 0.8 million ha, i.e. by 0.5 million ha (by 40.1%), sugar beet area from 0.5 million ha to 0.3 million ha i.e. by about 0.2 million ha (by 33.1%). Decrease of the total sown area results, first of all from the considerably smaller number of farms producing crop output;
- substantial decrease of cattle and sheep livestock. Farmers limited breeding of those species, among others, because of weakening demand for cattle and sheep for slaughtering, and difficulties with sale of wool. Instead in 2002 the growth of pig population was noted, connected with good, in that time, business conditions at pork market, and also dynamically increasing farming of poultry was noted, what resulted with considerable growth of poultry population.

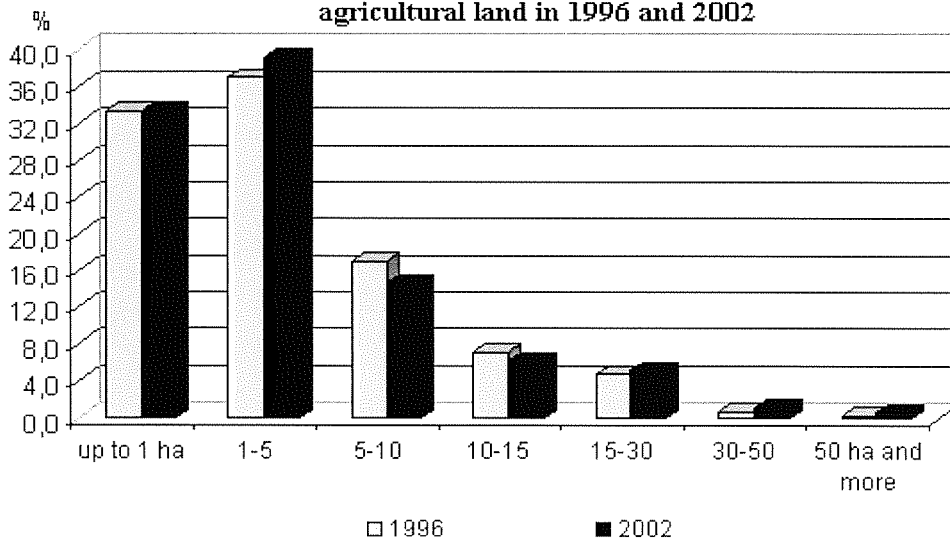
ORGANISATIONAL STRUCTURE OF AGRICULTURE

*N. of
hold*

Agriculture in Poland is characterised by constant process number of units, differentiated regarding size of farms, dire fluctuation of the economic situation in agriculture. The im difficult economic situation of the total population, lim procurement and market prices of agricultural products. Thos of agricultural holdings performing agricultural activity, le agricultural production, and also conducting non-agricultural ; The Agricultural Census conducted in 2002, describes ci agriculture, and in comparison with the full agricultural censi provided the information about changes in those economic ent In 2002 there were 2933.2 thousand agricultural holdings a number of entities decreased by 4.3%, i.e. by 133.3 thousand farms. Number of agricultural holdings exceeding 1 ha of agricultural land also decreased according to 1996 by 4.4% (by 90.7 thousand farms) and was 1956.1 thousand of farms.

anges. Large complexity and influenced by ts and low and number directions of situation in 6 and 2002

Drawing 1. Structure of agricultural holdings by area groups of agricultural land in 1996 and 2002



2.933.200 AgH

II. TABELARIC PART

Tab. 1. Number of agricultural holdings by area groups of agricultural land and holders in 1996 and 2002 (cont.)

Area groups of agricultural land in ha	1996	2002			
	Grand total	Private sector		Public sector	
		total	of which private farms		
	in % of grand total				
GRAND TOTAL					
GRAND TOTAL.....	100.0	100.0	100.0	100.0	100.0
Agricultural holdings of up to 1 ha of agricultural land (plots and livestock owners)					
Total.....	33.3	33.3	33.3	33.3	2.4
0 – 0.1.....	0.6	0.7	0.7	0.7	0.9
0.1 – 0.2.....	9.1	7.3	7.3	7.3	0.2
0.2 – 0.5.....	13.7	14.0	14.0	14.0	0.5
0.5 – 1.....	9.9	11.3	11.3	11.3	0.9
Agricultural holdings exceeding 1 ha of agricultural land					
Total.....	66.7	66.7	66.7	66.7	97.6
1 – 2	15.1	17.6	17.6	17,6	2,8
2 – 3	9.2	9.6	9.6	9,6	3,4
3 – 5	12.6	11.9	11.9	11,9	4,7
5 – 7	8.5	7.4	7.4	7.4	3.2
7 – 10	8.5	7.2	7.2	7.2	3.2
10 – 15	7.1	6.2	6.2	6.2	3.2
15 – 20	2.9	2.9	2.9	2.9	2.5
20 – 30	1.8	2.2	2.2	2.2	4.5
30 – 50	0.7	1.1	1.1	1.1	6.6
50 – 100	0.2	0.4	0.4	0.4	14.1
100 – 200	0.1	0.1	0.1	0.1	12.5
200 – 300	0.0	0.0	0.0	0.0	7.6
300 – 500	0.0	0.1	0.1	0.1	8.9
500 – 1000	0.0	0.0	0.0	0.0	8.5
1000 and more.....	0.0	0.0	0.0	0.0	11.9