

Agricultural Census, 2001 & Agricultural Holding Structure Survey, 2016

**Agricultural Statistics Department
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Content

2001 Census of Agriculture

- Purpose
- Coverage
- Method
- Organization
- Publicity of the census
- Application
- Characteristics of questionnaires
- Evaluation of the results, data processing and analysis

Content

2016 Agricultural Holding Structure Survey

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- Coverage
- Method
- Preparatory work
- Organization
- Application
- Characteristics of questionnaire
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Agricultural Censuses

Aim in general is:

- To collect data that cannot be collected through current statistics:
 - size and type of agricultural holdings,
 - land tenure type,
 - number of parcels,
 - fertilizer and pesticide usage,
 - household composition and employment
- To provide a frame for the sample surveys
- To provide data to use as benchmarks for and reconciliation of current agricultural statistics

Seven censuses of agriculture were conducted in Turkey

- 1927
- 1950
- 1963
- 1970
- 1980
- 1991
- 2001

These censuses have different coverage and methods according to period they were conducted

2001 CENSUS OF AGRICULTURE

-The latest census of agriculture in Turkey-

PURPOSE

Beside the general purposes of censuses, with 2001 Census of Agriculture it was aimed

- to make preparation to EU harmonisation
- and improve the agricultural statistics

Therefore 2001 AC covered three studies

Questionnaires used in 2001 Census of Agriculture

- Agricultural Holding List
- Village General Information Questionnaire
- Agricultural Holdings (Households) Questionnaire

Coverage

1. Agricultural Holding List

All the villages and centers of province and districts with population less than 25 000

2. Village General Information Survey

All the villages and centers of province and districts with population less than 25 000

3. Agricultural Holdings (Households) Survey

- All the agricultural holdings in all the villages and centers of province and districts with population less than 5 000 were covered
- Complete enumeration method was used in centers of provinces and districts with population of 5 001 and over by using restricts related to size of land and livestock ownership

Method

1. Agricultural Holding List

It was filled in by muhtars (village headmen) based on households by complete enumeration method

2. Village General Information Questionnaire

It was filled in by getting the information related to settlement from muhtars (village headmen) of the settlements by enumerators using complete enumeration method

3. Agricultural Holdings (Households) Questionnaire

Around 50 000 agricultural holdings were surveyed by face-to-face interviews with sampled 10 agricultural holdings from each of the 5 000 villages selected by sampling

APPLICATION: Field work

2001 Census of Agriculture was conducted in two stages

In the first stage:

- Muhtars were invited to centres of provinces and districts to fill in Village General Information Survey
- Also, Agricultural Holdings List which was filled in by muhtars were received from muhtars by control

In the second stage:

- Sample settlements were visited
- Agricultural Holdings (Households) Questionnaire was filled in with 10 agricultural holdings (households) that were selected by systematic sampling from each settlement

Characteristics of Agricultural Holdings (households) Questionnaire

Agricultural Holdings (Households) Questionnaire was designed regarding recommended variables and definitions in FAO 2000 World Agriculture Census Programme and EU regulations about structure of agricultural holdings

- Legal status of holding,
- Other activities of holding together with crop production and animal husbandry,
- Use of the land under agricultural holding's tenure

- Land covered by crops, type of crop, whether the crop is grown as a first sown or second and more sown, type of seed, production system, insurance and contract status of the crop information based on parcel
- Irrigation state of the land based on parcel
- Yield of products
- Type of fertilizer and pesticide used based on parcel
- Machine and equipment of the holding on the census day
- Livestock
- Yield of animal product and consumption of fodder
- Number of buildings and other constructions which the holding is using for agricultural purposes

- Household composition and employment
- Number of seasonal and permanent workers working in the holding
- Amount of credit obtained by the holding
- The most important three crops produced in the holding by type of valuation
- Usage types of products
- Other indicators related to structure of the holding (soil and land problems affecting agricultural production negatively, co-operatives or unions of which the holding is member, type of handicraft that is carried out for commercial purposes etc.)

Agricultural Holdings (Households) Questionnaire

- After completion of data entry, tabulation and analysis started and comparison with other disseminated data was done
- The data sources for comparison are:
 - 1980 and 1991 Census of Agriculture Agricultural Holdings (Households) Survey Results
 - 2001 Current Agriculture Statistics

- By 2001 Census of Agriculture Agricultural Holdings (Households) Survey, 3 076 650 agricultural holdings were determined and preliminary results were announced on 31.07.2003 as a News Bulletin, final results were announced in December 2004 as a publication and a CD

2016 AGRICULTURAL HOLDING STRUCTURE SURVEY

PURPOSE

- Obtaining consistent and comparable data harmonized with EU norms
- Determining physical sizes of farms
- Determining typology of agricultural holdings
- Classifying agricultural holdings according to their physical and economic sizes for typology

The purpose of typology:

- To provide needed data for Common Agricultural Policy (CAP)
- To analyse agricultural holdings by economic criteria
- To make comparison among EU countries for different typology classes

COVERAGE

Geographic coverage: Turkey

Coverage of agricultural holdings:

All agricultural holdings in 2014 Agricultural Production Registry System (APRS) which updated by TURKVET (Cattle,sheep and goats registry system)

METHOD

- All agricultural holdings in the frame were classified by their economic size. Agricultural holdings with economic size over 250 000 euro were fully surveyed
- Other agricultural holdings were classified by type of farming and selected by using stratified sampling technique
- Public Agricultural Holdings engaged in crop production and/or cattle, sheep and goats husbandry were fully surveyed

PREPARATORY WORK

The preparatory work for Agricultural Holding Structure Survey that is carried out within EU harmonisation work was started by considering the list of characteristics presented by EU for Farm Structure Survey (FSS)

Regulation (EC) 1166/2008

Frame formation

- Bovine, sheep and goat part (TURKVET) updated by 2016 register which was converted to the register on the base of agricultural holding by address code
- Address of the agricultural holdings were updated by using National Address Database

APPLICATION: Field work

- Field work of 2016 Agricultural Holding Structure Survey was done by TurkStat enumerators and supervisors
- Face to face survey with tablets
- Field work started on October 2016 and was completed in February 2017

CHARACTERISTICS

- Questionnaire was prepared in order to determine physical sizes of the agricultural holdings by considering national and international needs
- All the variables in the list of characteristics presented by EU for Farm Structure Survey were included

Variables in the questionnaire

There are 8 sections in the questionnaire:

Section 1- Legal status and general characteristics of the holding

- Legal status of holding (single household, partnership of two or more households and corporation, co-operative, Public Agricultural Holdings),
- Landscape property
- Agricultural activity type

Section 2- Land Tenure and Use

- Type of tenure of the agricultural land, permanent meadow and pasture and number of parcels
- Land use of the holding,

Section 3- Crop production of the holding

- Area of field crops, fruits, vegetables and fodder crops grown by the holding based on the crop,
- Production system and whether the crop is grown as a first sown or second and more sown,
- Irrigated area

Section 4- Irrigation

- Irrigable area
- Irrigation system and sources

Section 5- Tillage methods, soil cover and fertilizer use

- Tillage methods used
- Soil cover on outdoor arable land
- Manure application techniques and area

Section 6- Livestock

- Number of bovine, buffaloes, sheep and goats existing in the holding on the reference day by age and sex
- Number of equidae, poultry, bees
- Number of organic animals

Section 7- Other gainful activities of the holding

- List of other gainful activities
 - Provision of health, social or educational services
 - Tourism, accommodation and other leisure activities
 - Handicraft
 - Processing of farm products
 - Production of renewable energy
 - Wood processing (e.g. sawing)
 - Aquaculture
 - Contractual work (using production means of the holding)
 - Forestry
 - Other

Section 8- Household composition and employment

- Demographic features and employment status of head and members of household (total number of household members of agricultural holding by sex, the number of days and average hours worked in a day etc.),
- Number of non-family regular agricultural employees employed in the agricultural holding and the number of days worked in a year (by age and sex),
- Number of seasonal workers in the agricultural holding in the production year.

Evaluation of the results, data processing and analysis

- Validation rules for internal consistency was loaded to the tablets
- Data entry was done by TurkStat regional enumerators by tablets
- Consistency was controlled by TurkStat regional supervisors
- Additional control reports were also loaded to the system by using SAS
- Non response rate was controlled

- After completion of the analysis, the calculation of expansion factors were completed
- The tabulation and reporting of the results were completed
- Results are compared with 2001 Census and current statistics
- The results were published on April 2018 as ratio in News Bulletin and metadata and Quality Report are available at web site.

THANK YOU VERY MUCH FOR YOUR ATTENTION