

Farm Structure Survey 2009/2010 Survey on agricultural production methods 2009/2010

National Methodological Report (NMR)

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FARM STRUCTURE SURVEY 2009/2010 SURVEY ON AGRICULTURAL PRODUCTION METHODS 2009/2010

NATIONAL METHODOLOGICAL REPORT

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SUMMARY

HISTORY

Agricultural census 2010 – Farm Structure Survey and Survey on Agricultural Production Methods (FSS & SAPM 2010) was conducted during autumn 2010. The survey was focused on obtaining detailed and complex information on the whole scale of the Czech agriculture, i.e. about the size and structure of agricultural holdings, about their equipment, specialisation of their production and other gainful activities. This time the survey questionnaire contained a new part called Survey on agricultural production methods (SAPM), which covered variables such as tillage methods used, animal housing capacity, establishing of landscape features, etc. A large part of the SAPM variables was surveyed for the first time; it referred especially to variables bringing information on the environmental impact of agriculture (e.g. the above-mentioned establishing of landscape features or tillage methods, soil cover in winter, methods of manure application, water consumption for irrigation, etc.). The survey also served as a data source for update of the Farm Register, which is a basis for yearly surveys in agriculture.

In 2003, 2005 a 2007, Farm Structure Surveys were organized as sample surveys.

At the turn of the millennium the CZSO mounted the above-mentioned Agrocensus 2000. The census was implemented in the framework of the World Census of Agriculture arranged by the Food and Agriculture Organisation of the United Nations (FAO) regularly at the turn of every decade. The aim of Agrocensus 2000 was to identify all farming entities and to record basic data on their importance, position, economic size, production activity and production and other functions. In addition to the traditional information on agricultural production activities, characteristics of follow-up activities related to the environment, rural space and agro-tourism became available. The indicators measured in Agrocensus 2000 were related to 30 September 2000, mostly in line with EU legislation. The basic criterion for an agricultural entity to be included in Agrocensus 2000 was 1 (one) hectare of utilised agricultural land plus a number of sub-criteria. The survey produced a file of approximately 56 000 active reporting units that met pre-set thresholds at that time. These units became a basis for updates of the Farm Register.

The transformation processes under way in the Czech Republic after 1989 brought principal and deep changes in ownership and forms of holdings in Czech agriculture. There was only partial information about these changes, provided by routine statistical surveys and departmental sample surveys. Comprehensive information on the new structure of Czech agriculture and on its enterprise basis seen from the angle of legal forms of enterprise, ownership, size of agricultural holdings, labour, material and technical supplies and the like, was missing. To collect this information was set as an objective of Agrocensus 1995 organised at the time when the transformation processes already progressed a lot, but were not yet completed. The main purpose of the census was also to check the enterprises included in the Business Register for activity, in other words to ascertain the actual number of enterprises engaged in agricultural production as principal activity. This ad hoc statistical survey Agrocensus 1995 was administered by the CZSO throughout the Czech Republic in compliance with Act No. 89/1995 Coll. on the State Statistical Service and conducted on 1 – 31 October 1995 in cooperation with local authorities of state administration, regional bodies of the CZSO, and regional departments of the Agrarian Chamber and the Ministry of Agriculture of the Czech Republic.

In 1969 Czechoslovakia re-established its proper membership of FAO, assuming the duty to participate in activities of this international organisation. This also implied to take part in large-extent extraordinary actions such as the world censuses of agriculture (WCA) that constituted a key comprehensive source of information on world agriculture. The former Czechoslovakia participated in the WCAs in 1970, 1980 and 1990. The Federal Statistical Office of that time cooperating with the Czech Statistical Office and the Slovak Statistical Office ensured WCA requirements mostly through normal, exhaustive statistical surveys run by state statistical authorities and geodetic and cartographic bodies, reclassifying and processing the survey results in accordance with FAO principles.

In 1930 an extensive census of agricultural works was mounted by the State Statistical Institute of that time. The census had a wide coverage and its processing was also very detailed, carried out at

many various breakdowns of the agricultural works. The results were brought out in tens of volumes of the then journal “Československá statistika” (Czechoslovak Statistics). The census had been prepared in accordance with the world census of agricultural works organized in the same year by the International Institute of Agriculture in Rome.

AGRICULTURAL CENSUS AND SAPM 2010 REFERENCE PERIOD

- **Labour force variables:** 1 October 2009 – 30 September 2010
- **Land use variables:** 30 September 2010^{*)}
- **Livestock variables:** 30 September 2010^{*)}
- **SAPM variables:** 30 September 2010
- **Support for rural development variables:** last three years (2008 – 2010)

^{*)} The sample of the FSS & SAPM 2010 included agricultural holdings involved in the sample of the Areas under Crops Census survey (reference period of 31 May). In such case the data from the Areas under Crops Census were used for the purpose of FSS & SAPM 2010 as the acreages do not change during the vegetation period. The same approach was applied also for holdings involved in the sample for Livestock Census survey (reference period of 1 April 2010) if no changes in numbers of livestock occurred from April till September (reduction of response burden). On the contrary, if the holdings noticed changes in numbers of livestock from April till September, they recorded actual numbers of livestock as at 30 September. Detailed explanation: most of the holdings were surveyed by interviewers and they were trained to ask those holdings whether the changes in numbers of livestock occurred or not. And holdings surveyed by post received the informative letter in which was explained how they deal with livestock section. In conclusion, the livestock data from April were confirmed or recorded the actual ones (as at September) during the census. Areas under Crops Census and Livestock Census despite their traditional names are conducted as sample surveys.

COVERAGE

The survey included agricultural holdings reaching following threshold values as at the day of generating of the population:

- Area above 5 ha of utilised agricultural area (own or rented);
- or more than 1 ha of orchards; or 3,500 m² of vineyards;
- or sum of area for vegetable, strawberries and flowers above 2,500 m²
- Or breeding of 5 heads of cattle, or 10 heads of pigs, or 10 heads of sheep and goats;
- Or 100 heads of poultry including ostriches.

SURVEY ORGANISATION

The survey consisted of four principal phases, following/overlapping each other:

- Phase 1: Preparation, organisation, coordination, monitoring
- Phase 2: Field survey
- Phase 3: Processing
- Phase 4: Data validation, dissemination

The Agricultural, Forestry and Environmental Statistics Department of the Czech Statistical Office functioned as a project administration unit; it was responsible for the organisation, coordination, financial and methodological support, time schedule keeping, competence management and problem solving during the whole survey.

DATA COLLECTION AND DATA ENTRY

Staff of the CZSO regional offices was responsible for collection of the data in the field and data entry to a specialised programme. The Statistical Data Processing Department in České Budějovice collected the data using postal communication (in some cases e-mail communication). They dealt with data entry using optical character recognition.

DATA PROCESSING, ANALYSIS AND ESTIMATION

All the data obtained using the two above-mentioned ways of data entry were processed consequently by the Statistical Data Processing Dept. Particular exported files were merged and checked using checking rules. All the mistakes found were consulted with respondents immediately and corrected afterwards. After all corrections needed, the database was sent to the Agricultural Statistics Dept. for further steps of checking. The resulting data were used for developing output tables containing FSS & SAPM results.

1 CONTACTS

| | |
|---------------------------|--|
| Contact organisation | Czech Statistical Office |
| Contact organisation unit | Agricultural, Forestry and Environmental Statistics Department |
| Contact name | 1) Jiří Hrbek 2) Klára Čermáková 3) Marcela Máčová 4) Dominik Satran |
| Contact person function | 1) Director of the Department, project leader 2) Methodology, dissemination, database management 3) Methodology, dissemination 4) Database management |
| Contact mail address | Czech Statistical Office Agricultural, Forestry and Environmental Statistics Department Na padesátém 81 100 82 Praha 10 |
| Contact email address | jiri.hrbek@czso.cz klara.cermakova@czso.cz marcela.macova@czso.cz dominik.satran@czso.cz |
| Contact phone number | +420 274 05 2331 +420 274 05 4087 +420 274 05 4088 +420 274 05 3117 |

2 SURVEY METHODOLOGY

2.1 National legislation

Act No. 89/1995 Coll., on the State Statistical Service, as amended, is the basic national legislation related to statistical surveys.

The national legislation deals neither with scope, coverage and periodicity of surveys nor with reference period for data collection.

IDENTIFICATION, PROTECTION AND OBLIGATIONS OF ENUMERATORS

Paragraph 13 of the Act lays down that agricultural censuses are conducted by the CZSO or by the Ministry of Agriculture of the Czech Republic in cooperation with municipalities. Municipalities ensure data collection on questionnaires received from the authority carrying out the census; this authority covers the relevant expenses incurred by the municipalities. Persons authorized by the municipality to conduct agricultural censuses are allowed to become familiar with individual data needed to fulfil their tasks; they must, however, neither make these data public nor communicate them to anyone but employees of the authority conducting the census.

RIGHT OF ACCESS TO ADMINISTRATIVE DATA

Pursuant to Paragraph 9 of the Act, authorities carrying out the State Statistical Service are allowed to use administrative data obtained or gathered on the basis of special legislation by the ministries and other administrative authorities. The ministries and other administrative authorities are obliged to provide such data to the authorities carrying out the State Statistical Service on their request, in time and free of charge, unless provided otherwise in the Act.

CONFIDENTIALITY

Paragraph 16 of the Act lays down that it is incumbent to keep secrecy and protect individual data. Employees of the State Statistical Services and other natural persons processing statistical surveys or collecting data for agricultural censuses shall be subject to secrecy of individual data they get familiar with. To this end, they must be sworn to secrecy when entering their employment or before they start the relevant work.

Agrocensus 2010 was carried out on the basis of the Programme of Statistical Surveys for the year 2010, which was published as an annex to the chapter 125 of the Decree No. 386/2009 Coll. in the Collection of Laws of the Czech Republic, of 13 November 2009. The agricultural holding shall supply all requested data; they are appealed in written form or personally by the interviewers.

2.2 Characteristics and reference period

Main groups of characteristics collected for national purposes are shown in Table 1. The purpose of data collection and name of the requesting organisation is included.

Table 1: National characteristics

| Group of national characteristics collected | Purpose of collection | Requested by |
|---|---|---|
| Detailed acreage of utilised agricultural area by cadastre | Classification of holdings by UAA size | NSI |
| Detailed breakdown of machinery and equipment | Computation of energy statistics and energy accounts (Environmental Accounts) | Research Institute of Agricultural technology |
| Services for agriculture | Verification of agricultural holdings activities before inclusion into Farm Register | NSI |
| Processed amount of own products, providing services (CZK thous.) | Compilation of Economic Accounts for Agriculture | NSI |
| Own consumption (self-consumption of own products) | Compilation of Economic Accounts for Agriculture | NSI |
| Principal agricultural production of the holding by selected activities (CZ-NACE) | Verification of definition of agricultural holdings (see Annex I of the Regulation (EC) No.1166/2008) | NSI |

Table 2 shows non-significant characteristics not surveyed in the Czech Republic in the frame of FSS & SAPM 2010. Not existed characteristics are listed in Table 3.

Table 2: Non-significant characteristics

| | Crop | % of UAA | | | % of total area | | | % specific crop's output of total crop output | | |
|---------------|--|----------|----------|----------|-----------------|----------|----------|---|----------|----------|
| | | FSS 2003 | FSS 2005 | FSS 2007 | FSS 2003 | FSS 2005 | FSS 2007 | EAA 2003 | EAA 2005 | EAA 2007 |
| 2.01.01.02 | Durum wheat | 0.0122 | : | : | 0.0084 | : | : | NA | NA | NA |
| 2.01.06.10 | Hemp | 0.0004 | 0.0030 | : | 0.0003 | : | : | NA | NA | NA |
| 2.01.07.01.02 | Fresh vegetables, melons and strawberries - market gardening | : | 0.0148 | 0.0095 | : | 0.0103 | 0.0067 | NA | NA | NA |
| 2.01.07.02 | Fresh vegetables, melons and strawberries - under glass or other (accessible) protective cover | 0.0062 | 0.0021 | 0.0024 | 0.0043 | 0.0014 | 0.0017 | NA | NA | NA |
| 2.01.08.02 | Flowers and ornamental plants - under glass or other (accessible) protective cover | 0.0018 | 0.0031 | 0.0029 | 0.0012 | 0.0022 | 0.0021 | NA | NA | NA |
| 2.04.01.03 | Nuts | 0.0013 | 0.0013 | : | 0.0009 | 0.0009 | : | NA | 0.0001 | NA |
| 2.04.06 | Other permanent crops | 0.1403 | 0.0531 | 0.0059 | 0.0964 | 0.0368 | 0.0041 | NA | NA | NA |

: not surveyed

NA not available

Table 3: Not existed characteristics

| FARM STRUCTURE SURVEY | |
|--|--|
| 1.03.01.03 | UAA for share farming or other modes |
| 1.03.02.03.09 | Citrus plantations on which organic farming production methods according to national or European Community rules are either applied and certified or under conversion to be certified: |
| 1.03.02.03.10 | Olive plantations on which organic farming production methods according to national or European Community rules are either applied and certified or under conversion to be certified: |
| 2.01.01.07 | Rice |
| 2.01.06.01 | Tobacco |
| 2.01.06.03 | Cotton |
| 2.01.06.11 | Other fibre crops |
| 2.04.01.01.02 | Fruit of subtropical climate zones |
| 2.04.02 | Citrus plantations |
| 2.04.03 | Olive plantations |
| 2.04.03.01 | Normally producing table olives |
| 2.04.03.02 | Normally producing olives for oil production |
| 2.04.04.04 | Raisins |
| 2.04.07 | Permanent crops under glass |
| SURVEY OF AGRICULTURAL PRODUCTION METHODS | |
| 4.02 | Common land grazing |
| 4.02.01 | Total number of animals grazing on common land |
| 4.02.02 | Amount of time for which animals are grazing on common land |
| 8.01.02.03 | Rice (irrigated area) |
| 8.01.02.14 | Citrus plantations (irrigated area) |
| 8.01.02.15 | Olive plantations (irrigated area) |

Reference period for FSS & SAPM 2010 was defined as follows:

- **Labour force variables:** 1 October 2009 – 30 September 2010
- **Land use variables:** 30 September 2010^{*)}
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Organisation of FSS & SAPM 2010 was based on the Handbook CPSA/SB/652. rev. 6; i.e. pullets were included in laying hens according the following definition: „*Growing pullets before point of lay are included if they have been stalled up as laying hens. Cull hens are also included. All hens which have started to lay are included, whether the eggs are for consumption or for breeding. Breeding cocks for laying hens are included*“.

According to the EU definitions, hop is included in crops grown on arable land. In the Czech Republic, however, hop or hop-gardens are reported as permanent crops according to the Law No 252/1997 Coll., on agriculture, as amended. Historically, the total utilised agricultural area consists of arable land and following permanent crops: hop-gardens, vineyards, kitchen gardens, orchards, and permanent grassland. Due to this different approach data on total arable area and permanent crops in EUROSTAT database differ from the data published on the national level.

According to the EU definition, nurseries are included in permanent crops. In the Czech Republic, on the contrary, nurseries are reported as crops grown on arable land. Due to this fact data in EUROSTAT database differ from the data published on the national level likewise.

Because of above-mentioned differences in hop-gardens and nurseries definitions, data on share of arable land out of planned crop rotation in EUROSTAT database and in national publication differ as well.

Questionnaire used in the survey together with methodological notes is included in the National Methodological Report, Annex I.

2.3 Survey organisation

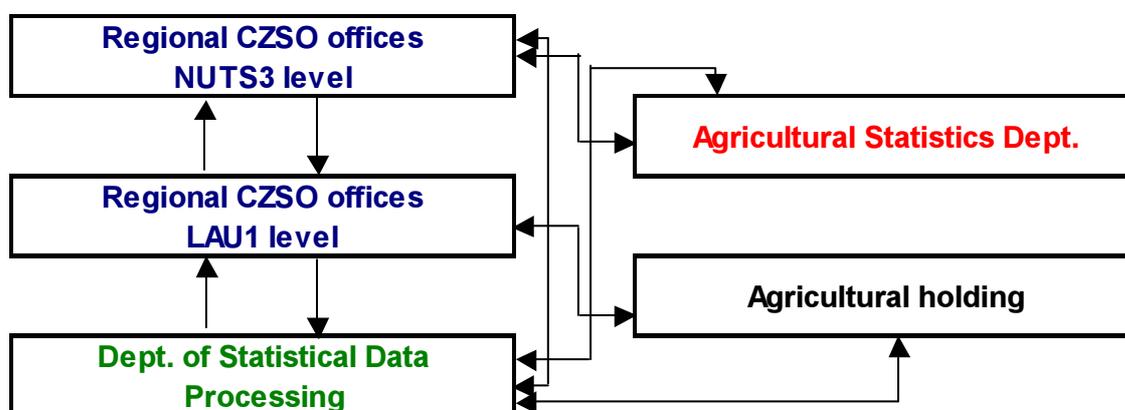
The Agricultural, Forestry and Environmental Statistics Department of the Czech Statistical Office was responsible for the preparation, course, adherence to methodology, organisation as well as financial aspects of FSS. Its staff responsible for FSS closely cooperated not only with employees of other CZSO departments (Department of Statistical Data Processing – preparation of questionnaire for OCR; Unit for Statistical Territorial Units – generating of geographical coordinates of agricultural holdings etc.) but also with other institutions: Ministry of Agriculture of the Czech Republic, Institute of Agricultural Economics and Information, Research Institute of Agricultural Engineering, Agrarian Chamber of the Czech Republic and other agricultural organisations.

As for the methodology and organisation of the survey, the Agricultural Statistics Dept. administered the survey in regions and districts via the CZSO regional offices. Regional CZSO employees together with external interviewers ensured realization of the survey in holdings of natural persons (with Standard Gross Margin up to 50 000 €). Dept. of Statistical Data Processing was responsible for data collection for holdings of legal persons and holdings of natural persons (with Standard Gross Margin above 50 000 €) and also for processing, software development and output tables developing.

Three main groups of staff on different levels of the CZSO (Agricultural Statistics Dept., Dept. of Statistical Data Processing, and the CZSO regional offices) participated in the survey in order to ensure its smooth course. Within their competence, the groups were fully responsible for allocated tasks and for successful progress of the survey. The survey was divided into four phases, following/overlapping each other:

- Phase 1: Preparation, organisation, coordination, monitoring
- Phase 2: Field survey
- Phase 3: Processing
- Phase 4: Data validation, dissemination

Figure 1: Processing technology



Agricultural, Forestry and Environmental Statistics Department (AGRI Dept.)

The director of the department was fully responsible for the course of the survey.

The staff was responsible for the preparation, course and organisation of the survey, coordination of the work in accordance with the methodological instructions, continuous monitoring of the work, as well as financial matters. The staff generated the population (equals sample), delivered it to Regional CZSO offices and Dept. of Statistical Data Processing, received net DBF file and check tables, delivered anonymized database to the Institute of Agricultural Economics and Information (which dealt with classification of holdings according to their type of farming and economic size and with SO 2007 computation), delivered list of agricultural holdings for geographical coordinates generating to the Unit for Statistical Territorial Units, converted the database to Eurofarm database structure and finally delivered the database of anonymized individual data to Eurostat.

Regional CZSO offices

Heads of particular CZSO regional offices were responsible for smooth course of the survey in the field.

The staff of regional offices at NUTS3 level distributed the sample to particular offices at LAU1 level and after field surveys they made batches of questionnaires for each LAU1 level office and sent them to the Dept. of Statistical Data Processing. During the field survey they provided methodological support.

The staff of regional offices at LAU1 level dealt with recruitment and training of the interviewers, distribution of questionnaires to the interviewers and their methodological support, collecting of filled-in questionnaires, their coding and registering, data processing (data entry and checking using Dataman Windows programme, taking data from Areas under Crop Census as at 31 May 2010 database (Osev 3-01) and Livestock Census as at 1 April database (Zem 1-01) and delivering of the batches to the NUTS3 level regional offices.

Department of Statistical Data Processing (DATA PROCESSING Dept.)

The director of the Dept. of Statistical Data Processing was responsible for smooth course of FSS & SAPM 2010 processing in the department as well as for centralised data processing.

Dept. of Statistical Data Processing ensured centralised processing of questionnaires using an optical character reading method (OCR method). The same department carried out checks for correctness and completeness of the data files at the national level (including checks for double counting of ID numbers).

The staff was involved in processing and delivery of programmes used and databases Osev 3-01 and Zem 1-01 to regional offices, questionnaire collection from legal persons and large natural persons, processing of questionnaires using OCR, creating an archive, scanned data checking and corrections, selected logical controls, data conversion to Dataman Windows, check runs and corrections, printing check tables, developing net DBF file and its delivery to the Agricultural Statistics Dept.

PILOT SURVEY

As similar surveys were conducted in 2003, 2005 a 2007, there was no pilot survey organized in the frame of FSS & SAPM 2010. During the survey, all the staff involved fully utilised the experience obtained in previous runs of the survey.

PROMOTION OF THE SURVEY

Informing reporting units on the survey was supported both by the Czech Statistical Office and by municipalities (which placed information leaflets on their information boards).

The Czech Statistical Office informed about the survey by means of its website (www.czso.cz) and every regional office of the CZSO (there are 14 regional offices) published information on the survey on its regional website.

The website displayed press information together with leaflets for the reporting units surveyed by interviewing, a web-link to Eurostat publication – SIF – showing aggregated outputs on EU level.

Holdings of legal persons recorded in the Farm Register were sent a cover letter informing them about the FSS 2010 survey.

2.4 Calendar (overview of work progress)

As the Farm Structure Survey was conducted for several time and there were experienced workers in the staff, no delays occurred during preparation and implementation of the survey.

| Period | Working Unit | Activity |
|-----------------|--------------|---|
| 2009 | | |
| February | AGRI Dept. | - submitting a request for including the survey in the decree concerning the Programme of Statistical Survey, Decree No. 386/2009 Coll. |
| March - April | AGRI Dept. | - variables specification as set down in Regulation (EC) No 1166/2008 of the European Parliament and of the Council - preparation of the questionnaire (consultations with experts) |
| May | AGRI Dept. | - request on national budget (co-financing) for AGC 2010 and SAPM 2010 surveys - completion of questionnaire for AGC 2010 and SAPM 2010 - inclusion of survey description to the Programme of Statistical Survey |
| 2010 | | |
| January - April | AGRI Dept. | - specification of budget items from the CZSO financial resources - specification of financial and personal provision of the survey - methodological notes for the survey |
| May | AGRI Dept. | - coordination meeting for the AGC 2010 field survey - compilation of information leaflet for the respondents (14 types; one for each region) |

| Period | Working Unit | Activity |
|----------------------|--|---|
| June - July | AGRI Dept. | <ul style="list-style-type: none"> - generating population = sample of respondents - training of the regional staff and Statistical Data Processing Department staff - minutes of the meeting including specification of the contracts for temporary workers and information letters for the respondents - ordering of consumables - printing of questionnaires, methodological notes and identification cards for the interviewers - input technical project |
| | Regional offices | <ul style="list-style-type: none"> - sending accompanying letters to municipal offices - recruitment of interviewers |
| August | Regional offices | <ul style="list-style-type: none"> - training of interviewers at regional offices - completing contracts for work with the interviewers |
| | Data Processing Dept. | <ul style="list-style-type: none"> - programming enter data, checking, control tables |
| | AGRI Dept. | <ul style="list-style-type: none"> - working out Instruction for financial and wage records |
| September - December | Regional offices | <ul style="list-style-type: none"> - press release concerning the survey (promotion on CZSO internet pages) - field survey - methodological support of the interviewers, checking of collected questionnaires - collecting questionnaires from legal persons, checking and coding - entering the data to Dataman Windows |
| | AGRI Dept. | <ul style="list-style-type: none"> - press release concerning the survey (promotion on CZSO internet pages) - monitoring of the survey, methodological support - report on non-response - sending SO 2007 coefficients to Eurostat (December) |
| | Data Processing Dept. | <ul style="list-style-type: none"> - sending questionnaires to respondents by regular mail - processing of filled-in questionnaires (completion checking, coding, scanning) |
| December | IAEI ¹⁾ | <ul style="list-style-type: none"> - computation of Standard Output coefficients (SO 2007) |
| 2011 | | |
| January - February | Regional offices + Data Processing Dept. | <ul style="list-style-type: none"> - finishing of additional non-response survey |
| March - April | AGRI Dept. | <ul style="list-style-type: none"> - completion of output technical project - processing of programme for conversion of AGC 2010 outputs into Eurofarm database program |
| | Data Processing Dept. | <ul style="list-style-type: none"> - completion of questionnaire processing - output tables programming |
| May - June | Data Processing Dept. | <ul style="list-style-type: none"> - generating of check tables - delivery of net database do Agricultural Statistics Dept. |
| | AGRI Dept. | <ul style="list-style-type: none"> - conversion of AGC 2010 outputs into Eurofarm database structure - checking of database using validation rules developed by Eurostat |

| Period | Working Unit | Activity |
|-----------------|--|--|
| July - November | Data Processing Dept. | - processing output tables to be disseminated |
| | AGRI Dept. | - Farm Register update - dissemination of AGC 2010 results - press conference |
| | Unit for Statistical Territorial | - generating of geographical coordinates of agricultural holdings - anonymization criteria for solitary holdings in a grid - solving discrepancies in location of holdings |
| | IAEI ¹⁾ | - elaboration of Farm Typology (SO, type of farming, economic size) |
| December | AGRI Dept. | - sending microdata to Eurostat - preparation of AGC 2010 publication - analytical evaluation (part 3) |
| | Unit for Statistical Territorial Units | - final file including geographical coordinates - methodology of geographical coordinates generating |
| 2012 | | |
| January - March | AGRI Dept. | - microdata validation - elaboration of National Methodological Report - checking the control tables - dissemination of AGC 2010 results |
| April - June | AGRI Dept. | - follow-up dissemination of AGC 2010 results |

¹⁾ IAEI - Institute of Agricultural Economics and Information

2.5 Population and frame

POPULATION, DEFINITION OF THE AGRICULTURAL HOLDING

The target group for FSS & SAPM 2010 consists of agricultural holdings reaching threshold levels for the survey.

In line with the Regulation (EC) No 1166/2008 of the European Parliament and of the Council, of 19 November 2008, on farm structure surveys and the survey on agricultural production methods and repealing Council Regulation (EEC) No 571/88, agricultural holding is defined as a single unit, both technically and economically, which has a single management and which undertakes agricultural activities based on the common statistical classification of economic activities (CZ-NACE), either as its primary or secondary activity. Among these activities belong: growing of non-perennial crops (01.1); growing of perennial crops (01.2) including wine production from self-produced grapes; plant propagation (01.3); animal production (01.4); mixed farming (01.5); support activities to agriculture and post-harvest crop activities (01.6). Agricultural holdings raising other animals (01.49) are excluded, except ones raising and breeding ostriches, emus and rabbits, and dealing with bee-keeping and production of honey and beeswax. Furthermore, all agricultural holdings carrying out activities under 01.6 of CZ-NACE are excluded, except holdings exclusively maintaining agricultural land in good agricultural and environmental condition.

A threshold above 1 ha of utilised agricultural area was set for FSS & SAPM 2010. The threshold was set up at such level, that only small agricultural holdings representing up to 2% of utilised agricultural area and up to 2% of livestock units¹ were excluded (see Article 3.2 of the

¹ Livestock unit means a standard measurement unit that allows the aggregation of the various categories of livestock in order to enable them to be compared. 1 Livestock unit represents 500 kg of live weight of an animal.

Regulation No 1166/2008). Due to this fact, data obtained in FSS & SAPM 2010 are not fully comparable with the data from previous surveys FSS 2003, 2005, and 2007.

Threshold values for FSS & SAPM 2010:

- Area above 5 ha of utilised agricultural area (own or rented);
- Or more than 1 ha of orchards, or 3,500 m² of vineyards;
- Or sum of area for vegetable, strawberries and flowers above 2,500 m²;
- Or breeding of 5 heads of cattle, or 10 heads of pigs, or 10 heads of sheep and goats;
- Or 100 heads of poultry including ostriches.

Table 4: Confirmation of meeting requirements as set in Article 3.2

| | Farm Register (before sampling) | FSS & SAPM 2010 results | % of coverage |
|----------------------------------|------------------------------------|----------------------------|---------------|
| Utilised agricultural area (ha) | 3 538 825.73 | 3 483 500.03 | 98.4 |
| Livestock Units | 1 454 354.81 | 1 770 350.66 | 121.7 |
| Agricultural holding | 47 281 | 22 864 | x |
| Average acreage (ha per holding) | 74.85 | 152.36 | x |

FRAME

The frame for agricultural statistical surveys is based on the Farm register managed by the Agricultural Statistics Dept.

Threshold values for FSSs 2007, 2005 and 2003 equal to the ones used for including of the agricultural holding to the Farm Register:

- 1 ha of utilised agricultural land own or rented, or
- Area of 1 500 m² of intensive crops (orchards, vegetables, flowers), or
- 1 000 m² of vineyards, or 300 m² of greenhouses or hotbeds, or
- 1 head of cattle, or 2 heads of pigs, or 4 heads of sheep and goats, or
- 50 heads of poultry, or 100 heads of rabbits or fur animals.

The Farm Register is updated regularly. Data on livestock numbers and areas under crops are updated yearly after finishing particular statistical surveys. Data in the Farm Register are not subject to any quality control.

In addition, administrative sources are used for Farm Register update: (i) Land Parcel Information system (LPIS) and (ii) Animal Register. Table 5 and Table 6 compare data from the Farm Register and administrative sources.

Table 5: Comparison of sources – utilised agricultural area (ha)

| | Farm Register ¹⁾ | LPIS ²⁾ | Cadastre ³⁾ |
|--|-----------------------------|--------------------|------------------------|
| Utilised agricultural area, total | 3 538 826 | 3 537 328 | 4 233 501 |
| Arable land | 2 566 223 | 2 532 435 | 3 008 090 |
| Hop-gardens | 5 930 | 5 816 | 10 552 |
| Vineyards, total | 15 946 | 13 756 | 19 434 |
| Kitchen gardens | 1 527 | NA | 163 010 |
| Orchards | 21 784 | 21 652 | 46 556 |
| Permanent grassland, total | 927 358 | 955 965 | 985 859 |

Sources:

¹⁾ Czech Statistical Office (CZSO)

²⁾ Ministry of Agriculture

³⁾ Czech Office for Surveying, Mapping and Cadastre (COSMC) - administrative data source; the land is registered as agricultural land and its sub-categories irrespective whether it is utilised or not

Table 6: Comparison of sources – livestock (heads)

| | Farm Register ¹⁾ | Animal Register ²⁾ |
|---|-----------------------------|-------------------------------|
| Cattle, total | 1 349 096 | 1 390 239 |
| Cows, total | 549 262 | 545 132 |
| Dairy cows | 385 973 | 377 666 |
| Suckler cows, cull cows, cows for fattening | 163 289 | 167 133 |
| Pigs, total | 1 921 364 | 1 914 368 |
| Sheep, total | 188 255 | 246 382 |
| Goats, total | 20 702 | 29 110 |
| Horses, total³⁾ | 29 272 | 71 353 |
| Poultry, total | 25 418 647 | NA |
| Hens | 6 338 208 | 6 435 672 |

Sources:

¹⁾ Czech Statistical Office (CZSO)

²⁾ Ministry of Agriculture

³⁾ Different methodology

2.6 Survey design

The Farm Structure Survey and the Survey on Agricultural Production Methods was conducted as a census.

The Farm Register contained 47 281 agricultural holdings as at the day of generating population; equals sample. On the basis of threshold values (see Chapter 2.5), in total 26 908 agricultural holdings were selected. In total we have obtained data for 22 864 agricultural holdings which reached the threshold values for the survey.

At the turn of November/December 2010, we found in the preliminary data that the sum of UAA did not reach the required value of 98 % of the total UAA. During January and February, an additional survey was conducted in order to obtain data from the holdings that had not filled in the questionnaire before. The additional survey was successful and we met the above-mentioned requirement (see Chapter 2.5, Table 4: Confirmation of meeting requirements as set in Article 3.2). Consequently, the non-response ratio has decreased.

2.7 Sampling, data collection and data entry

2.7.1 Drawing the sample – for SAPM and/or OGA, if applicable

Both Survey on Agricultural Production Methods and Other Gainful Activities data collection were conducted as censuses.

2.7.2 Data collection and data entry

DATA COLLECTION METHODS

Combination of two data collection methods was applied: (i) by regular mail, (ii) by interviewers.

Regional CZSO offices were responsible for data collection by a net of external interviewers. In case a holding refused to respond, a CZSO regional office employee asked the holding again personally or by phone. Phone calls were used mostly for reminder calls and for data correctness checking.

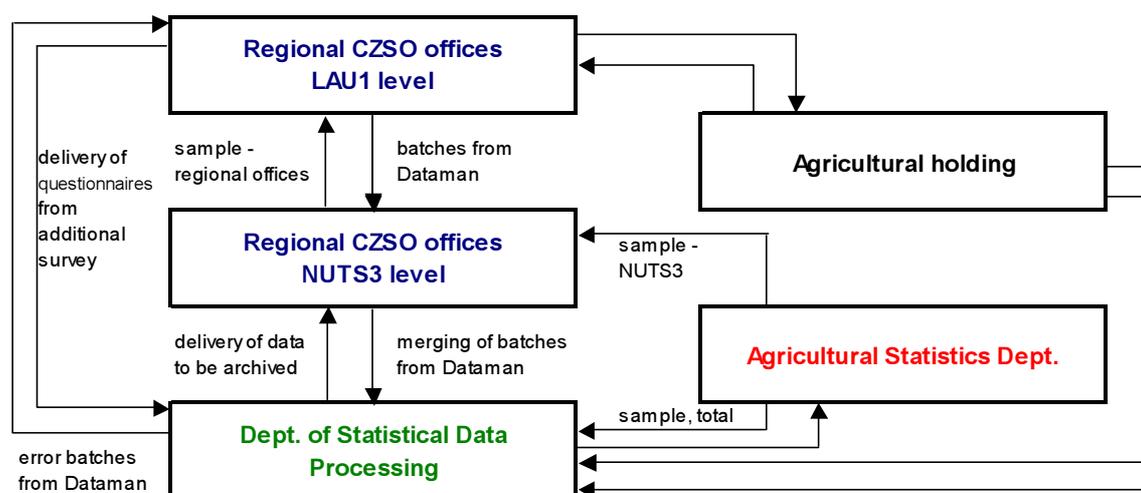
The Department of Statistical Data Processing collected the data by regular mail, in several cases electronically (per e-mail).

DATA ENTRY MODES

The regional CZSO offices (LAU1 level) staff converted the data to an electronic form using Dataman Windows programme; they also included the data from Osev 3-01 and Zem 1-01 databases (Areas under Crops Census as at 31 May 2010 and Livestock Census as at 1 April 2010, respectively). The data were sent to Regional CZSO offices at NUTS3 level, where the batches for particular LAU1 offices were merged; the resulting files for each NUTS3 level were sent to the Department of Statistical Data Processing for further centralised processing.

The Department of Statistical Data Processing used the OCR method for data processing; i.e. the questionnaires were scanned and the errors were recognized and corrected. Further step included Dataman Windows processing. The data were checked using checking rules set down in the technical project.

Figure 2: Data flow diagram



2.7.3 Use of administrative data sources

The characteristics concerning rural development support were not surveyed in frame of FSS & SAPM 2010. These data were obtained using administrative data source, namely State Agricultural Intervention Fund, which is a recognized payment agency – mediator of financial support from the EU and national sources.

ADMINISTRATIVE SOURCE INFORMATION

Name: State Agricultural Intervention Fund

Description: The State Agricultural Intervention Fund is an accredited paying agency - an administrator of financial subsidies both from the European Union and from the national financial funds. Within the scope of the Common Agricultural Policy, the financial subsidy is granted from the European Agricultural Guarantee Fund (EAGF) and for a current programming period (2007 – 2013) also from the European Agricultural Fund for Rural Development (EAFRD) and the European Fisheries Fund (EFF). The new Programme for Rural Development (PRV) drawing out financial resources from the EAFRD replaces current Horizontal Rural Development Plan (HRDP) and the Operational Programme for Rural Development and Multifunctional Agriculture (OP RVMZ).

Legislation frame: The State Agricultural Intervention Fund is a legal entity with residence in Prague and its activities are regulated by the Law No. 256/2000 Coll., concerning the State Agricultural Intervention Fund, as amended by the Law No. 128/2003 Coll. and the Law No. 85/2004 Coll. and the implementing regulations in the form of the Czech Government Order.

Definition of agricultural holding: includes all the subjects requesting for grants.

Purpose of the administrative source use: mainly decrease of the respondents' burden.

Table 7: List of characteristics taken from administrative data sources

| Code | Characteristics |
|------------|--|
| 7.01. | Holding benefited from one of the following rural development measures during the last 3 years |
| 7.01.01. | Use of advisory services |
| 7.01.02. | Modernisation of agricultural holdings |
| 7.01.03. | Adding value to agricultural and forestry products |
| 7.01.04. | Meeting standards based on Community legislation |
| 7.01.05. | Participation of farmers in food quality schemes |
| 7.01.06. | Natura 2000 payments for agricultural area |
| 7.01.07. | Payments linked to the Water Framework Directive |
| 7.01.08. | Agri-environment payments |
| 7.01.08.01 | of which in the framework of organic farming |
| 7.01.09. | Animal welfare payments |
| 7.01.10. | Diversification into non-agricultural activities |
| 7.01.11. | Encouragement of tourism activities |

2.8 Specific topics

2.8.1 Common Land

The concept of Common Land is not applied in the Czech Republic, i.e. such characteristics were included in the UAA neither in AGC 2010 nor in preceding surveys.

2.8.2 Geographical reference of the holding

DATA SOURCES AND THEIR DESCRIPTION

- (i) List of addresses of agricultural holdings with the headquarter = place of the holding's agricultural production (16 028 holdings); *Source: Agrocensus 2010*

Agricultural holdings, for which headquarter is the same as the place where the main part or all the holding's agricultural production takes place. In these cases, the geographical coordinates were matched with the headquarter address.

- (ii) List of addresses of agricultural holdings with the headquarter ≠ place of the holding's agricultural production (6 836 holdings); *Source: Agrocensus 2010*

Agricultural holdings, for which headquarter differs from the place where the main part or all the holding's agricultural production takes place. In these cases, the geographical coordinates (of centroids) were matched with the dominant territorial technical unit² (TTU), i.e. TTU where the largest parcel is placed.

- (iii) Coordinates of address places (geographical layer of address points); *Source: Register of Enumeration Districts and Buildings, as at 1.11.2011.*

Coordinates of address points represent position of address point of the particular address place situated into the centre of the ground plan of the building or to its edge in the position of entrance. The coordinates are primarily available in the S-JTSK national coordination system (System of unified trigonometric cadastral net; obligatory for the map products in the Czech Republic).

- (iv) Coordinates of territorial technical units centroids (geographical layer); *Source: Register of Enumeration Districts and Buildings (REDB), as at 1.11.2011.*

Coordinates of TTU centroids represent coordinates of the point situated in the centre of built-up area of the main settlement indicated in the reference map. The coordinates are primarily available in the S-JTSK national coordination system.

- (v) Borders of LAU1 districts (geographical layer); *Source: REDB, as at 1.11.2011.*

Borders/polygons of LAU1 districts, with the accuracy of ZM 1:10 000; corrected as for exact localisation of address places and buildings.

- (vi) Regular spatial grid of 5x5 min in the ETRS89 system (geographical layer); *Source: REDB /GIS*

Regular spatial grid with the cell size of 5x5 min in ETRS89 coordinates system (geographical coordinates) generated for the area of the Czech Republic with the origin in the point represented by geographical coordinates 0° and 90°. Geometrical centres of particular cells were used for matching anonymized coordinates with agricultural holdings, whose original position was situated within given cell.

In 70% of cases, address points were used for determination of geographical coordinates as the coordinates had been already available in Register of Enumeration Districts and Buildings (INSPIRE data source).

APPLICATION TOOLS

MS Visual FoxPro (matching coordinates with the address or dominant TTU of the holding);

Arc/Info 9.3, arcView 3.3 (transformation and anonymization of the coordinates, table operations, geographical data processing, spatial analyses, map outputs, process modelling);

MS Excel (development and completion of output tables).

² A Territorial Technical Unit is a unit defined as cadastral territory or part of cadastral territory separated by the border of a basic settlement unit, i.e. by the border of a municipality, city district or city part. A municipality (LAU2) consists of one or more Territorial Technical Units.

PROCESS DESCRIPTION

- (i) Matching building identification (IDOB), address (IDADR) and address points coordinators to agricultural holdings with a headquarter = place of the holding's agricultural production, using combination of part of municipality, street number, street name (this method was not applicable for 103 holdings; in such cases the coordinates of "relevance centre" of dominant TTU was used).
- (ii) Matching of TTU centroids coordinates and holdings whose headquarter differs from place of the holding's agricultural production using dominant TTU code;
- (iii) Generating of anonymization 5x5 min space grid (ETRS89);
- (iv) Conversion of auxiliary geographical layers (coordinates) from the S-JTSK projection system into ETRS89 system (geographical coordinates) using reference transformation equation developed by the Czech Office for Surveying, Mapping and Cadastre (COSMC) (resulting accuracy 1-3 m);
- (v) First step of anonymization – matching coordinates of the centres of cells of the anonymization grid (Spatial join of the grid and address/TTU points);
- (vi) Checking of resulting anonymized position of the holding as concerns correct LAU1 affiliation;
- (vii) Correction of coordinates for the correct matching of LAU1 (2 669 holdings): matching with suitable neighbour cell centre (note that in this case the generalisation of original accuracy might exceed 5 min) (Point Distance ArclInfo, manual correction);

There were 457 holdings whose coordinates had been shifted by more than 5 minutes. In such cases new reference points were chosen: centres of polygons defined as intersect of (i) the LAU1 polygons and (ii) grid cells in which respective holdings are situated.

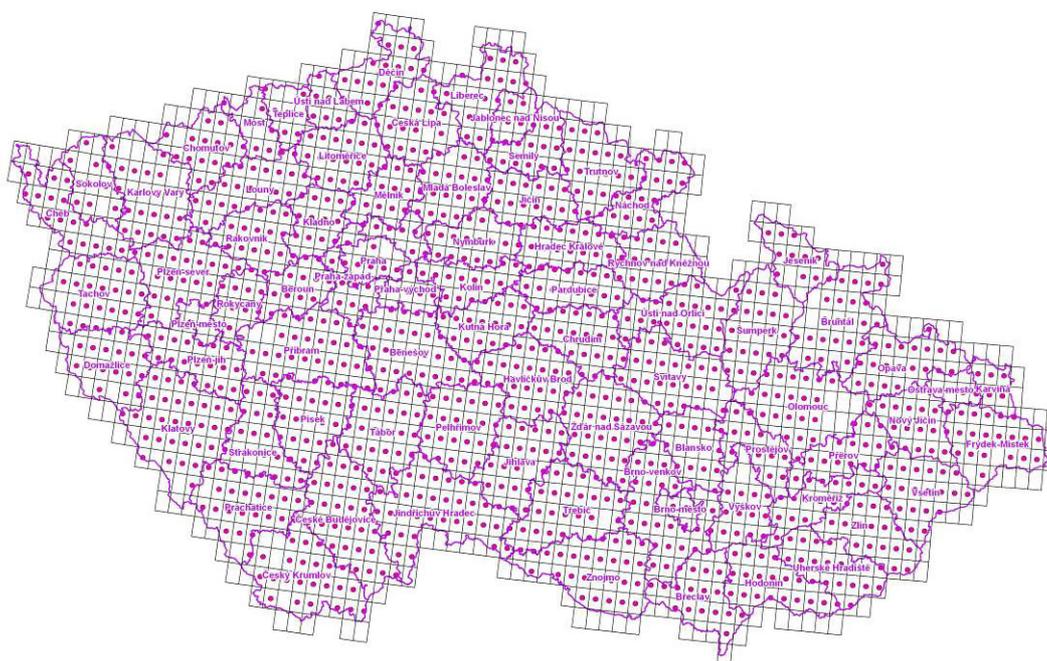
- (viii) Identification of solitary holdings, i.e. less than four holdings per cell;
- (ix) Second step of anonymization – matching coordinates (173 holdings): matching of coordinates of neighbour cell centre to achieve a minimum of four holdings in each cell;

To ensure anonymization of the solitary holdings, we followed the rules set down by the Regulation (EC) No. 1166/2008 of European Parliament and of the Council (Article 2, point e) as well as by the national legislation (see Chapter 5).

"After completing of data processing statistical information can be released if following conditions are fulfilled: the statistical information was produced as an aggregation of at least three subjects of natural person or legal person. Furthermore, sum of shares for the two greatest individual values for natural or legal persons cannot exceed 70 % of the total aggregation. In case of exceeding this value the data is treated as confidential by the competent department of the CZSO. This department shall produce an aggregation on a superior level or apply another solution to ensure confidentiality. The data can be released or provided to a third party on a contractual basis if the dominant subject provides a written approval to the CZSO." (Internal directive of the CZSO No 5/2008, art. 2, par. 2).

- (x) Completion of output tables, developing of geographical layers and of map project.

Figure 3: Agricultural holdings after their geographical coordinates' anonymization



Footnote: Data validation showed that in few cases resulting coordinates did not correspond with NUTS codes. From this reason, coordinates for two points were corrected manually:

- Coordinate 17.2076°E, 48.8756°N was moved 0.0002° up north to 17.2076°E, 48.8758°N because of its position at the borderline with Slovakia.
- Coordinate 18.2071° E, 49.2921 N was moved 0.0006° up north to 18.2071°E, 49.2927°N because of its position on the Slovak side of the border.

2.8.3 Volume of water used for irrigation

The question on the volume of water used to irrigation on the holding was included in the questionnaire; i.e. the information was obtained directly from the respondents.

The data were surveyed according to the Handbook CPSA/SB/652, rev.6; i.e. volume of water used for irrigation of kitchen gardens and crops under cover was not included.

2.8.4 Other issues

The Farm Register was updated on the basis of FSS & SAPM 2010 results. However, the Farm Register covers agricultural holdings where the agricultural area utilised for farming is one hectare or more (see Article 3, par. 1a), 1b) of Regulation (EC) No. 1166/2008 of European Parliament and of the Council). The average area per holding is 77.43 ha.

| | Farm Register (before sampling) | Farm Register (after update on the basis FSS & SAPM results) |
|----------------------------------|------------------------------------|--|
| Utilised agricultural area (ha) | 3 538 825.73 | 3 540 561.99 |
| Agricultural holding | 47 281 | 45 727 |
| Average acreage (ha per holding) | 74.85 | 77.43 |

2.9 Response-burden policy

To keep the non-response rate as low as possible, a variety of measures was applied. In case of uncompleted questionnaires, each staff member was obliged to contact the particular respondent and complete the data. The same procedure was used when any discrepancies were found during the statistical data processing (e.g. breaking the check rules).

The agricultural holdings that obtain the questionnaires by regular post are usually less willing to provide data in comparison with holdings surveyed by interviewers. Such holdings were asked for the data by phone, and, in case of further negative response, they were contacted by interviewers.

In the frame of non-response issues, an emphasis was put on obtaining data especially from large holdings.

Although the Law 89/1995 Coll., on the State Statistical Service, sets down rules for penalties to be applied in case of not providing requested data, the CZSO has never applied this approach.

3 ACCURACY AND RELIABILITY OF THE DATA COLLECTED

3.1 Data processing, analysis and estimation

3.1.1 Estimation and sampling errors – for SAPM and/or OGA, if applicable

Survey on Agricultural Production Methods as well as Other Gainful Activity data collection was conducted as full census.

3.1.2 Non sampling errors

COVERAGE ERRORS

- (i) **Under-coverage:** during the survey, in total 67 newly established agricultural holdings were found. Such holdings were not involved in the sample (i.e. they were not recorded in the Farm Register) but they were surveyed as they belonged to the target population.
- (ii) **Over-coverage:** according to the FSS & SAPM 2010 results, in total 3 474 agricultural holdings do not belong to the target population as they either do not reach the threshold levels for the survey or have temporarily stopped their agricultural activity.
- (iii) **Contact errors:** Exceptionally, correct address of the agricultural holding was not available due to moving of the holding.

NON-RESPONSE ERRORS

- (i) **Unit non-response:** 570 subjects → 2.12 % (see Table 11)
- (ii) **Item non-response:** unidentifiable (not recorded) → final item non-response is 0.

3.1.3 Methods for handling missing or incorrect data items

In case of imperfections in the data (e.g. missing data, item non-response) the respondents were contacted by phone and the data were completed. There was no reason to use any imputation technique for missing data.

Corrections of processed data were made by the Dept. of Agricultural Statistics as experts on survey methodology or by the Dept. of Statistical Data Processing (after their consultation with Dept. of Agricultural Statistics).

3.1.4 Control of the data

There was a multi-stage control process applied, starting with (i) basic controls in the field during the collection of questionnaires by interviewers, followed with (ii) controls at questionnaire delivery by external interviewers at the CZSO regional offices, than (iii) controls during the processing (such as logic checks, checks for completeness, linkage to nomenclatures, duplicities, etc.), and, finally, validation controls by the Dept. of Agricultural Statistics.

- (i) **Interviewers** had to check visually completeness of the filled-in questionnaire, checksums and linkages between particular sections. When an inadequacy was found on that level, the respondent was contacted again and the data was added or corrected.

- (ii) **Staff of the CZSO regional offices** controlled the questionnaires upon their takeover from interviewers. The data was afterwards entered to the Dataman Windows programme, where basic check rules were set up. The datasets were sent to Dept. of Statistical Data Processing, where the validation was performed.
- (iii) During processing at the **Dept. of Statistical Data Processing**, questionnaires were thoroughly checked. Data digitalisation process included various limit conditions and logic checks which were applied to the data. Technical project for inputs clearly defined the checks, which could have been of two kinds: (a) informative and (b) binding. Binding controls had to be verified and corrected and, if needed, explained and commented. Data control procedure was considerably time consuming. Firstly, scanner staff carried out optical check of scanned questionnaires whether numerical figures and codes were fetched properly. Cramped data was corrected and verified after careful checks. Controlled data was transferred to Dataman programme and a check run was started.

Dept. of Statistical Data Processing programmed automatic check tables for the most important indicators (number of reporting units broken down by legal form; agricultural land; main categories of animals; labour force). Thanks to them, data was compared to the data from the previous survey on the national level; it was also checked whether no mistake in digit places occurred (data in 100s instead of in 1000s, etc.) during the processing.

Dept. of Agricultural Statistics converted the data to Eurofarm database format and checked the data again using validation rules developed by Eurostat (DSM validation rules).

3.2 Evaluation of results

Table 8 and Table 9 show comparison of FSS & SAPM results with data from the “Areas under Crops Census as at 31 May 2010” survey. Table 10 compares FSS & SAPM with the “Livestock Census as at 1 April 2010” survey.

Table 8: Utilised agricultural area (ha)

| | Areas under Crops Census 31 May 2010 | FSS 2010 30 September 2010 | Differences +,- | Index FSS/Areas under Crops Census |
|--|--|-------------------------------|--------------------|--|
| Utilised agricultural area, total | 3 523 857 | 3 483 500 | -40 357 | 98.9 |
| Arable land | 2 540 471 | 2 513 846 | -26 625 | 99.0 |
| Hop-gardens | 6 479 | 5 748 | -731 | 88.7 |
| Vineyards, total | 16 686 | 14 347 | -2 338 | 86.0 |
| Kitchen gardens | 1 351 | 242 | -1 109 | 17.9 |
| Orchards | 22 776 | 20 499 | -2 277 | 90.0 |
| Permanent grassland, total | 936 095 | 928 818 | -7 277 | 99.2 |

Table 9: Arable land use (ha)

| | Areas under Crops Census 31 May 2010 | FSS 2010 30 September 2010 | Differences +,- | Index FSS/Areas under Crops Census |
|---|--|-------------------------------|--------------------|--|
| Arable land utilised, total | 2 540 471 | 2 513 846 | -26 625 | 99.0 |
| Cereals, total | 1 459 505 | 1 450 758 | -8 748 | 99.4 |
| Pulses for grain, total | 31 318 | 30 839 | -479 | 98.5 |
| Root crops, total | 84 492 | 82 437 | -2 056 | 97.6 |
| Industrial crops, total | 499 792 | 496 885 | -2 907 | 99.4 |
| Oleaginous | 490 420 | 487 798 | -2 622 | 99.5 |
| Other industrial crops (chicory root, rumex) | 1 494 | 1 324 | -171 | 88.6 |
| Arable fodder crops, total | 406 450 | 399 969 | -6 481 | 98.4 |
| Annual green fodder, total | 225 151 | 223 940 | -1 212 | 99.5 |
| Green maize | 181 939 | 180 600 | -1 339 | 99.3 |
| Perennial fodder crops | 181 299 | 176 029 | -5 270 | 97.1 |
| Vegetables, total | 8 583 | 8 592 | 10 | 100.1 |
| Strawberries, total | 495 | 504 | 9 | 101.8 |

Table 10: Livestock (number of heads)

| | Livestock Census 1 April 2010 | FSS 2010 30 September 2010 | Differences +,- | Index FSS/Livestock Census |
|--|----------------------------------|-------------------------------|--------------------|----------------------------------|
| Cattle, total | 1 349 286 | 1 328 925 | -20 361 | 98.5 |
| Cows, total | 551 245 | 549 587 | -1 658 | 99.7 |
| Dairy cows | 383 523 | 380 881 | -2 642 | 99.3 |
| Suckler cows, cull cows, cows for fattening | 167 722 | 168 706 | 984 | 100.6 |
| Pigs, total | 1 909 232 | 1 907 994 | -1 238 | 99.9 |
| Sheep, total | 196 913 | 184 032 | -12 881 | 93.5 |
| Goats, total | 21 709 | 16 900 | -4 809 | 77.8 |
| Horses, total | 29 887 | 25 034 | -4 853 | 83.8 |
| Donkeys and mules | 190 | 169 | -21 | 88.9 |
| Poultry, total | 24 838 435 | 25 322 881 | 484 446 | 102.0 |
| Hens | 6 215 840 | 6 063 056 | -152 784 | 97.5 |
| Chicken for breeding | 2 754 917 | 2 751 540 | -3 377 | 99.9 |
| Chicken for fattening | 14 884 344 | 15 292 456 | 408 112 | 102.7 |

Table 11: Information on surveyed units

| | FSS & SAPM 2010 |
|--|-----------------|
| Initial list of units | 26 908 |
| Number of holdings with completed questionnaires | 22 864 |
| Number of units under the thresholds applied | 1 128 |
| Holdings with ceased activities | 2 346 |
| Unit non-response | 570 |
| Refusals – not corrected | 203 |
| Refusals – corrected (imputed) | 0 |
| Number of records transferred to Eurostat | 22 864 |

COMMENTS ON MAJOR TRENDS FROM FSS 2007 TO FSS 2010

Table 12 shows major trends in the results from FSS 2007 and FSS & SAPM 2010 surveys. Changes exceeding 10% are explained in Comments. The crucial reason for these changes is using higher threshold values in 2010 in comparison with 2007 (see Chapter 2.2). Table 13 shows comparison after recalculation of the FSS 2007 data to FSS 2010 threshold values.

Table 12: Major trends between FSS 2007 and FSS 2010

| | FSS 2007 | FSS 2010 | Difference (%) | Comments |
|--|-----------|-----------|----------------|---|
| Number of holdings | 39 396 | 22 864 | -42.0 | Threshold values increased from 1 ha UAA in 2007 to 5 ha in 2010; number of holdings reaching threshold values decreased; integration of holdings |
| UAA (A_3_1), ha | 3 518 073 | 3 483 500 | -1.0 | |
| Arable land, ha | 2 570 882 | 2 517 489 | -2.1 | |
| Permanent grassland (B_3), ha | 909 175 | 928 818 | 2.2 | |
| Permanent crops (B_4), ha | 37 216 | 36 953 | -0.7 | |
| Wooded area (B_5_2), ha | 1 462 407 | 1 546 950 | 5.8 | |
| Unutilised Agricultural area (B_5_1), ha | 9 538 | 2 538 | -73.4 | Threshold values increased; changes in support policy |
| Fallow land (B_1_12_1 + B_1_12_2), ha | 15 704 | 37 460 | 138.5 | |
| LSU in LSU | 2 052 814 | 1 770 351 | -13.8 | Threshold values increased; phase-out of animal production |
| Cattle (C_2), head | 1 419 007 | 1 328 925 | -6.3 | |
| Family Labour force - in persons | 44 760 | 23 206 | -48.2 | Threshold values increased; number of (small) family farms decreased |
| Family Labour force - in AWU | 15 411 | 9 821 | -36.3 | |
| Non family labour force - in persons | 110 725 | 89 763 | -18.9 | Threshold values increased; structural changes: livestock production decrease, crop production increase |
| Non family labour force - in AWU | 97 245 | 80 556 | -17.2 | |

Table 13: Major trends between FSS 2007 and FSS 2010 (FSS 2007 data recalculated according to FSS 2010 threshold values)

| | FSS 2007 | FSS 2010 | Difference (%) | Comments |
|--|-----------|-----------|----------------|---|
| Number of holdings | 23 813 | 22 864 | -4.0 | |
| UAA (A_3_1), ha | 3 495 575 | 3 483 500 | -0.3 | |
| Arable land, ha | 2 561 440 | 2 517 489 | -1.7 | |
| Permanent grassland (B_3), ha | 897 594 | 928 818 | 3.5 | |
| Permanent crops (B_4), ha | 34 848 | 36 953 | 6.0 | |
| Wooded area (B_5_2), ha | 1 444 033 | 1 546 950 | 7.1 | |
| Unutilised Agricultural area (B_5_1), ha | 9 292 | 2 538 | -72.7 | Changes in support policy |
| Fallow land (B_1_12_1 + B_1_12_2), ha | 15 417 | 37 460 | 143.0 | |
| LSU in LSU | 2 039 151 | 1 770 351 | -13.2 | Phase-out of animal production |
| Cattle (C_2), head | 1 413 349 | 1 328 925 | -6.0 | |
| Family Labour force - in persons | 27 154 | 23 206 | -14.5 | Fewer family members involved in farm work; more part-time employment contracts |
| Family Labour force - in AWU | 11 107 | 9 821 | -11.6 | |
| Non family labour force - in persons | 109 808 | 89 763 | -18.3 | Structural changes: livestock production decrease, crop production increase |
| Non family labour force - in AWU | 96 564 | 80 556 | -16.6 | |

3.3 Data Revision Policy

No revisions of data were done since their dissemination until finishing the NMR. To enable comparison of trends in the period 2000 – 2010, basic data from previous FSSs were recalculated using threshold values for FSS & SAPM 2010.

4 ACCESSIBILITY AND PUNCTUALITY

4.1 Publications

REPORTS

The CZSO does not disseminate any preliminary results, only final ones are published. Quality documentation is not elaborated. During meetings regularly held, staff of the Dept. of Agricultural Statistics informs both regional CZSO staff and Dept. of Statistical Data Processing staff on working process steps and on quality of work done.

DATE OF ISSUING (DISSEMINATION)

On 26th August 2011, press conference focused on the FSS & SAPM results was held in the framework of the international agricultural fair “Země Živitelka” in České Budějovice. There were final results of the survey presented and the publication “Agrocensus 2010: Farm Structure Survey and Survey on Agricultural Production Methods” introduced.

Second publication “Agrocensus 2010 regions” was issued on 31st October 2011; final results in regional distribution (NUTS3, selected data for LAU1) are included there.

On 20th December 2011, a brochure “Agrocensus 2010: Farm Structure Survey and Survey on Agricultural Production Methods: selected data” was published. It presents a review of basic information on agriculture in the Czech Republic, on agricultural production in regions, and basic trends in development of agriculture during the last 10 years. This publication is in Czech only.

During the first half of 2012, third publication focused on analytical evaluation of agriculture and on farm typology will be issued.

All the publications are gratis (paid from a grant budget) both in paper version and electronic form at the website of the Czech Statistical Office (www.czso.cz). All publications (with the above-mentioned exception) are bilingual (Czech and English).

Table 14: Summary of disseminated results

| | Publication code | Issue date | Publication type | Results P - preliminary F - final | Publication content |
|---|------------------|------------------|------------------|---|---|
| Agrocensus 2010 Farm Structure Survey and Survey on Agricultural Production Methods | 2126-11 | 26 August 2011 | printed & www | F | basic information on FSS, methodological notes |
| Agrocensus 2010 regions Farm Structure Survey and Survey on Agricultural Production Methods | 2129-11 | 31 October 2011 | printed & www | F | basic information for regions, methodological notes |
| Agrocensus 2010 - Farm Structure Survey and Survey on Agricultural Production Methods (selected results) | 2136-11 | 20 December 2011 | printed & www | F | basic information on FSS |
| Agrocensus 2010 analytical evaluation Farm Structure Survey and Survey on Agricultural Production Methods | 2127-12 | 30 August 2012 | printed & www | F | major trends, comparison with the previous census 2000, farm typology |

The FSS results are not available in the on-line public database.

4.2 Timeliness and Punctuality

As mentioned in Chapter 4.1, final results were published as the first results.

Last day of reference period: 30 September 2010

Last day of field survey (additional non-response survey): 22 February 2011

Day of first publication of results: 26 August 2011

Time lag for first = final results: 330 days since the last day of reference period;
185 days since the last day of field survey.

5 CONFIDENTIALITY AND SECURITY

The rules for providing data by the CZSO to third parties are based on national and EU legislation, especially on the Act No. 89/1995 Coll., on the State Statistical Service, as amended.

Data confidentiality during dissemination is ensured by internal directive of the CZSO.

This directive states that statistical information can be released if it was produced as an aggregation of at least three subjects. Furthermore, sum of shares for the two greatest individual values cannot exceed 70 % of the total aggregation. In case of exceeding this value the data is treated as confidential. Aggregation on a superior level must be done or another solution must be applied. The data can be released or provided to a third party on a contractual basis if the dominant subject provides a written approval to the CZSO.

External users are not allowed to access micro-data for research purposes; for such cases, the CZSO produces “tailor-made” aggregations.

6 REFERENCES

Methodological notes available:

Eurostat, 2009: CPSA/SB/652. Rev. 6: Handbook on implementing the FSS and SAPM definitions. Luxembourg.

7 ANNEXES

Annex I: Questionnaire used in FSS & SAPM 2010, with methodological notes