



JAPAN – CENSUS OF AGRICULTURE AND FORESTRY 2020 – METADATA REVIEW

1. Historical outline

The census of agriculture and forestry (CAF) in Japan was first conducted in 1929 and the second in 1950. Census data collection for the forestry has been conducted since 1960 every ten years. Since 1995, censuses of agriculture and forestry have been conducted every five years. The metadata review and data presented here refers to the CAF 2020.

2. Legal basis and organization

Legal framework

The census was undertaken under the provision of the following acts:

- the Statistics Act, approved by the Cabinet (Cabinet Order No. 334 of 2008);
- Ordinance of the Ministry of Agriculture, Forestry and Fisheries (MAFF) No. 39 of 1969 on the Census of Agriculture and Forestry; and
- MAFF Notice No. 1071 of May 20, 2004.

Institutional framework and international collaboration

The CAF 2020 was organized and undertaken by MAFF. The national government entrusts the conduct of the CAF to prefectures and municipalities, which are local government organizations. The MAFF designed the CAF, developed the census forms and guidelines, supervised the prefectures and local statistics offices, tabulated the nationwide CAF results, and documented the reports. The census was funded through the national budget.

Census staff

Operations involving the CAF were carried out by a staff of 11 persons. Approximately 141 000 enumerators and 10 000 supervisors were engaged in the census operations to collect data from the agricultural and forestry management entities (for holding-level data collection). Fifty-eight branch offices were in charge of conducting and inspecting the survey of rural areas (for community-level data collection).

3. Reference date and period

Reference day: 1 February 2020 for inventory items such as livestock numbers.

Reference period: the past year (from 1 February 2019 to 31 January 2020) for farm workforce, land use, forestry items, etc.

4. Enumeration period

Data collection was carried out: (i) from 15 December 2019 to 28 February 2020 for the enumeration of agriculture and forestry management entities (AFMEs); and (ii) from 1 December 2019 to 30 June 2020 for the information data on rural areas from the municipalities and rural communities. Originally, data collection for communities was to be carried out from mid-December 2019 to the end of March 2020, but the period was extended to June 2020 due to the COVID-19 pandemic.

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

The **census scope** covered agricultural (crop and animal production) and forestry activities.

The **statistical unit** for the CAF 2020 was the AFME, defined as the entity that produces agriculture or forestry products or are engaged in agriculture or forestry operations under consignment agreements.

The AFMEs were divided into: (i) agriculture management entities (AMEs); and (ii) forestry management entities (FME). Among AMEs two types of entities were distinguished as individual management entities and organized management entities.

Community-level data

Along with the holding-level data collected from the AFMEs, the CAF collected information on rural areas from the municipalities and rural communities.

The survey key items collected were: (i) the total land area and forest area; (ii) status of conservation or utilization of local resources; and (iii) other items necessary to grasp the current status of rural areas.

The data was collected at the level of municipalities and rural communities.

6. Census coverage

Geographic coverage

The CAF 2020 covered the entire country.¹

Cut-off threshold and other exclusions

The following thresholds were established for the AFMEs:

- farming in which the cultivated land under management is over 30 ares (0.3 ha);
- farming above any of the following limits: (i) planted area for outdoor grown vegetables: 15 ares; (ii) cultivated area for greenhouse grown vegetables: 350 m²; (iii) cultivated area for fruit trees: 10 ares; (iv) cultivated area for outdoor green flowers: 10 ares; (v) cultivated area for greenhouse grown flowers: 250 m²; (vi) number of milking cows: one head; (vii) number of fattening cattle: one head; (viii) number of pigs: 15 head; (ix) number of hens: 150 head; (x) number of broiler chickens shipped each year: 1 000 head; or (xi) others: total sales of farm products equivalent to 500 000 yen or more during the one-year period up to the day before the survey period;
- farming operating under a consignment agreement;
- those conducting forestry operations based on rights to carry out silviculture and deforesting (excluding acquisition for the sole purpose of deforesting standing trees and bamboo) for an area of forest land of 3 ha or more (hereinafter referred to as "owned forest land")²;
- Consigned forestation or raw materials production or raw materials productions through the purchase of standing trees. For the raw materials production, the use of the term is limited to those who produced over 200 m³ of material within one year prior to the date of the survey.

7. Methodology

Methodological modality for conducting the census

The classical approach was used in the CAF 2020.

Relation to other censuses

The results of Survey on Agriculture and Forestry Management Entities was aggregated using the regional units of the survey of Rural Areas.

Frame

The frame for the CAF 2020 was built based on the list of AFMEs, which contains the names and addresses of individuals and organizations that are possible AFMEs. The previous Survey list was used after correcting it by administrative information.

Complete and/or sample enumeration methods

The CAF 2020 was conducted using complete enumeration.

Sample design

Not applicable.

Data collection method(s)

The information from the AFMEs was collected using the self-enumeration method. The census questionnaires were dropped off at the respondents' addresses and collected by the enumerators or completed on-line. However, questionnaires were sent by mail if enumerators had trouble visiting respondents due to the outbreak of livestock infectious disease, etc. For the survey of rural areas

¹ Due to the accident at TEPCO's Fukushima Daiichi Nuclear Power Station, the entire area is covered by the evacuation order area (as on 1 February 2019), referred to as the "evacuation order area". So, the AFME survey could not be conducted in Okuma and Futaba Town in Fukushima Prefecture. In the agricultural and mountain village area survey, the agricultural villages (75 villages) were included in the evacuation order area.

² The use of the term is limited to a management entity, which formulates "Forest management plan" or "Forest operation plan" or that has carried out forestation or deforestation while continually operating forestry for 5 years prior to the date of the survey

(municipalities) self-enumeration using the mail-out/mail-back method or on-line (via e-mail) was applied and for the survey of rural areas (rural communities) self-enumeration using the mail-out/mail-back method or on-line, and interview-enumeration was applied.

If it is difficult for enumerators to visit the respondents, telephone interview method was applied³. There was no effect of COVID-19 on the Survey on Agriculture and Forestry Management Entities and the Survey of rural areas (municipalities). Regarding the Survey of rural areas (rural communities), telephone interview was applied due to the effect of COVID-19.

Questionnaire(s) and items covered

Three questionnaires were used for CAF 2020 data collection: (i) a questionnaire for AFMEs; (ii) a questionnaire for rural areas (municipalities); and (iii) a questionnaire for rural areas (rural communities).

The CAF 2020 questionnaire was covered 15 out of 23 essential items recommended in the WCA 2020.⁴

8. Use of technology

Census results were disseminated and are accessible online.

9. Data processing

The program for validation and tabulation was developed and operated by the MAFF.

10. Quality assurance

Training for enumerators and municipalities, response to inquiries, reminder to non-respondent and outlier check were implemented to assure census data quality.

11. Data and metadata archiving

Metadata was published on the website

(<https://www.maff.go.jp/j/tokei/kouhyou/noucen/index.html#y>). Microdata was not anonymized or archived, and is not available for public use.

12. Data reconciliation

There was no reconciliation process of CAF 2020 data.

13. Dissemination of census results and microdata

The CAF 2020 results were disseminated through printed publications and online. A preliminary report for the CAF 2020 was released on 27 November 2020 and the final report was published in April 2021. Details will be released through sequential publications in due course.

The access of external users to the CAF 2020 microdata was not provided.

14. Data sources

Statistics of Japan. 2020. Summary of 2020 Agriculture and Forestry Census Results (Final Value). In: *Statistics of Japan* [online]. Tokyo, Japan. [Cited 23 June 2021].

<https://www.maff.go.jp/j/tokei/kouhyou/noucen/index.html#y>

15. Contact

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Email: <https://www.contactus.maff.go.jp/j/form/kanbo/koho/160807.html>

Website: <http://www.maff.go.jp/e/>

³ Data collection on AFMEs and on rural areas was conducted through the MAFF network: (i) AFMEs: prefectures – municipalities – supervisors – enumerators; (ii) rural areas (municipality questionnaire): regional coordination centres – enumerators; (iii) rural areas (rural communities' questionnaire): regional coordination centres/Outsourcing company – enumerators.

⁴ The following essential items were not covered: (i) 0108 Other economic activities of the household; (ii) 0302 Area of land actually irrigated: fully controlled and partially controlled irrigation; (iii) 0407 Number of permanent crop trees in scattered plantings (for each tree crop); (iv) 0411 Use of each type of fertilizer; (v) 0501 type of livestock system; (vi) 0503 Number of female breeding animals; (vii) 0601 Use of agricultural pesticides; (viii) 1201 Presence of aquaculture on the holding.