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MAIN CHARACTERISTICS OF THE HUNGARIAN CENSUS 2000

Invited paper submitted by the Hungarian Central Statistical Office*

Summary: The first Hungarian Agricultural Census took place in 1895. After then similar surveys were carried out in 1935, 1972, 1981 and 1991. The Agricultural Census 2000 was the sixth in the series of agricultural censuses. The aim of the 2000 census was to survey the economic structure created after the reprivatization of the landed properties, but the EU and FAO requirements will also be observed at the shaping up of the programme.

The paper gives an overview on the implementation of the Agricultural Census (legal background, role of the task forces, design of farms, completeness, division of labour between the Department of Agriculture and HCSO regional directorates, communication)

Concerning the result the main characteristics of the Hungarian Agriculture are highlighted (huge number of small family farms). The list of publications is also included.

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HUNGARIAN AGRICULTURE

1. Agriculture has played a significant role in our country's economy in the last century and the same can be said even today. The cultivated agricultural land area is 70% of the total land area, while 7% of the active earners are employed in agriculture. The share of agriculture in the Gross Domestic Products (GDP) is about 5%, and that of the food industry is more than 6%.

2. In the recent years fundamental changes have taken place as regards the ownership and the structure of agriculture in Hungary. In previous years a relatively small number of large-scale agricultural and food-industrial holdings were existing. After the privatisation of the land area, state farms and the transition of agricultural co-operatives a large number of small and medium size agricultural units were established. According to data of the Agricultural Census 2000, there were more than 8000 companies, state farms, co-operatives and other agricultural enterprises in the country. Beside them 960 thousand households qualified as farms were also surveyed.

Variation of the number of holdings

Year	Family holdings	Enterprises	thousand
			Total
1972	1841,5	6,1	1847,6
1981	1529,6	1,4	1531,0
1991	1395,8	2,6	1398,3
2000	958,3	8,4	966,6

AGRICULTURAL CENSUSES 1895 – 2000

3. Regular agricultural statistical data supplying in Hungary dates back to almost two hundred years. The surveys conducted from 1828 covered the land sown, agricultural production and number of productive livestock. The first land register, the so-called provisional cadaster – providing the basis for subsequent land area statistics – was introduced in 1853 while the data collection relating to vineyards and vintages was introduced in 1873.

4. The first detailed agricultural census was ordered by statute VIII passed in 1895. The survey covered every owner occupied farm.

5. The second census was accomplished in 1935 when it was recommended by the International Institute of Agriculture (IIA) in Rome, the predecessor of FAO.

6. The third census was ordered by a Cabinet decision No 3401/1970 and a governmental decree No 2/1972 regulated its execution. In compliance with the government's decision the census took place in 1972.

7. In 1980 Hungary joined the world census indicating to FAO applying of cost-saving methods which implied narrowing down the data collection of 1972.

8. Taking into account the data requirements of national institutions and FAO every five years, the HCSO, in conjunction with the livestock census in 1976 and 1986, collected information also on the most important data of small-scale producers.

9. The subsequent agricultural census in 1991 was ordered by a government decision dated 2 August 1990 and the execution of the census was regulated by decree No 36/1991 of 1 March 1991. The objectives of the census were realized by the harmonized accomplishment of several surveys.

THE SIXTH AGRICULTURAL CENSUS

10. Pursuant to Act XLVI of 1999 the Hungarian Central Statistical Office (HCSO) carried out an Agricultural Census (AC) between 1. – 21. April 2000 by the reference date of 31 March 2000. The AC 2000 was the sixth in the series of agricultural censuses.

Preparatory phase

January 5, 1999	The AC plan was accepted by the HCSO Presidency
January 22, 1999	The act on AC was drafted
February, 1999	Interdepartmental review of the act
February 10, 1999	Governmental decision on AC
March and April, 1999	Review of the act by parliamentary committees
May 4, 1999	The act on AC was passed by the Parliament

11. All documents adjunct to AC have been reviewed by professional bodies, including the Ministry of Agriculture and Regional Development (MARD), professional associations and unions, universities and research institutes, and the regional directorates of HCSO. All comments, specifically those of MARD, have been included in the final design of the questionnaire, provided there was no conflict with the relevant EU regulations and FAO recommendations.

12. Professional Committee for the coordination of methodological and organizational tasks, and Financial and Budgetary Committee for preparing the financial transactions were created. The participants have been delegated by the MARD, regional directorates and the different departments of HCSO, including the department of Agriculture. The task forces held regular and ad-hoc meetings.

Completeness – interview districts

13. One of the most difficult tasks in the design of censuses is the assurance of completeness. Apart from the family farms agricultural businesses need the same foresight for circumspect mapping. The changes in the past years and the not up to date registry added to the difficulties in the survey of businesses. For managing this issue a new report was introduced.

14. Similarly to the earlier censuses completeness on family holders were achieved by visiting each household in the districts of settlements where animal husbandry was permitted. Apart from the rural settlements interview districts were also created in towns during the year 2000. For arranging the interview districts administrative sources, MARD registry data were used and the registries of farmers were consulted, too.

15. A total of 13712 interview districts were selected in the light of local peculiarities with a view to complete the census in each district in three weeks time at most. The regional directorates and the local authorities defined jointly the boundaries of interview districts to include in the census all inhabited parts of each settlement without any overlapping. The interview districts were determined by the end of January 2000.

Training of enumerators

16. Between February 28 and March 2, 2000 four full-day briefing sessions were held in Budapest for the staff of HCSO regional directorates (number of them is 19) involved in the census, including the county census officers and his/her deputies, and the census coordinators. The county staff was given first-hand information about the tasks involved in the implementation of the census, and had a chance to clarify issues and questions.

17. Qualified regional officers of the regional directorates trained the enumerators, supervisors and settlement officers on the basis of the implementation directive of January 31, 2000 and the training curriculum of February 28, 2000 issued by the department of Agriculture.

Communication

18. A Communications Ltd. designed the AC communications programme under contract, in cooperation with the staff of the Department of Agriculture.

19. Two press conferences were held before the census (08. 12. 1999 and 21. 03. 2000). The preliminary data of AC were already presented in June 2000, the final data of AC were presented September 2000 at press conferences.

Results

20. In the framework of the census the enumerators had visited 2,1 million households (more than 60% of total households). 960,000 households have reached the reporting holding size. Another 835,000 households control smaller land area or livestock than the specified threshold, and 300,000 households do not perform any agricultural activities.

21. According to the data, on 31. March 2000 the agricultural sector in Hungary includes nearly 960,000 family holdings and more than 8,400 enterprises engaged in agricultural activities. In the census completed in 1991 2,600 enterprises and 1,4 million family holdings were recorded.

22. 27% of the enterprises does not cultivate any land area. More than 70% of the family holdings utilise less than 1 ha or altogether they farm less then 8% of the total productive land area used by the group of family holdings.

23. The structure of the livestock is dominated by cattle in case of enterprises and by pigs in case of family holdings. 90% of the total livestock consists of 2 species in case of enterprises and 4 species in case of family holdings.

24. From the total livestock of family holdings more than 40% of cattle, nearly 50% of cows, 36% of pigs, and 41% of breeding sows are kept by the farmers controlling 1 to 10 ha productive land area.

This sector controls more than 30% of the cow- and pig-keeping capacity and nearly 50% of the wine storage capacity. This sector has a considerable share in the stock of tractors and trucks, too (42% and 38%). In case of the enterprises these resources are concentrated in units using 100 ha or more.

25. Slightly below 3 persons on the average belongs to a family holding, 2 of them actively participate in farming.

26. Nearly 25% of holders are females. The average age of the holders is 60 in case of females and 53 in case of males.

Main characteristics of enterprises by size of the productive land area

Denomination	Size of the productive land area					percent
	0	<1.00	1,00- <10,00	10,00-< 100,00	100,00	Total
	hectare					
Number of enterprises	27,0	4,0	9,2	27,1	32,6	100,0
Productive land area	0,0	0,0	0,1	2,3	97,6	100,0
Cattle	5,5	2,3	0,2	2,3	89,8	100,0
Cows	5,5	2,0	0,2	2,5	89,8	100,0
Pigs	25,1	0,5	3,6	6,9	63,9	100,0
Breeding sows	25,7	0,4	3,7	7,0	63,2	100,0
Horses	12,7	0,6	3,0	16,8	66,9	100,0
Sheep	8,0	1,6	1,0	7,1	82,3	100,0
Hens, chickens, roosters	50,7	0,6	3,4	7,3	38,0	100,0
Geese	61,7	0,1	0,3	14,7	23,3	100,0
Ducks	81,9	0,5	4,0	9,2	4,4	100,0
Turkeys	77,1	0,5	0,2	5,6	16,6	100,0
Cowshed capacity	6,0	2,7	0,3	3,1	87,8	100,0
Pigstry capacity	24,8	0,7	3,3	6,3	64,9	100,0
Henhouse capacity, m ²	51,0	0,5	2,0	7,4	39,2	100,0
Wine storage capacity, hectolitre	2,6	0,2	1,8	9,7	85,7	100,0
Tractors, piece	8,5	1,8	1,5	7,4	80,8	100,0
Trucks, piece	13,5	1,7	2,4	7,4	75,1	100,0

Main characteristics of family farms by size of productive land area

Denomination	Size of the productive land area					percent
	0	<1.00	1,00- <10,00	10,00-< 100,00	100,00	Total
	hectare					

Number of holding	0,4	70,0	24,2	5,1	0,2	100,0
Productive land area	0,0	7,7	27,7	47,7	16,9	100,0
Cattle	0,2	16,0	41,6	35,6	6,6	100,0
Cows	0,1	13,7	48,7	31,0	6,6	100,0
Pigs	0,6	43,2	36,4	17,4	2,4	100,0
Breeding sows	0,9	35,0	41,4	19,1	3,6	100,0
Horses	0,7	48,5	34,8	13,5	2,5	100,0
Sheep	0,1	12,3	21,8	41,5	24,3	100,0
Hens, chickens, roosters	13,6	50,9	22,7	12,3	0,5	100,0
Geese	0,0	24,1	30,3	29,4	16,1	100,0
Ducks	1,9	26,6	53,8	17,6	0,1	100,0
Turkeys	17,1	57,9	18,2	0,9	6,0	100,0
Cowshed capacity	0,2	22,7	36,8	34,8	5,5	100,0
Pigstry capacity	0,5	49,1	34,0	14,7	1,7	100,0
Henhouse capacity, square m	11,7	49,9	25,4	11,1	2,0	100,0
Wine storage capacity, hectolitre	0,0	36,1	46,1	17,2	0,6	100,0
Tractors, piece	0,1	17,0	42,1	35,7	5,1	100,0
Trucks, piece	0,3	20,3	37,6	35,0	6,9	100,0

SOME CHARACTERISTICS

27. Due to the large number of petty farms producing exclusively for family consumption compliance with the statistical coverage specification was an extremely difficult methodological task. At the same time, comprehensive monitoring of agricultural activity provides vital information for decision-makers, analysts and agents of the market. For instance, the livestock kept at market producer farms is insufficient for determining the total livestock. The exact definition of the market producer unit would also bring up numerous problems, not mentioning comparability. In terms of size, activity or degree of specialization commodity producer farms under Hungarian circumstances probably would not fall in the same category prevailing in the Netherlands or Denmark.

28. In Hungary market production of petty farms producing mainly for own consumption was not negligible even at the time of earlier censuses conducted in 1972 and 1981. The picture was the same in 2000, too.

29. For analyzing the structure of family farms the gross production value of the units was estimated. The estimated gross production value was based on average prices and yields rather than the actual output of individual farms. Product balance sheets were used as the basis of calculation. At that time

gross production value was the only value indicator for summarizing data expressed in terms of various different natural units, such as land area by land use categories, livestock by kind of animals, etc.

30. In our investigations size groups of farms were defined on the basis of gross production value. Our findings showed that most of the family farms turned out extremely low production value. The ratio of farms where the majority of income of a small farming household originated from agricultural production came to only a few percent on the basis of the production value net of costs. Household dependence exclusively on agricultural production could be assumed only in the case of the largest farms while in the case of the majority of farms other sources of income also contributed to make a living. Part-time agricultural activity, which has become a worldwide phenomenon, is widely practised in Hungary, too.

Publications

Following the census, the processing of the data started immediately, thus the first, preliminary data were already published in June by the HCSO. Publishing of the final data commenced in September.

The Agricultural Census 2000

The CD provides overall information about the history and organisational structure of the HCSO, emphasizing the role of the Department of Agriculture. It contains preliminary information on the recent agricultural census and a general overview on the changes taken place in the Hungarian agriculture over the last decade. It discusses the history and most important findings of the previous censuses.

Hungarian Agriculture 1851-2000

The CD gives a historical summary of the Hungarian agriculture based on the content of the previous CD, however is extended with the preliminary data collected by the Agricultural Census in spring 2000, in a separate chapter.

The CD contains two analyses. One is a summary of the development of the Hungarian agriculture in the 20th century. The other gives a comprehensive look at the agricultural production, value of production and agricultural prices of the year 1999.

The long trend figures of agricultural labour force, land area by land use categories, sown area and yield production of the main crops, livestock and the livestock products, gross agricultural output, average procurement prices, and market prices are shown in tables for easy diagram calculations.

Hungarian Agriculture, 2000. - regional data -

The publication contains data of the territorial units (150 NUTS IV, 19+1 countries, 7 regions), on the number of the holdings, on the size, structure and average size of the land use, the livestock, on the machinery and equipment, buildings and structures, on the agricultural production value on holding level, on the distribution of the production value of the holdings, on the characteristics of the land use and livestock per holding concerning the family holdings and agricultural enterprises in 123 tables. Available in paper and CD format.

Land Use of Hungary, 2000. - data by settlements -

The publication shows by settlements the enumerated agricultural land area by land use categories, the number of the users, quality of arable land area, fruit tree plantations and

vineyards, the territorial land within the administrative boundary, respectively provides data on family holdings and agricultural enterprises by counties and regions. Available in paper and CD format.

Livestock in Hungary, 31 March 2000. - data by settlements

The publication informs by settlements about the size and the structure of the livestock, the number of livestock keepers, respectively their rank by counties and regions. It contains county and regional data concerning the family holdings and enterprises, as well. Available in paper and CD format.

Agricultural fixed assets, 2000 – data by countries

The publication includes data on the number and the capacity of the various types of machinery and equipment, farm buildings and structures. Data on the age of assets and other technical parameters will also be published. It will be available in March 2001 in paper and CD format.

Agricultural employment, 2000 – regional data

The publication includes data on the number of persons belonging to the holding, the number of persons working at the holdings, the time spent with agricultural work, the volume of paid and non-paid labour etc. It will be available in June 2001 in paper and CD format.

Key indicators of family farming units 2000

	Gross production value (thousand HUF)							Total
	-50	51-100	101-200	201-500	501-1000	1001-5000	5001-	
Number of farms (thousand)	114345	196094	250285	213398	88722	83150	12390	958384
Share of farms (percent)	11,9	20,5	26,1	22,3	9,3	8,7	1,3	100,0
Share in gross production value (percent)	0,7	2,9	7,2	13,1	12,3	32,9	30,9	100,0
Per one farming unit								
arable land (hectares)	0,39	0,36	0,53	1,2	3,0	9,55	40,33	2,75
vineyard (hectares)	0,09	0,13	0,17	0,30	0,59	1,01	2,33	0,30
orchard (hectares)	0,1	0,07	0,04	0,05	0,11	0,28	1,13	0,11
cattle (heads)	0,00	0,00	1,00	1,37	2,38	5,76	25,97	5,05
pig (heads)	1,00	1,51	2,24	4,03	7,79	14,12	46,44	5,01
horse (heads)	1,00	1,25	1,51	1,75	1,82	2,12	3,53	1,88
sheep (heads)	2,09	3,39	4,92	8,68	16,30	52,02	272,23	39,03
poultry (heads)	6,72	10,43	18,37	28,86	32,08	43,46	1700,20	43,38