

1. HISTORICAL OUTLINE

The Republic of Korea participated in the decennial WCA, with agricultural censuses being conducted every ten years from 1960 to 1990 (in 1960, 1970, 1980 and 1990). Starting in 1995, agricultural censuses in Korea are undertaken every five years.¹ Starting in 2010, three censuses were consolidated into a single census, the Census of Agriculture, Forestry and Fisheries (CAFF), with a periodicity of five years. In addition, the Rural Community Survey, implemented since 1980, was carried out concurrently with the CAFF 2015.

2. LEGAL BASIS AND ORGANIZATION

Legal framework

The CAFF 2015 was carried out according to:

- the Statistics Act, wholly amended by Act No. 12844 of 19 November 2014, with further amendments;
- Designated statistics (Approval No. 10141);
- the Regulation of the Agriculture, Fishery and Forestry Census (Ordinance No. 502 of the Ministry of Strategy and Finance); and
- the Statistics Act (Article 5-3), on conducting the survey; according to Article 32, every citizen is required to answer the questions to the best of their knowledge.

Institutional framework and international collaboration

The CAFF 2015 was conducted under the authority of Statistics Korea and was executed through the local administration channel. The National Statistics Committee, the official statistical advisory body, deliberated the entire process. As a result, Statistics Korea organized a Committee of Experts, composed of representatives of government agencies and research institutes, to accomplish advisory functions in relation to the determination of survey items and census procedures.

Census staff

The CAFF fieldwork was carried out by 21 000 enumerators, temporarily recruited, under the supervision of 2 400 census officials from Statistics Korea and local governments.²

3. REFERENCE DATE AND PERIOD

Reference day: 1 December 2015 (“zero hour”), for items such as possession of land, livestock numbers and fishing vessels.

Reference periods:

- the year preceding the census (from 1 December 2014 to 30 November 2015), for items on forestry and fishing activities, crops, sales amounts, etc.
- the preceding five years (from 1 December 2010 to 30 November 2015), for some forestry-related items.

4. ENUMERATION PERIOD

The field data collection took place from 1 December to 15 December 2015.

5. SCOPE OF THE CENSUS AND DEFINITION OF THE STATISTICAL UNIT

The **census scope** covered agricultural activities (crop and animal production), forestry and fishery (aquaculture and capture fisheries activities). A community survey was carried out together with the CAFF 2015.

The following **statistical units** were distinguished in the CAFF: (i) the “agricultural household”;³ (ii) the “forestry household”; (iii) the “inland water fishery household”; and (iv) the “marine fishery household”.

The *agricultural household* was defined as a household directly engaged in agricultural activities and that meets the established thresholds, as specified in section 7.

6. GEOGRAPHIC COVERAGE

The CAFF covers the entire area within the scope of the administrative jurisdiction of the Republic of Korea⁴.

7. CUT-OFF THRESHOLD AND OTHER EXCLUSIONS

The following thresholds were applied for the agricultural households:

- a household directly cultivating an area of at least 0.1 ha of arable land, or land under permanent crops, at the time of enumeration (1 December 2015);
- a household of which sales of produced agricultural (crop or livestock) products amounted to at least KRW⁵ 1.2 million during the reference year (1 December 2014 – 30 November 2015);
- a household raising livestock worth at least KRW 1.2 million at the time of enumeration (1 December 2015).

Companies, associations and other legal entities were not included in the CAFF.

Specific thresholds were also established for forestry households, inland water fishery households and marine fishery households.⁶

¹ Since 2000, the Agricultural Census was integrated with the Fishery Census (and conducted simultaneously). Since 2005, the Agricultural Census was integrated with the Fishery Census and the Forestry Census (conducted simultaneously).

² To be qualified as an enumerator, one had to be 18 years old or more, sincere and devoted to census-taking and, if possible, have gained experience as an enumerator in the 2015 Population and Housing Census and reside within the enumeration district (ED).

³ The census results presented in the current publication concern agricultural households.

⁴ Ri (Administrative division).

⁵ Korean won.

⁶ For more details on forestry households, inland water fishery households and marine fishery households, refer to: <http://kosis.kr/publication/publicationThema.do>

8. METHODOLOGY

Methodological modality for conducting the census

The classical approach was used for the data collection of the 2015 CAFF.

Frame

The 2015 CAFF used the enumeration districts (EDs) of the Population and Housing Census (PHC) 2015.

Complete and/or sample enumeration methods

The 2015 CAFF was conducted on a complete enumeration basis.

Sample design (if sampling was used)

Not applicable.

Data collection methods

Data collection from households was conducted using mainly the PAPI method. The CAWI method was also used, although to a lesser extent. The community survey was conducted using the CAWI method.

Questionnaire(s)

Four questionnaires were used for data collection: (i) the agricultural and forestry household questionnaire; (ii) two questionnaires for the fishery sector (marine fisheries and inland water fisheries); and (iii) the rural community questionnaire.

The CAFF 2015 census questionnaires covered 14 of the 16⁷ core items recommended for the WCA 2010 round.

9. USE OF TECHNOLOGY

The CAWI method was applied in the collection of community survey data and, to some extent, the collection of census data from households. Scanning technology (using Intelligent Character Recognition (ICR) was applied for data capture of holdings' questionnaires. The census results were disseminated and are accessible online.

10. DATA PROCESSING AND ARCHIVING

To ensure accuracy and efficiency in data processing, the ICR data entry system was used together with the Editing and Imputation System. The CAFF 2010, the PHC 2015 and administrative data were used for imputation, and the CHAID algorithm was used to construct donor groups. The hot-deck method was also used for imputing missing data. SAS was used for analysis and tabulations. After dissemination of the CAFF's final results, the microdata were transferred to the central data centre operated by the Government and provided to users through the Micro-Data Integrated Service (MDIS).

11. CENSUS DATA QUALITY

To assess the quality of census data, a PES was conducted from 18 December 2015 to 24 December 2015. To ensure quality during field operations, consistency checks were implemented in the system.

12. DATA DISSEMINATION

Provisional results on the basic items were released before the publication of the final results in April 2016. More detailed census results (for each census item) were released in September 2016. The final report of the CAFF (including rural community data) was published in December 2016. Census results were disseminated online and are available at the Korean Statistical Information Service (KOSIS). Access to microdata is provided through the MDIS.

13. DATA SOURCES

Korean Statistical Information Service. 2019a. *Statistics by Theme* [online]. Seoul, Republic of Korea. [Cited 16 August 2019]. <http://kosis.kr/eng/>

Korean Statistical Information Service. 2019b. Statistical Database. In: *Korean Statistical Information Service* [online]. Seoul, Republic of Korea. [Cited 16 August 2019]. http://kosis.kr/eng/statisticsList/statisticsListIndex.do?menuId=M_01_01&vwcd=MT_ETITLE&parmTabId=M_01_01

Statistics Korea. 2016. *Final Results of the 2015 Census of Agriculture, Forestry and Fisheries. Census Publication.* (also available at <http://kostat.go.kr/portal/eng/pressReleases/2/6/index.board>).

14. CONTACT

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⁷ The following core items were not covered by the CAFF: (i) "Main purpose of production of the holding" and (ii) "Land tenure types on the holding".

THE REPUBLIC OF KOREA – CENSUS OF AGRICULTURE, FORESTRY AND FISHERIES 2015 – MAIN RESULTS

NUMBER OF HOLDINGS AND AREA, BY LAND TENURE		
	Holdings	Area (ha)
Total	1 088 518	1 309 787
Holdings without land	10 478	
Holdings operated under one tenure form	793 755	634 037
Ownership and owner-like possession	706 577	532 036
Rented from others	87 178	102 001
Holdings operated under two or more tenure forms	284 285	675 751

DISTRIBUTION OF HOLDINGS BY LAND SIZE CLASSES		
	Holdings	Area (ha)
Total	1 088 518	1 309 787
Holdings without land	10 478	
Holdings with land	1 078 040	1 309 787
Less than 0,1 ha	21 932	2 001
0,1–0,2 ha	164 082	25 348
0,2–0,3 ha	105 936	27 124
0,3–0,5 ha	194 284	76 932
0,5–0,7 ha	124 663	75 935
0,7–1,0 ha	130 702	113 132
1,0–1,5 ha	113 819	141 214
1,5–2,0 ha	71 292	124 485
2,0–2,5 ha	36 387	81 623
2,5–3,0 ha	26 248	71 903
3,0–4,0 ha	32 891	114 131
4,0–5,0 ha	16 439	74 109
5,0–6,0 ha	9 788	53 608
6,0–7,0 ha	8 347	54 690
7,0–10,0 ha	10 979	91 832
10,0 ha and over	10 251	181 720

LAND USE		
	Holdings	Area (ha)
Total	1 088 518	1 309 787
Total area of holdings	1 077 104	1 293 318
Land under temporary crops	950 540	1 104 310
Land under permanent crops	246 971	166 688
Uncultivated land	52 316	16 469

HOLDERS IN THE HOUSEHOLD SECTOR, BY SEX		
	Number	Area operated (ha)
Total	1 088 518	1 309 787
Male	894 446	1 184 677
Female	194 072	125 111

MEMBERS OF HOLDER'S HOUSEHOLD, BY SEX	
	Number
Total	2 569 387
Male	1 264 652
Female	1 304 735
Engaged in agricultural activities on the holding	1 984 185
Male	1 002 365
Female	981 820

HOLDINGS BY HOUSEHOLD SIZE	
	Number
Total	1 088 518
1 person	201 240
2–3 persons	722 694
4–5 persons	140 448
6–7 persons	22 712
8 persons and over	1 424

HOLDERS IN THE HOUSEHOLD SECTOR, BY SEX AND AGE	
	Number
Holder is an individual	1 088 518
Male	894 446
Female	194 072
20–24 years	111
Male	100
Female	11
25–34 years	4 043
Male	3 683
Female	360
35–44 years	38 555
Male	34 954
Female	3 601
45–54 years	152 468
Male	138 037
Female	14 431
55–64 years	311 336
Male	273 540
Female	37 796
65 years and over	582 005
Male	444 132
Female	137 873

LIVESTOCK		
	Holdings	Head
Total holdings with livestock	118 617	
Cattle	78 215	2 721 055
Cattle	75 205	2 396 640
Korean native cattle (Hanwoo)	73 619	2 272 590
Beef cattle	3 375	124 050
Cow	4 433	324 415
Goats	9 484	271 110
Pigs/swine	4 389	7 368 195
Poultry (1 000 head)	27 023	155 660
Chickens	26 250	147 350
Broilers	10 939	98 830
Layers	16 504	48 520
Ducks	1 698	8 307
Other animals	6 187	
Rabbits and hares	2 450	85 823
Deer	1 755	28 279
Other	2 305	
Insects		
Bees (hives)	7 185	849 706

MACHINERY AND EQUIPMENT USED ON THE HOLDING		
	Holdings	Units
Total tractors of all kinds	250 495	271 431
Combine harvesters	77 023	78 027
Other (machine-powered)	n.a.	
Power tiller	530 221	561 965
Multi-purpose cultivator	368 956	384 382
Grain dryer	310 677	336 202
Rice transplanter	177 039	178 896
Sprayer	57 906	59 919