

# CHINA - Agricultural Census 2016 - Metadata review

#### 1. Historical outline

The Agricultural Census (AC) 2016, to which the metadata review and data presented here refer, is the third agricultural census conducted in China after the ACs 1996 and 2006.

## 2. Legal basis and organization

### Legal framework

Statistical activities in China are regulated by the Statistics Law of the People's Republic of China, enacted in 1983, with amendments in 1996 and 2009. The AC 2016 was undertaken by virtue of Decree No. 473 of the State Council (the Regulations on the National Agricultural Census), of 23 August 2006. According to Article 8 of the Decree, the AC shall be conducted decennially in years ending with 6.

#### Institutional framework and international collaboration

The National Bureau of Statistics (NBS) is the agency responsible for conducting the ACs. Other state bodies and organizations concerned with the agricultural census were actively involved in accomplishing the works related to the AC 2016. The State Council, provinces, municipalities, prefectures, counties established the steering groups and Agricultural Census Offices (ACO) for the AC. ACOs were established in towns and townships. Agricultural census working groups were established in administrative villages and resident committees. In line with the Chinese fiscal system, the funds needed for the AC 2016 were shared by the central government and local governments at all levels and were included in the governmental budgets of the corresponding year, so that the funds could be appropriated on schedule and ensured.

# Census staff

Nearly four million census staff (including enumerators, supervisors and staff members) were involved in fieldwork activities. The number of enumerators and supervisors amounted to 3 953 776.

## 3. Reference date and period

Reference day: 31 December 2016 for inventory items such as livestock numbers.

**Reference period:** calendar year 2016 (from 1 January to 31 December 2016) for items such as labour, use of fertilizers, pesticides, agricultural machinery.

# 4. Enumeration period

Field data collection took place between 1 January to 31 March 2017. A community survey was conducted in May 2017. A Crop Field Survey (CFS) was carried out in several waives, depending on sowing time during April – May 2016 and August 2016.

# 5. Scope of the census and definition of the statistical unit

The **census scope** included agricultural activities (crop and animal production), forestry, aquaculture and capture fishery activities as well as agricultural services.

The *statistical units* of the AC 2016 were household-based agricultural operators, rural households holding a land contract with the state collective or possess the means of agricultural production, agricultural enterprises, villages committees and town and township governments.

### Community-level data

A community survey was conducted along with the census. Data were collected from village (resident) committees as well as towns and townships that were covered by the AC.

# 6. Census coverage Geographic coverage

The census covered the entire country, both urban and rural areas. Taiwan province, Hong Kong special administrative region and Macao special administrative region were not covered by the census.

#### Cut-off threshold and other exclusions

The following minimum size limits (MSLs) were used to define a household agricultural holding: (i) the holding operates arable land, garden plot and aquaculture water surface cover with an area of 0.1 mu (approximately 67 m²) or more within the year; (ii) the holding operates woodland and pasture cover with an area of 1 mu or more within the year; (iii) the holding keeps at least one large or medium livestock, such as cattle, horse, pig and sheep within the year; (iv) the holding keeps at least 20 heads of rabbits and other small animals and fowls within the year; (v)the value of sold and self-produced agricultural products in the whole year exceeds 1000 RMB Yuan; and (vi) the operating revenue from crop farming, forestry, livestock and aquaculture and fisheries service provided for other households exceeds 1000 RMB Yuan.

# 7. Methodology

# Methodological modality for conducting the census

The classical approach was used in the AC 2016. A community survey and a CFS were included in the AC 2016.

#### Relation to other censuses

The villages cadres and cadres of villager groups, the personnel who were engaged in accounting, statistics or population census or other trained personnel with high educational level served as enumerators.

#### Frame

The enumeration areas (EAs) are standard village-level administrative entities used by the NBS for statistics. The EAs were divided by the areas under the jurisdiction of the villager (resident) committees. Each EA was equipped with at least one census supervisor. Sub- EAs were set up under EAs.

#### Complete and/or sample enumeration methods

A combination of complete and sample enumeration was applied in the AC 2016. The census data were collected based on a complete enumeration basis. Sampling methods were used to collect data in the CFS.

## Sample design

For the CFS, five survey segments (with a size of 200 m x 200 m) in each EA were selected by simple random sampling, and the natural plots covered by the selected segments were surveyed. In total, about 20 000 EAs and 110 000 segments were covered in the CFS.

### Data collection methods

The information from the households and entities was collected using CAPI with PDA. The community survey was completed directly by the ACOs and relevant information was collected. More than 50000 staff members participated in the measurement of the sown area of grain, cotton and other staple crops using satellite remote sensing technology (the sown area was collected by a questionnaire at the same time).

### Questionnaire(s) and items covered

Six types of questionnaires were used in the AC 2016: (i) Household questionnaire<sup>1</sup>; (ii) Large-scale household questionnaire; (iii) Corporate questionnaire; (iv) Administrative village questionnaire; (v) Town and township questionnaire; and (vi) Crop field survey questionnaire.

# 8. Use of technology

CAPI with PDA was used for census data collection. Census results (in report form) were disseminated and are accessible online. Remote sensing images were used for crop data which were verified in the field with the CFS questionnaires.

# 9. Data processing

The software used for data processing, analysis and tabulations were the AC 2016 data processing system.

<sup>&</sup>lt;sup>1</sup> Household questionnaire included two types of enumeration objects. The first type was for the household engaged in agriculture, regardless of its location in cities, towns or villages while the other type was for the household living in village with confirmed(contracted) tenure of land, no matter whether or not it was engaged in agriculture.

## 10. Quality assurance

In accordance with international practice, the Steering Group Office of the AC carried out the post-enumeration survey (PES) for quality assessment. The PES results indicate that the percentage of coverage omission of registered households was 0.19 percent and the difference rate of the AC 2016 data was 0.4 percent, which fulfilled the designed data quality standard.

# 11. Data and metadata archiving

Data and metadata were archived and stored on the server using the tool of the AC 2016 data processing system.

#### 12. Data reconciliation

The AC 2016 results were used to revised the historical data on agriculture, animal husbandry and fishery. They were published in the China Statistical Yearbook 2018.

### 13. Dissemination of census results

The AC results (such as the "Communiqué of the Third National Agricultural Census of China") were disseminated through printed reports and online at: <a href="http://www.stats.gov.cn/tjsj/tjgb/nypcgb">http://www.stats.gov.cn/tjsj/tjgb/nypcgb</a>. The final census results were disseminated in December 2017.

#### 14. Data sources

**National Bureau of Statistics of China**. 2017. Communique of the Third National Agricultural Census of China (No.1). In: *National Bureau of Statistics of China* [online]. Beijing, China. <a href="http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171214\_1562740.html">http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171214\_1562740.html</a>

**National Bureau of Statistics of China**. 2017. Communique of the Third National Agricultural Census of China (No.2). In: *National Bureau of Statistics of China* [online]. Beijing, China. http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563539.html

**National Bureau of Statistics of China**. 2017. Communique of the Third National Agricultural Census of China (No.3). In: *National Bureau of Statistics of China* [online]. Beijing, China. <a href="http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563589.html">http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563589.html</a>

**National Bureau of Statistics of China**. 2017. Communique of the Third National Agricultural Census of China (No.4). In: *National Bureau of Statistics of China* [online]. Beijing, China. <a href="http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563634.html">http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563634.html</a>

**National Bureau of Statistics of China**. 2017. Communique of the Third National Agricultural Census of China (No.5). In: *National Bureau of Statistics of China* [online]. Beijing, China. <a href="http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563599.html">http://www.stats.gov.cn/tjsj/tjgb/nypcgb/qgnypcgb/201712/t20171215\_1563599.html</a>

## 15. Contact

National Bureau of Statistics of China

Address: No. 57, Yuetan Nanjie, Sanlihe, Xicheng District, Beijing 100826, China

Telephone: (+86) 10 68782869 E-mail: baoyu@stats.gov.cn

Website: http://www.stats.gov.cn/english/