

GLOBAL REVIEW OF AGRICULTURAL CENSUS METHODOLOGIES AND RESULTS (2006–2015)

World Programme
for the Census
of Agriculture 2010

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FOREWORD

The Food and Agriculture Organization of the United Nations (FAO) has been developing and advocating decennial World Programmes for the Census of Agriculture (WCAs) since 1950. The WCA 2010 was the ninth programme in the series. These programmes provide guidance to countries on collecting structural data using standard international concepts and definitions and the latest methodologies, and promote the availability of internationally comparable data on the structure of agriculture.

Member countries provide reports of their agricultural censuses to the FAO Statistics Division. At the end of each census round, the FAO Statistics Division reviews and assesses national census practices, methodologies and results, and summarizes the findings in separate publications under the Statistical Development Series (SDS). For the WCA 2010 round (2006–2015), these assessments have been presented in two separate publications. The first publication was the SDS 17, released in 2019, which was a compendium of census metadata and main results for a record number of 127 countries and territories. The SDS 18, i.e. this second publication, consists of two parts. The first part (Chapters 1 to 12) presents a methodological review of the WCA 2010 round. The second part (Chapter 13) presents internationally comparable data on selected variables characterizing the structure of agriculture.

The SDS 18 reviews the various census scopes and coverages, methodological modalities, enumeration and data collection methods, and types of census frames made available by 127 countries. The methodological review is expected to provide valuable lessons for future censuses and for further developments in the methodologies of agricultural censuses and surveys. The SDS 18, together with methodological publications from earlier WCA rounds, serves as a unique reference document for understanding the evolution of strategies and methods seen in national agricultural censuses.

In the second part, the publication presents an international comparison of census results on a number of key structural variables. Some of the variables – such as number and area of holdings, land tenure and holder gender – are not available in any other source. It is worth noting that cross-country comparison of statistics is arduous and challenging, and entails dealing with variations in the concepts, definitions and approaches followed by countries to suit their national requirements. The main limitations stem from time reference, definition of agricultural holding, scope and coverage of census and methodology. Furthermore, the conversion of national units of measurement to standard units brings additional challenges. This is observed, for example, when such conversion is applied to the distribution of holdings by land size, as it disturbs the size classes' limits. FAO has made its best efforts to ensure the most complete coverage of country data in the comparison tables. However, some tables lack completeness due to unavailability of information from some countries.

The FAO Statistics Division is pleased to bring out this unique publication, which offers both a distinctive panorama of country census practices across the regions of the world and an international view enabling comparison of the structural characteristics of national agricultural sectors. FAO hopes that this exceptional information will serve as useful reference material for national census agencies for census planning and implementation, and for policymakers and researchers who are interested in development of agriculture.

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The document was edited by Sarah Pasetto, while Anastasia Clafferty carried out the layout of the publication with support from Monica Umena and the OCCP design team. Olivier Lavagne d'Ortigue and Giulia Conchedda assisted with the preparation of maps, and Jude Anang provided clerical assistance.

ABBREVIATIONS AND ACRONYMS

AC	Agricultural Census
AH	Agricultural Holdings
AQUASTAT	FAO's Global Information System on Water and Agriculture
ASF	Area Sampling Frame
CA	Census of Agriculture
CAP	Common Agricultural Policy (of the European Union)
CAPI	Computer-assisted Personal Interviewing
CASI	Computer-assisted Self-interviewing
CATI	Computer-assisted Telephone Interviewing
CAWI	Computer-assisted Web Interviewing
CSPro	Census and Survey Processing System (software package)
DO-PKE	Drop-off/pick-up by enumerators
EA	Enumeration area
EEA	European Economic Area
EU	European Union
EUROSTAT	European Union Statistical Office
FAO	Food and Agriculture Organization of the United Nations
FAOSTAT	Food and Agriculture Organization Corporate Statistical Database
FSS	Farm Structure Survey (of the European Union)
GIS	Geographic Information System
GPS	Global Positioning System
HH	Household
ICR	Intelligent Character Recognition
IIA	International Institute of Agriculture
ILO	International Labour Organization
ISIC	International Standard Industrial Classification of All Economic Activities
M49	Standard country or area codes for statistical use (of the United Nations)
MO-MB	Mail-out/mail-back
MSF	Multiple sampling frame
NSO	National statistics office
OMR	Optical Mark Recognition
PAPI	Paper-and-Pen Interviewing
PATI	Paper-based (or assisted) Telephone Interviewing
PDA	Personal Digital Assistant
PES	Post-enumeration survey
PHC	Population and Housing Census
PPS	Probability Proportional to Size
PSU	Primary sampling unit
SAPM	Surveys on Agricultural Production Methods (of the European Union)
SAS	Statistical Analysis System (software package)
SDMX	Statistical Data and Metadata eXchange
SDS	Statistical Development Series
SPSS	Statistical Package for the Social Sciences (software package)
SSU	Secondary sampling unit
STATA	General-purpose statistical software package
UAA	Utilized agricultural area
UN	United Nations
UNFPA	United Nations Population Fund
UNSD	United Nations Statistics Division
WCA	World Programme for the Census of Agriculture

EXECUTIVE SUMMARY

The Food and Agriculture Organization of the United Nations (FAO), as the leading United Nations agency for censuses of agriculture since 1945, regularly provides guidelines for the conduct of agricultural censuses worldwide. The guidelines are published under the umbrella of the World Programme for the Census of Agriculture (WCA). Besides disseminating the guidelines to all member countries, FAO provides capacity-building to countries in the use of best practices in census-taking and of standard concepts, definitions and classifications, in order to ensure internationally comparable data on the structure of agriculture.

As a consequence of this support, country participation in the WCA has been steadily increasing over the decades. It has grown from 81 countries and territories in the 1950 round to 127 in the 2010 round, a new record. Europe and Asia were the regions with the fastest growth.

At the end of each census round, FAO reviews and assesses national census practices, methodologies and results, and summarizes the findings in methodological publications, under the Statistical Development Series (SDS). For the WCA 2010 round (2006–2015), these assessments have been presented in two separate publications. The first one, titled “*Main results and metadata by country*” (SDS 17), published in 2019, presented a compendium of census metadata and main results for a record number of 127 countries and territories.¹ The SDS 18, i.e. this publication, presents in its first part (Chapters 1 to 12) a methodological review of the national censuses. In its second part (Chapter 13), it illustrates global comparable data on key variables characterizing the structure of agriculture.

The methodological review starts by giving a historical perspective of the WCAs and highlights the main changes in methodological developments over time. Then, it reviews the different concepts used by countries in terms of census scope, statistical units and coverage. Then, the review focuses on the methodological modalities, and enumeration and data collection methods (including the use of technology) used by the countries. It also analyses the integration of the census of agriculture with other censuses or surveys, in particular with the population censuses, aquaculture and/or fisheries censuses, forestry censuses and community surveys.

Then, the review analyses the main types of frames (including georeferencing) used for different census modalities, such as the classical and modular approaches, involving complete and/or sample enumeration. Subsequently, the publication reviews country practices in adapting WCA 2010 recommendations on census items to their national situations. This includes the core items, themes and community-level items covered by censuses.

Next, the review examines data processing modalities and other country practices vis-à-vis WCA 2010 recommendations with respect to classification variables and cross-tabulations in census reports. The review examines the practices seen in data archiving and anonymizing. Then, the publication reviews the country practices for the dissemination of census results, including the use of web-based products. It also assesses the time gaps between the end of census enumeration periods and the publication of the census results. The methodological review ends by examining country practices to ensure census quality at various phases of the census, from the preparatory phase, to the enumeration and post-enumeration phases.

¹ The publication includes census information for France and overseas territories (French Guyana, Guadeloupe, Martinique and Réunion) and the United States of America, the United States Territories and Outlying Areas (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands). For statistical purposes, these territories and areas are treated as separate entities.

Throughout the first part of the publication, boxes illustrate particular country examples. Several summary tables are presented in the text, while detailed country level tables are provided in the annexes for reference. The data presented in the tables of the annexes have been prepared based on available information. Any assumptions are explained in notes and footnotes, wherever possible.

The second part of the publication provides a series of global comparison tables prepared with data extracted from the SDS 17 publication, national reports on agricultural censuses and FAOSTAT. These cross-country tables provide a unique comparison with as many data as possible. An effort was made to include in the comparisons all the data conforming to the concepts and definitions recommended by FAO. Footnotes in the tables, where necessary, inform the users about approximations and variations in the concepts.

The global review of census results includes key structural variables that are not available elsewhere. Some examples are number and area of holdings, land tenure and holder gender. Other variables are land size classes, average holding sizes, legal status of holders, household sizes, source of farm labour, land use and operated land.

Countries and territories in tables are shown by geographical region, based on the United Nations M49 standard (United Nations, 2020). In Annex 2, France and its Overseas Territories are presented together under Europe.

This unique publication offers a distinctive outlook of country census practices across the world and a cross-country comparison of the structural characteristics of national agricultural sectors. FAO hopes that country census agencies, policymakers and researchers find this exceptional information a useful reference for planning future censuses and understanding better their country's agricultural sectors vis-à-vis that of other countries.

1

Introduction

1.1 OUTLINE OF THE PUBLICATION

The Food and Agriculture Organization of the United Nations (FAO), as the United Nations agency responsible for the World Programme for the Census of Agriculture (WCA), provides guidelines to countries for the conduct of national agricultural censuses (AC). Apart from updating and disseminating census guidelines, FAO provides countries with capacity-building in the use of best practices in the planning and implementation of agricultural censuses.

At the end of each decennial census round, FAO reviews and assesses national census practices, methodologies and results, and summarizes the findings in methodological publications, under the Statistical Development Series (SDS). Following the completion of the WCA 2010 round in 2015, FAO embarked on the preparation of two methodological review publications. The first one of these publications, SDS 17, published in 2019, was a compendium of methodological reviews of agricultural censuses conducted in 127 countries and territories during the 2010 round, covering the period 2006–2015, and their main results. The second one, i.e. this publication (SDS 18), presents a methodological review of these censuses and a global review of their results.

For the WCA 2000 round, the methodological review and the international comparison of results were published in two separated documents, while for the WCA 2010 round, these have been merged in a single one.

This publication is therefore divided in two parts. The first part, composed of the first 12 chapters, corresponds to the methodological review, while the second part (Chapter 13) presents the global review of national data characterizing the structure of agriculture. After providing a historical recount of the WCAs, the first part discusses methodological aspects of the national censuses conducted by countries, in terms of census scope, statistical unit and coverage; methodological modalities, enumeration and data collection methods; the integration of the census of agriculture with other operations; frames (including georeferencing); coverage of core items, themes and community-level items; data tabulation, archiving, anonymization and dissemination. Part 1 ends by examining quality assurance practices. The second part of the publication provides a series of global comparison tables (see Annex 2), prepared with data extracted from the SDS 17 publication, national census reports and FAOSTAT. These cross-country tables provide a unique comparison of structural data on agriculture. To the extent possible, the comparisons include data conforming to the concepts and definitions recommended by the WCA 2010.

Boxes have been included throughout the publication to illustrate country practices. Several summary tables are presented in the chapters, while detailed country-level tables are provided in Annexes 1 and 2 for reference. The data presented in the annexes have been prepared based on

the information available. In addition to the tables, maps and figures are provided to highlight key conclusions.

Census data at the national level are available in diverse forms and language. Every effort was made by the FAO Statistics Division to collect, validate and standardize such data in order to present them in a comparable format using WCA 2010's terminology and classifications. Users are nonetheless advised to use the data carefully, bearing in mind the limitations and warnings mentioned in the following sections.

The data presented in the cross-country tables relate to the WCA 2010 round. As per information available at the time of preparation of the report, 127 countries and territories had conducted an agricultural census during the round as reported in the SDS 17. Nevertheless, the data presented here have been prepared on the basis of the results reported by 122 countries and territories in the census reports made available to FAO.

1.2 REGIONAL GROUPINGS AND AVAILABILITY OF DATA FROM CENSUSES

In order to capture the broad structural tendencies usually seen, the data collected from the census reports of the countries have been grouped into regions. The grouping of countries into different regions was done in conformity with the grouping used in the SDS 17 (FAO, 2019). This country grouping by region follows standards established by the UN Statistics Division (UNSD), namely standard M49 (United Nations, 2020), on the composition of macro geographical (continental) regions, viz. Africa, Americas, Asia, Europe and Oceania. For statistical purposes only, no distinction has been made between “countries” and “territories” in this publication; both are referred to as “countries”.

A review of the data on methodological aspects of the censuses and the structural data published by countries indicates that most countries provided information on the methodologies applied (census year and time-related data, enumeration method, data collection method, frame and coverage). Regarding the data items included in the census and reported to FAO, the number of reporting countries varies according to the item. The number of holdings is reported by almost all countries (119 out of 127), while fewer countries reported operated land area (110 out of 127), and even fewer countries reported operated land by legal status of the holder (72 out of 127). Similarly, 72 countries out of 127 reported operated land by land tenure type. Data on demography of the household managing the holding were reported by 97 countries out of 127, while data on employment of holdings were reported by 46 countries. More than half of the countries (68 countries out of 127) reported data on the use of tractors by the holdings or the number of tractors belonging to the holdings. Over 42 percent of countries reported data on holdings using irrigation and areas irrigated (54 countries out of 127).

1.3 INCOMPLETENESS OF THE WCA 2010 ROUND AND LIMITATIONS ON THE DATA REPORTED

As indicated earlier, the second part of this publication and Annex 2 provide comparable data on key structural aspects of agriculture. However, due to the varying scope and coverage of country censuses, it has not always been possible to cover all reporting countries in all tables. It was considered useful to prepare and publish specific tables even if only a few countries could be

included in them. As a result, the number of countries in a table can vary, from 54 in Table A2.14 on irrigation to 119 in Table A2.5 on number and area of holdings. The countries not covered in a table were either those whose reports were not available to FAO, or those whose reports did not contain comparable data on relevant items.

1.4 COMPARISON WITH OTHER DATA SOURCES

One of the purposes of an agriculture census is to establish benchmark data that are used to adjust data from sample surveys. Users may thus be tempted to compare census figures with the figures derived from other national and international sources, such as FAOSTAT and AQUASTAT. This is often recommended in order to validate the quality of the data from a specific source. However, it is to be noted that the census data may slightly differ from the data from alternative sources, although they may appear similar. This is mainly on account of conceptual and definitional differences between the data or differences in the methodology used for collection. The data in international databases, though sourced from the same country, may come from diverse data sources such as administrative records, annual surveys or ad hoc assessments.

2

The World Programme for the Census of Agriculture 2010

2.1 HISTORICAL EVOLUTION OF THE WORLD PROGRAMME FOR THE CENSUS OF AGRICULTURE

The concept of a World Programme for the Census of Agriculture (WCA), a census of agriculture conducted in all countries during a specified period and based on the same principles, was conceived in the early twentieth century by the International Institute of Agriculture (IIA), Rome. This led to the first WCA carried out in 1930 under the auspices of the IIA. The WCA 1940 was planned, but the Second World War interfered with the full implementation of the programme, leaving it incomplete.

Following the dissolution of the IIA in 1946, FAO took over the programme and in 1948 launched the WCA 1950, as well as the successive decennial programmes. Since then, the WCA has become an established international programme. The WCA 2010 was the ninth programme in the series, covering the agricultural censuses conducted during the period 2006–2015.

In the first two WCA rounds, 1930 and 1940, a “standard form” was recommended for use by all countries referring to the same census period.² At that time, there was a large gap in the agricultural information available. However, many countries found it difficult to conduct the census using a long questionnaire, given the limited human and technological resources. Each subsequent programme was enriched with the experience of the previous programmes, from both the methodological and operational points of view.

The WCA 1950, the first programme developed by FAO, brought forward the idea of collecting data on the structural characteristics of agriculture as the primary purpose of the census. This focus on the structural characteristics of agriculture still holds. The WCA 1950 recommended a short list of essential census items and an extended list with items of secondary importance. The 1950 programme also gave increased attention to the definitions of census items and the tabulation of internationally comparable results.

The WCA 1960 accomplished a quantum leap in census methodology, as it introduced the use of sampling methods in censuses, including post-enumeration surveys (PES). The option to use sampling methods increased the number of countries participating in the census of agriculture. The programme arranged the census items into ten sections according to subject matter. It also raised the issue of the relationship between the agricultural and the population censuses for the first time.

² In the WCA 1940, the recommendation was relaxed compared to WCA 1930, allowing countries to choose a year that was as close as possible to the recommended year in case of unavoidable circumstances that prohibited taking the census in the designated year.

The WCA 1970 discussed the role of the census of agriculture in the overall system of agricultural statistics, in terms of the frame for sample surveys, the benchmark for current agricultural statistics and capacity development for organizing subsequent agricultural surveys. The programme discussed the use of sampling in pilot censuses and pre-testing surveys, in PES, in quality checks during data processing, in tabulation of results, etc. The WCA 1970 introduced an entirely new section dealing with the association of agricultural holdings with other industries.

The WCA 1980 brought about several recommendations. First, that the census of agriculture should form the basis for the collection of current agricultural data through improved methods. Second, that the census should be utilized for the development and improvement of an overall programme of food and agricultural statistics. Third, that concepts, definitions and methods should be harmonized with other related statistical systems and operations to ensure comparability and compatibility. Fourth, that more elaborate tabulations should be produced, supported by advances in electronic data processing. Fifth, each country should have greater flexibility and more freedom in adapting the programme. For the first time, a special chapter was dedicated to practical guidelines on the preparation and organization of a census of agriculture. The WCA 1980 was the first to indicate explicitly that it referred to national censuses conducted within the decade (1976–1985) centred on the reference year of the round (1980). Additional supplementary guidelines on taking agricultural censuses were published later to provide practical information on the steps involved in actually conducting an agricultural census.

The WCA 1990 encouraged countries to develop and implement the agricultural census according to their economic and statistical capabilities and requirements. The programme made further efforts to harmonize concepts, definitions and classifications with those used in other data sources. It did not recommend the inclusion of production and input quantities in the census scope. It recommended extensive cross-tabulations to ensure the maximum use of the census data. The WCA 1990 encouraged a complementary relationship between the agricultural census and more frequent food and agricultural sample surveys, as well as with related non-agricultural censuses and surveys. Separate guidelines on micro-computer-based data processing (SDS 2a) were published later.

The WCA 2000 stressed that economic units engaged solely in: (a) hunting, trapping and game propagation; (b) forestry and logging; (c) fishing; or (d) agricultural services; were not considered as agricultural holdings and, therefore, considered to fall outside the scope of the census. It recommended that the activities covered by the agricultural census correspond to those included in the International Standard Industrial Classification of All Economic Activities, third edition, ISIC groups 011 (crops), 012 (animals) and 013 (crops and animals). The programme also introduced the issue of the role of women in agriculture and the presentation of census results disaggregated by sex. Another innovation was the option to include aquaculture holdings (introduced in supplementary guidelines, SDS 5b) and the marking of some items as having environmental implications. Two additional supplementary guidelines were published later: one on employment (SDS 5a) to improve concepts, definitions and standards used to collect employment information in agricultural censuses; and another (SDS 6) on conducting agricultural censuses and surveys to provide more practical information on the steps involved in actually implementing an agricultural census.

The next section provides a brief overview of the basic features of the WCA 2010 and the new elements it introduced.

2.2 BASIC CHARACTERISTICS OF THE WCA 2010

The WCA 2010 continued in the same vein of earlier programmes, stressing that agricultural censuses are mainly concerned with the collection of structural data for agricultural holdings. It also stressed on the central place of the census of agriculture in the overall system of agricultural statistics.

The WCA 2010 introduced a new census methodology in the light of the lessons learned from national censuses in the WCA 2000. Acknowledging that countries needed to collect a wider range of data from the agricultural census while minimizing the cost of census-taking, it introduced the modular approach. This approach consisted of a core module carried out on a complete enumeration basis to provide key structural data, in conjunction with one or more sample-based census supplementary modules to provide more in-depth data.

The concept of essential items in earlier census programmes was succeeded by the concept of core items in the WCA 2010 and complemented by supplementary items. A list of 16 items was recommended for the core module (as a minimum set of data), not only for collecting key structural data but also for use in creating sampling frames for the census supplementary modules or for the programme of agricultural surveys. Table A1.1, Annex 1 provides a detailed comparative picture of the items included in the 2000 and 2010 WCAs.

The WCA 2010 also introduced the concept of aquacultural unit (for countries wishing to include an aquacultural supplementary module) and the option to conduct an aquacultural census in conjunction with the agricultural census.

Two new concepts – the sub-holding and the sub-holder – were introduced to measure the role of household members in the management of the holding, especially women. The programme introduced a community survey to be conducted in parallel with the census and for obtaining data on common infrastructure issues affecting farmers. This originated from the fact that these data are collected more cost-efficiently at the community level rather than the holding level. This includes items on geographical and socioeconomic conditions, access to services, infrastructure, communal grazing land and forest. Many countries adopted this recommendation for more in-depth analysis of the census data using holdings and community-level data.

Finally, the WCA 2010 gave emphasis to integrating the agricultural and population censuses, not only through the use of standard concepts and definitions, and sharing field materials, but also through adding agriculture-related questions to the population census (for frame building), and linking the data from the two sources. This recommendation was underpinned with the publication of supplementary guidelines for linking population and housing censuses (PHCs) with agricultural censuses (FAO and UNFPA, 2012). Methodological successes vary from country to country. “The implementations of new technologies, staying within budget, meeting deadlines and maintaining data quality” were mostly regarded as census successes in the 2010 round. For some countries, instead, being able to conduct a census of agriculture was a major achievement.

3

Participation of countries in the Programme for the World Programme for the Census of Agriculture 2010 and previous census rounds

3.1 HISTORICAL TRENDS AND REGULARITY OF CENSUS TAKING

Many countries have participated in the WCA, starting from the 1930 round. Some countries have participated in all complete rounds,³ while others conducted their first agricultural census during the WCA 2010 round.⁴ Some territories that are not independent countries but conducted agricultural censuses are recorded as separate entities here, for statistical purposes.⁵

Table A1.2, Annex 1 provides the overall picture of agricultural censuses conducted during all WCA rounds since 1930. Compared to the WCA 2000 round, which reported on 188 FAO Member Nations, six additional countries⁶ became members between 2006 and 2015. Therefore, the table presents 194 FAO Member Nations as of the end of the 2010 round (2015); 14 territories (American Samoa, Bermuda, French Guyana, French Polynesia, Guadeloupe, Guam, Martinique, Montserrat, New Caledonia, the Northern Mariana Islands, Puerto Rico, Réunion, Saint Helena, and the United States Virgin Islands) are recorded as separate entities, as previously explained; certain former countries and territories (Alaska, Arab Republic of Yemen, Czechoslovakia, French West Africa, Hawaii, North Borneo, People's Democratic Republic of Yemen, Ryukyu Islands, Saar,⁷ Sarawak, Zanzibar/Pemba, Yugoslavia) that had conducted an independent census in one of the previous WCA rounds. The latter are included in order to enable comparison of participating countries across rounds.

For each country, the table shows participation in all complete rounds of the WCA up to 2010. The year of participation refers to the year in which the census enumeration took place. If, because of several census stages or other reasons, the enumeration took place over several years: (i) for two consecutive years, the start year and ending year are separated by a slash; (ii) for more than two consecutive years, all years are indicated by the start year and ending year and are separated by a hyphen. If, during a certain round, a country conducted more than one census, the years of all censuses are shown separated by an ampersand "&". During the 1930 and 1950 rounds of the WCA, the participation criterion was applied relatively flexibly, and those countries (mostly, colonial territories) that could not take a proper census but had made other efforts to obtain the

³ The 1940 census round could not be completed due to the onset of the Second World War.

⁴ Countries that participated for the first time under the WCA 2010 round: Armenia 2014, Cambodia 2013, Equatorial Guinea 2015, Kazakhstan 2006/2007, North Macedonia 2007, Palestine 2010, Republic of Moldova 2011, Russian Federation 2006 and Tajikistan 2013.

⁵ Throughout this publication, for the reader's convenience, a "country" means both a country in the political sense of the term and a territory that for statistical purposes has been considered as a separate entity having participated in a WCA round.

⁶ These countries are Andorra, Brunei Darussalam, Montenegro, the Russian Federation, Singapore and South Sudan.

⁷ Saar was a French protectorate from 1945 to 1957, but it now forms part of Germany.

required minimum information were also considered as participants. Such censuses are considered as having been conducted by “special estimates”; for them, the participation years are marked with “(*)” in Table A1.2, Annex 1. Variations in the nomenclature of countries from one round to another are indicated in the table footnotes.

Table 3.1 below is derived from Table A1.2, Annex 1, and shows the overall and regional trends in the participation of countries in the WCA rounds. For comparability purposes, censuses conducted by means of “special estimates”⁸ are not taken into account in the calculation of regional and overall totals.

The table clearly shows that a record number of 127 countries undertook a census of agriculture during the WCA 2010 round covering the period 2006–2015, surpassing the latest peak of 122 reached during the previous round. The high participation witnessed under WCA 2010 conceals the fact that 31 countries that did not participate in the previous round took part in the WCA 2010 round, while 24 countries that were in the previous round did not participate in the WCA 2010 round. The highest turnover was in Africa, with nine countries out for the 2010 round, and six countries in. Overall, the participation of African countries in the WCA 2010 round fell by three (12 percent).

The Americas showed the biggest increase (27 percent) in the 2010 round relative to the two previous rounds. This was mainly due to the reappearance of certain countries such as Antigua and Barbuda, Belize, the Plurinational State of Bolivia, Costa Rica, El Salvador, Haiti and Suriname. Europe also showed a rebound in the round due to the Republic of Moldova, North Macedonia and the Russian Federation, which conducted censuses for the first time as independent countries. Asia had reached a peak in census participation in the previous round but lost momentum in the 2010 round, due to the absence of Afghanistan, Kyrgyzstan, Malaysia, Qatar, the Syrian Arab Republic, Turkey, the United Arab Emirates and Yemen; thus, despite the participation of Armenia, Cambodia, Kazakhstan, Oman, Palestine and Tajikistan. In Oceania, the trend has remained relatively stable for the last four rounds.

Table 3.1. Number of countries participating in the WCA rounds by region and by round

Region	WCA round							
	1930	1950	1960	1970	1980	1990	2000	2010
Total number of countries participating in each round	53	81	100	112	103	94	122	127
Africa	8	18	29	25	21	23	25	22
Americas	14	26	29	33	28	23	22	28
Asia	4	11	20	21	21	14	31	29
Europe	23	20	17	24	22	21	33	36
Oceania	4	6	5	9	11	13	11	12

⁸ “Special estimates” refer to the censuses of those countries and territories that during the 1930 and 1950 rounds (and Fiji in the 1960 round) could not take a proper census, but made other efforts to obtain the minimum information required. These countries were considered as participants but their censuses were not taken into account when counting the totals (FAO, 2013b).

The data provided in Table A1.2, Annex 1 enables analysis of how regularly countries have conducted their agricultural censuses. The following criteria were adopted to group countries according to their census regularity:

- (a) **regularly**, if the country participated in **seven or eight** out of the eight complete WCA rounds;
- (b) **with some regularity**, if the country participated in **five or six** rounds; and
- (c) **irregularly**, if the country participated in **up to four** rounds.

There are also countries that have **never** conducted an agricultural census since the beginning of the WCA. Censuses conducted by “special estimates” are considered when analysing census regularity.

Table A1.2, Annex 1 refers to censuses rather than countries. Thus, in view of changes in the political boundaries of countries, some censuses in the table refer to several present-day countries. For this reason, in classifying countries according to census regularity, the following criterion was adopted: *if the whole territory of a present-day country was covered during a census round as a part of another country or countries, it is deemed that the country has participated in that round.* All relevant information is in the footnotes to the table. According to this approach, the census of 1929/1930 of India is also attributed to Bangladesh and Pakistan. Likewise, all censuses conducted by the former Czechoslovakia and Yugoslavia are attributed to all the countries that emerged after their break-up. The 1929-1930 census in French West Africa (conducted by special estimates) is attributed to all of the countries forming that territory at that period, and so on. Table 3.2 below summarizes census regularity per region according to the criteria above.

Table 3.2 shows that almost two thirds of the countries in the world had either irregularly (121 countries and territories) or never (14 countries and territories) undertaken an agricultural census. Although this is a substantial share of the countries, the number of countries that have never conducted an agricultural census decreased from 21 in the previous round to 14 in the 2010 round. Both the African and Asian regions exceeded the world’s average, with a higher proportion of countries (72 and 63 percent, respectively) irregularly conducting their agricultural census, followed by Oceania (57 percent). Europe (six countries) and Asia (five countries) are the regions with the greatest number of countries that have never conducted an agricultural census.

Table 3.2. Numbers of countries by regularity in census-taking

Region	Total number of countries	Regularly		With some regularity		Irregularly		Never	
		Number	%	Number	%	Number	%	Number	%
World *	220	40	18	45	20	121	55	14	6
Africa	57	5	9	9	16	41	72	2	4
Americas	44	11	25	15	34	18	41	0	0
Asia	51	5	10	9	17	34	64	5	9
Europe	47	15	33	8	18	16	36	6	13
Oceania	21	4	19	4	19	12	57	1	5

* World includes all FAO member countries as at the end of 2015 (194), 14 territories, and 12 former countries and territories.

In the Americas and Europe, over half of the countries conducted agricultural censuses either in all census rounds or with a high degree of regularity (59 and 50 percent, respectively).

3.2 PARTICIPATION OF THE COUNTRIES IN THE WCA 2010 ROUND

As mentioned earlier, a record number of 127 countries participated in the WCA 2010 round, as shown below in Map 3.1. For comparison purposes, and to assess how countries are best trying to meet the recommendation of conducting the census as close as possible to the year of reference (middle of the round), the census round (2006–2015) was divided into three parts:

- (a) **beginning** of the round – **2006-2008**;
- (b) **middle** of the round – **2009-2012**;
- (c) **end** of the round – **2013-2015**.

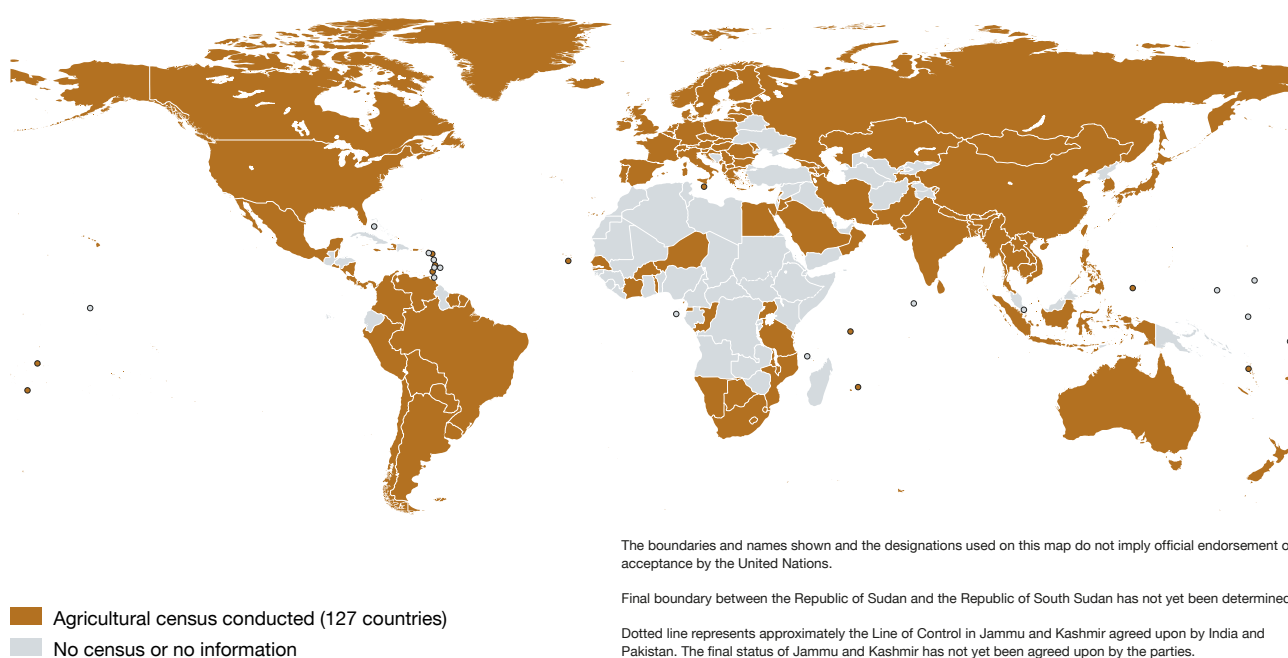
Table 3.3 below shows the distribution of participating countries by their period of participation within the round.

As seen in Table 3.3, over half (71 percent) of the participating countries conducted their census in the middle of the round. In Europe, as in the previous census round, almost all participating countries conducted their censuses close to the reference year of the round. To a considerable extent, this is due to European Union (EU) regulations stating that EU Member States should conduct an agricultural census in the years ending with zero. However, derogations were granted to Greece, Portugal and Spain to carry out their census in 2009. In Oceania and Asia, to a lesser extent, countries also conducted their censuses close to the reference year of the round. Conversely, the Americas tended to conduct their censuses at the beginning of the round. African countries carried out their census in a fairly uniform way over the decade but with a greater emphasis towards the end of the round.

Table 3.3. Timing of censuses during the WCA 2010 round

Region	Total number of countries	Number and percentage of countries that conducted the census in the:					
		Beginning of the round (2006–2008)		Middle of the round (2009–2012)		End of the round (2013–2015)	
		Number	%	Number	%	Number	%
All participating countries	127	29	23	72	56	26	21
Africa	22	6	27	7	32	9	41
Americas	28	13	46	12	43	3	11
Asia	29	4	14	13	45	12	41
Europe	36	2	6	34	94	0	0
Oceania	12	4	33	6	50	2	17

Map 3.1. Countries that conducted an agricultural census during the WCA 2010 round (2006-2015)



Note: Map produced by the Statistics Division of FAO, 2020.

Source: WCA, 2010 conforms to UN World Map, 2020.

Table A1.3, Annex 1 presents some time-related information associated with an agricultural census, such as year(s) of participation, time gap from the previous census, reference period, reference day, enumeration period and year of publication of the census results for the reporting countries. In the calculation of time gaps, some simplifying assumptions were made, specifically: (a) if a country has conducted several censuses during the WCA 2010 round, the time gap was calculated between the last two censuses of the round; (b) if a census was conducted over more than one year, the last year of the previous census (when it was actually completed) was considered in the calculation of the time gap.

Both Tables A1.2 and A1.3, Annex 1 reveal that 9 countries out of 127 conducted the first ever census of agriculture during the WCA 2010 round. In Europe, the Republic of Moldova, North Macedonia and the Russian Federation conducted their first comprehensive and or independent agricultural censuses in the 2010 round. Other countries were Equatorial Guinea in Africa, and Armenia, Cambodia, Kazakhstan, Palestine and Tajikistan in Asia.

Table 3.4 below is derived from Table A1.3, Annex 1. It shows, for each region, the typical (mode, i.e. most frequent and its frequency) and median time gaps from the previous census of agriculture, as well as the range of variation in the time gap between censuses (maximum and minimum). Countries that conducted their first census in the 2010 round were not taken into account.

Table 3.4. Mode, median and range of variation of the time gap between the last two censuses

Region	Time gap (years)				
	Mode	Frequency of the mode	Median	Max	Min
All participating countries	10	34	10	64	4
Africa	13	4	13	64	4
Americas	10	7	11	49	4
Asia	10, 11	6	10	34	5
Europe	10	16	10	14	7
Oceania	10	3	10	26	4

As seen from the table, most countries typically follow a ten-year cycle, except certain countries in Africa which typically took 13 years between their last two censuses. The highest maximum figures in the table refer to Mauritius in Africa (64 years), the Plurinational State of Bolivia in the Americas (49 years), and Oman in Asia (34).

3.3 COVERAGE OF THE WCA 2010 ROUND BY POPULATION AND AREA

Table A2.2, Annex 2 provides information on the physical area of countries, the area under management by agricultural holdings, and the population for the 119 countries that reported holding area. For comparison purposes and in order to be consistent with SDS 13, the coverage is used here in terms of the total area of the countries. These results are summarized and compared with the world's totals in Table 3.5 below, to assess the global coverage of the WCA 2010 round.

Table 3.5. Global coverage of the WCA 2010 round

Region	World			Coverage of the WCA 2010 by:					
	Total number of countries	Total population	Total area of countries	Number of countries		Population		Physical area	
		(million)	(million ha)	(number)	(% of total)	(million)	(% of world)	ha (million)	(% of world)
World	*230	6 973	13 449	127	55.2	5 846	83.8	10 488	78
Africa	57	1 044	3 032	22	38.6	404	38.7	1 026	33.8
Americas	51	941	4 065	28	54.9	838	89.1	3 646	89.7
Asia	51	4 211	3 199	29	56.9	3 894	92.5	2 765	86.4
Europe ^{1,2}	48	740	2 297	36	75.0	681	92.0	2 246	97.8
Oceania	23	37	856	12	52.2	29	78.4	805	94.0

Source: Population (FAOSTAT, year 2010) (FAO, 2013); Total area of the countries (FAO, 2010).

* The number of countries refer to the number and list of countries and territories in FAOSTAT, by region, as of July 2020.

1. Physical area corresponds to total area of the countries.

2. Russia is included in Europe as per the United Nations M49 standard.

The 127 countries that conducted agricultural census in the 2010 round represent more than half of the world's countries and territories, and about 78 percent of the total geographical area in the world. The countries differ considerably in terms of size, population and structure of agriculture. As in the previous round, the highest coverage in terms of number of countries and population is observed in Europe, followed by Asia and the Americas. The participation of countries in terms of number of countries is lower in Africa (37 percent) and Oceania (48 percent). In terms of area, the highest coverage is seen in Oceania (94 percent), followed by the Americas (90 percent) and Asia (86 percent). The coverage of countries' physical area in Africa was under 34 percent.

Table 3.6 shows that the increases in population and area covered are due to the increased coverage in Europe, the Americas and Oceania. The entry of the Russian Federation in the list of countries undertaking a census explains a large part of the observed increase in area and population covered by agricultural censuses in Europe. The first ever census conducted by the Russian Federation in the 2010 round (2006) entailed the addition of 450 million ha of holding land for Europe.

Table 3.6 presents a broad picture of the three dimensions of coverage during the WCA 2010 round as compared to the previous round (2000). The WCA 2010 and 2000 rounds showed similar levels of coverage in terms of the number of countries and population. In terms of area, the WCA 2010 round covered 78 percent of the world area, against approximately 64 percent covered in the WCA 2000. The highest turnover, registered in Africa (see Section 3.1 and Table 3.1), entailed a stagnation of the indicators (population and physical area) at the global level, despite the increase induced by Europe, the Americas and Oceania.

Table 3.6. Comparison of coverage in the 2000 and the 2010 WCA rounds

Region	By number of countries				By population				By physical area			
	Number		% of total		(million)		% of total		ha (million)		% of total	
	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010	2000	2010
All participating countries	114	127	51.9	52.5	5 068	5 845	82.9	83.8	8 598	10 488	64.1	78.0
Africa	25	22	44.6	37.3	413	404	50.4	38.7	1 461	1 026	48.5	33.8
America	22	28	44.0	50.9	651	838	77.5	89.0	3 299	3 646	81.1	89.7
Asia	29	29	56.9	58.0	3 484	3 894	94.2	92.5	2 585	2 765	81.4	86.4
Europe^{1,2}	29	36	74.4	67.9	496	681	68.2	92.0	456	2 246	19.8	97.8
Oceania	9	12	34.6	48.0	24	29	76.8	77.5	797	805	93.3	94.0

Source: Population refers to year 2010-11 (FAO, 2013) while total area of the countries refers to year 2009 (FAO, 2010).

1. Physical area corresponds to the total area of the countries.

2. Russia is included in Europe as per the United Nations standard (M49).

4

Scope, coverage and enumeration periods

4.1 SCOPE OF THE CENSUSES

The census of agriculture aims to measure the structure of the agricultural production industry. The scope of the census of agriculture is defined by the ISIC. For the WCA 2010, the scope covered three ISIC groups: “Growing of crops; market gardening; horticulture” (Group 011), “Farming of animals” (Group 012) and “Growing of crops combined with farming of animals (mixed farming)” (Group 013). In view of the increased importance of aquaculture in many parts of the world, the programme recommended that countries conduct an aquacultural census in conjunction with the agricultural census, where there is a need for aquacultural data.

In the WCA 2010 round, most countries focused the census scope on ISIC Groups 011, 012 and 013. However, 24 countries (19 percent) added forestry activities and 26 countries (20 percent) added fisheries and/or aquaculture activities to the scope of their censuses (see Chapter 8). Two countries included hunting, and two more added agricultural services to the census scope. The EU countries included, in their census scope, activities related to maintaining land in good agricultural and environmental conditions which is no longer used for production purposes.

4.2 STATISTICAL UNITS

The statistical unit for the agricultural census recommended in the WCA 2010 remained the “agricultural holding”, as in previous rounds. As discussed in the WCA 2010, agricultural holdings could be of two types: (i) holdings in the household sector – operated by household members; and (ii) holdings in the non-household sector, such as corporations and government institutions.

The WCA recommendation to use the concept of “holding” for the agricultural census was applied by most countries in the 2010 round. The definitions adopted by countries were tailored to fit specific operational aspects when conducting the censuses.

Some countries – particularly those in which a large part of the holdings was found in the household sector – emphasized, in the definition of agricultural activities, “activities for own account or for account of the household” to distinguish holdings’ activities and the activities of household members employed in agricultural holdings outside the household. The countries concerned were Botswana, the Congo, Lesotho, Namibia and Senegal.

As recommended in the WCA 2010, in order to facilitate the identification of the holdings and field data collection, 49 countries divided the agricultural holdings into two groups: “household sector” and “non-household sector”. Specific frames were built and used for each sector.

Box 4.1. Country examples on the definition of statistical units of the census

Argentina: The statistical unit was the agricultural holding (*explotación agropecuaria*, or EAP), defined as “the organizational unit of agricultural production with at least 500 m² within a single province that, regardless of the number of parcels: (i) produces crops, livestock or forestry goods for marketing; (ii) has a management that manages the functions and assumes the risks associated with production activities; and (iii) utilizes in all its parcels the same production means and part of the same labour”. The agricultural holdings comprised both holdings in the household sector and in the non-household sector.

Botswana: The statistical unit was the agricultural holding, defined as an economic unit of agricultural production under single management, comprising all livestock kept and all land used wholly or partly for own-account agricultural production purposes, without regard to title, legal form, or size. The AC 2015 covered holdings in both the household sector (the “traditional sector”) and the non-household sector (the “commercial sector”).

China: The statistical unit of the AC 2006 was the agricultural holding, defined as the household or entity in the non-household sector engaged in crop farming, animal husbandry, forestry, fisheries and agricultural services on agricultural land, and that meet one of the criteria specified as a threshold. The agricultural holdings were classified as: (a) household agricultural holdings or (b) non-household agricultural holdings, as identified by surveying the following entities and households within the territory of the People’s Republic of China: (i) rural households; (ii) urban agricultural households; and (iii) non-household agricultural holdings (agricultural establishments).

Indonesia: The statistical unit was the agricultural holding, defined as “an activity producing agricultural products with the aim of partially or completely selling or exchanging the products, except when food crops were exclusively for self-consumption”. In general, two types of holdings were covered in the household sector: agricultural production households (“household agricultural holding”), and other households (“non-agricultural households”).

Lao People’s Democratic Republic: The statistical unit was the “farm household” (holding), defined as an economic unit of agricultural production under single management, comprising all livestock raised and all agricultural land operated, regardless of ownership, which engages agricultural operation above certain established thresholds of land, livestock or aquaculture.

Portugal: The statistical unit was the agricultural holding, defined as a techno-economic unit where there is common use of inputs (labour, machinery, buildings, lands, etc.) and that cumulatively: (i) produces agricultural products or maintains in good agricultural and environmental conditions land which is no longer used for production purposes (as set forth in Regulation EC No. 1782/2003); (ii) reaches or exceeds a specific size (minimum limit); (iii) is in a specific identifiable location, even when its area covers more than one commune or even more than one municipality; and (iv) is operated under the single management of an agricultural holder, who assumes substantive decision-making.

However, some countries limited the census scope by limiting the statistical unit to holdings in the household sector only (e.g. the Lao People’s Democratic Republic, Palau, Senegal and Togo). Some countries defined a holding as an entity being within a single administrative unit, such as a province or a municipality (e.g. Argentina, Mexico and Thailand).

4.3 COVERAGE OF THE CENSUSES

As indicated in the WCA 2010, an agricultural census should cover the agricultural holdings in the whole country or a significant part of it, including both rural and urban areas. The overall geographic coverage of a census is particularly important to provide a frame for subsequent agricultural surveys. Incomplete coverage leads to underestimation of census variables, and different exclusion criteria result in problems with the comparability of results between countries. However, countries customarily apply a minimum size limit for the inclusion of units in the census of agriculture. This is justified on the grounds that there is usually a large number of very small units making little contributions to the total agricultural production, whose inclusion in the agricultural census is not cost-effective; alternatively, these units do not fall within the definition of holding in the country. Likewise, countries may omit certain areas of the country, such as urban areas, areas with limited agriculture or areas with security problems.

There are two types of restrictions: (1) certain geographic areas of the country are not covered (geographical restriction); and (2) units below an established threshold are excluded (statistical restriction). Table A1.7, Annex 1 provides detailed information about both types of restrictions for all reporting countries, while Table A1.8, Annex 1 presents the thresholds used for the census (e.g. minimum size criteria based on land size, number of trees, number of livestock by type, etc.). The next two sections discuss the geographical and statistical restrictions of the censuses.

4.3.1 Restrictions on geographical coverage

Table 4.1 shows that 105 countries out of 127 applied some kind of restriction. Only 24 countries (19 percent of the countries) implemented geographical restrictions in the census. Of these, 16 countries applied both geographic and statistical restrictions, while 8 countries applied only geographical restrictions. The most common type of geographical restriction was the exclusion of urban and peri-urban areas. For example, in Bhutan, the Plurinational State of Bolivia, Botswana, Cambodia, Colombia, Eswatini, Jamaica, Togo and Vanuatu, urban areas were excluded from the agricultural censuses. In Antigua and Barbuda and the Congo, selected cities and districts were excluded from the census. In some other countries, areas beyond the control of the government were excluded (see below). In yet other countries, exclusions were made because of the specific context, such as areas presenting damages caused by natural disasters.

The decision to exclude some parts of the country was mostly based on two reasons:

1. Agricultural production in the excluded areas was deemed to be unimportant, at least relative to the resources needed for data collection there. Mostly, these were urban and peri-urban areas, but often deserts and other scarcely populated or remote areas also fell into this category.
2. It was impossible to collect data on the excluded territory because it was not controlled by the government, because of adverse natural events, or for security and other reasons.

Table 4.2 describes geographical exclusions. It shows that the lack of importance of agriculture was the main reason for the exclusion. In Europe and Asia, impossibility of data collection in the excluded areas was the main reason of exclusion. In Serbia, the Autonomous Provinces of Kosovo and Metohija were excluded from the census coverage. In Azerbaijan, Cyprus, Georgia and the Republic of Moldova, the coverage excluded territory outside the control of the government.

Table 4.1. Geographic and statistical restrictions in the censuses

Region	Total	No restrictions	Type of restriction		
			Only geographically	Only statistically (using thresholds)	Both geographically and statistically
All reporting countries and territories	127	22	8	81	16
Africa	22	4	2	9	7
Americas	28	5	2	18	3
Asia	29	7	3	15	4
Europe	36	3	0	31	2
Oceania	12	3	1	8	0

Table 4.2. Censuses excluding some geographical areas by reason of exclusion

Region	Total	Agriculture deemed unimportant	Data collection impossible	Both
All reporting countries and territories	24	17	6	1
Africa	8	9	0	0
Americas	5	5	0	0
Asia	7	2	4	1
Europe	2	0	2	0
Oceania	1	1	0	0

In Cambodia, the urban area of Phnom Penh was excluded; in the Philippines, the municipalities of Baganga, Boston and Cateel in Davao Oriental were not covered because of the vast damage caused by Typhoon Pablo.

4.3.2 Statistical restrictions (use of thresholds)

Table 4.1 also shows that 97 countries (76 percent of the countries) implemented statistical restrictions in the census. Of these, 81 countries applied only statistical restrictions (thresholds), while 16 countries applied both statistical and geographic restrictions. The thresholds include the establishment of minimum size limits on the holdings identified in a prior listing operation. Tables A1.7 and A1.8, Annex 1 provide detailed information about the criteria used by countries for the use of thresholds. Table 4.3 summarizes the types of criteria used for the coverage of holdings. Restrictions related to area in combination with livestock numbers was the most common criterion used for establishing minimum size limits (41 percent of the countries concerned).

Table 4.3. Thresholds and other criteria used for the coverage of holdings

Region	Holdings coverage								
	Total	Minimum size criteria based on:							Other types of criteria**
		Some types of area*	Livestock numbers	Some types of area and livestock numbers	Value of production/sale	Value of production/sale and some types of area	Area, number of trees and livestock	Area, value of sale, number of trees and livestock	
All reporting countries and territories	97	14	1	40	8	5	12	4	13
Africa	16	1	0	3	0	0	2	0	10
Americas	21	5	0	3	3	0	6	4	0
Asia	19	2	1	11	0	2	2	0	1
Europe	33	4	0	23	1	3	2	0	0
Oceania	8	2	0	0	4	0	0	0	2

* This category includes combination with a minimum number of trees. This is the case of Burkina Faso, Niue and Samoa.

** Other types of criteria include exclusions, such as holdings in the non-household sector (e.g. Côte d'Ivoire) or in the non-commercial sector (e.g. South Africa).

In six Asian countries, size of output and amount of sales were used as the inclusion criteria. In China, units with income from annual sales of agricultural products, including self-consumption, exceeding RMB 500 were included. In Cyprus, units having 20 or more beehives were included. In Japan, units with annual sales of farm products of JPY 500 000 or more, and forestry operations based on rights (at least 3 ha), were included. In the Republic of Korea, households for which sales of agricultural products were at least KRW 1.2 million during the reference year and households raising livestock worth at least KRW 1.2 million were covered. In Viet Nam, the census covered crop and aquaculture farms with annual output value of at least VND 700 million, livestock farms with output value of at least VND 1 billion and forestry farms with output value of at least VND 500 million.

In the Americas, certain countries, such as Belize, Grenada, Puerto Rico, the United States of America and the United States Virgin Islands, used output sales as a criterion for inclusion. The Bolivarian Republic of Venezuela covered units raising organic crops, nurseries and crops with special and/or handicraft techniques. In Europe, area restrictions in combination with livestock numbers was the main criterion used for establishing minimum size limits. In Belgium and Estonia, holdings not producing for sale were excluded. In Denmark, Latvia, Lithuania and the Netherlands, minimum output sales were used.

The “Other type of criteria” column refers to the types of restrictions not falling within the previous seven threshold categories. These restrictions were largely related to the legal status of the holding, and recurred mainly in Africa. For instance, Côte d’Ivoire, Equatorial Guinea, the Gambia, Lesotho, Malawi, the Niger, Palau, Senegal and Togo excluded holdings in the non-household sector. In turn, South Africa covered only tax-registered enterprises.

4.4 REFERENCE AND ENUMERATION PERIODS

The census has two main reference periods, namely the census reference year and the census reference day. The census reference year is used for collection of flow items, such as the main purpose of production, area of holding according to land use types, use of irrigation and other inputs on the holding. These are measured over the calendar year or agricultural year. The census reference day is a point in time used for stock/inventory items, such as location of agricultural holding and livestock numbers. It can be a fixed census reference day or the day of enumeration.

Table 4.4 below, which is based on Table A1.3, Annex 1, summarizes the census reference days used during the WCA 2010 by region. In Africa, the day of enumeration was the most common reference day used (by 82 percent of the countries in the region). Only three countries (Egypt, Mauritius and the United Republic of Tanzania) used a fixed census day as a reference day for stock items. South Africa used both enumeration day or interview date for different items. The country used the day of enumeration for inventory items such as legal status, management system of the holding and livestock numbers, and a fixed day for number of family members and employees involved in farming activities. In Oceania, the day of enumeration was also the most common reference day.

In Asia, a fixed census reference day was the most common practice for collecting stock items (chosen in two thirds of the countries). Two countries (Indonesia and the Philippines) used both the enumeration day and a fixed census reference day for various items. In Europe, a fixed census reference day was the most common reference day (94 percent of the countries). In the Americas, both the fixed census reference day and the day of enumeration were equally used as the reference day.

Table 4.4. Number of censuses by type of reference day used for stock/inventory items

Region	Total	Day of enumeration	Fixed census reference day	Combination of both
All reporting countries and territories	127	46	72	9
Africa	22	18	3	1
Americas	28	11	14	3
Asia	29	9	18	2
Europe	36	1	34	1
Oceania	12	7	3	2

Table 4.5, derived from Table A1.3, Annex 1 shows that globally, the common practice regarding the reference period is the use of a combination of both “the last twelve months before the enumeration” and “the agricultural year”. This combination of enumeration periods was used by 38 percent of the countries. For 35 percent of the countries, the reference period was the “agricultural year”, while for 27 percent, it was “the last twelve months or another period”. Across regions, the agricultural year was frequently adopted in Africa and the Americas, while a combination of periods of reference was more common in Europe and Oceania. Asia showed an equal preference for the agricultural year and the last 12 months.

Table 4.5. Number of censuses by type of reference period used for flows items

Region	Total	Agricultural year	Last 12 months or another period	Combination of both
All reporting countries and territories	127	45	34	48
Africa	22	13	3	6
Americas	28	11	8	9
Asia	29	13	13	3
Europe	36	3	9	24
Oceania	12	5	1	6

5

Census modalities

Countries use a range of methodological approaches to the census, according to their technical capabilities, needs and circumstances. In the 2010 census round, three main modalities were commonly used: (i) the classical approach (a one-off operation); (ii) the modular approach (core and supplementary modules); and (iii) other approaches, involving some features of the classical and modular approaches.

Table 5.1 and Table A1.4, Annex 1 show that in the WCA 2010 round, approximately 92 percent of countries in Oceania, 96 percent of those in the Americas and 72 percent of countries in Asia used the classical approach. In contrast, one third of the countries in Africa conducted their censuses using the modular approach. Table 5.1 presents the classical approach subdivided in two groups, according to implementation: only field operations and field operations combined with the use of registers as sources of census data. The latter category was very popular in Europe (61 percent of countries). The various census modalities are discussed below.

Table 5.1 Agricultural censuses by census modality used by countries in the WCA 2010 round¹

Region	Total	Classical approach		Modular approach	Other ³
		Only field operations	Combined with the use of administrative registers ²		
All reporting countries and territories	127	83	22	11	11
Africa	22	10	0	7	5
Americas	28	27	0	0	1
Asia	29	21	0	4	4
Europe	36	14	22	0	0
Oceania	12	11	0	0	1

1 The modular and “other” approaches refer only to censuses that collected data exclusively through field operations.

2 Use of administrative registers (to source at least one census item) in combination with field data collection.

3 Censuses conducted in the field mixing classical and modular approaches.

In the WCA 2010 round, EU Member States, as well as Montenegro, Norway and Switzerland, conducted a Survey on Agricultural Production Methods (SAPM),⁹ a one-off survey carried out to collect data on agri-environmental practices at holding level. In many countries, the frame for the SAPM was not based on the census of agriculture (like in the modular approach) but on the frame established prior to the census. For these reasons, the SDS 17 (FAO, 2019) classified these censuses of agriculture as classical censuses.

5.1 CLASSICAL APPROACH

5.1.1 Only field operations

In a classical census, enumeration is commonly conducted in a one-off operation, providing a snapshot of the entire population with a comprehensive data set at the lowest geographical level at a specified period.¹⁰ Historically, the classical approach is the most widely used, despite its financial and technical demands and administrative complexity. Some of the greatest advantages of classical censuses, when conducted on a complete enumeration basis, compared to other census modalities are comprehensiveness of coverage and simultaneity. Over two thirds of the 83 countries that followed the classical approach used complete enumeration. An advantage of complete enumeration is that countries can build up statistical farm registers and exhaustive sampling frames for subsequent regular agricultural surveys.

The other 28 percent of countries that followed the classical approach used sampling, mainly in combination with complete enumeration. Table A1.4, Annex 1 provides details regarding the use of census modalities and enumeration methods by country. This is further discussed in Section 5.2 below.

In a classical census, all census data are commonly collected in a one-off operation during a specified enumeration period. However, in countries such as Colombia and the Russian Federation, certain regions were enumerated at different times of the year because of seasonal, access and agricultural conditions. In the Russian Federation, in most parts of the country enumeration was carried out from 1 July to 25 July 2006, while in remote and difficult access areas (the Far North and equated areas) data were collected from 15 September to 15 November 2006.

In many countries, a single questionnaire was administered to all agricultural holdings (e.g. in Australia, Belize, Cambodia, Jordan, Paraguay, Romania and South Africa). A number of countries used multiple census questionnaires and devoted one of those questionnaires or forms to collecting data from a specific subpopulation or holding type (e.g. household or non-household sectors, according to the holder's legal status), size, location, etc. For example, in Armenia, two types of questionnaires were used to collect holding-level data: for agricultural holdings in the household sector, and those in the non-household sector. In Mexico, a detailed questionnaire was used for production units and a shorter one for households with backyard activities. In Chile, although only one questionnaire was used, for some regions of the country, it was supplemented with two annexes, which included specific questions relevant to those regions.

⁹ Austria, Bulgaria, Czechia, Montenegro, Estonia, France, Italy, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Romania and Slovakia carried the SAPM out as a census survey, while Belgium, Croatia, Cyprus, Denmark, Finland, Germany, Greece, Hungary, Ireland, Latvia, Norway, Poland, Slovenia, Spain, Sweden, Switzerland and the United Kingdom of Great Britain and Northern Ireland carried the out SAPM as an independent sample survey. In some countries, the SAPM was carried out by complete enumeration (e.g. Austria, Romania).

¹⁰ However, certain regions of a country may be enumerated at different times of the year because of seasonal and agricultural conditions.

Box 5.1. Country example on the use of short-long questionnaires: Thailand, Agricultural Census 2013

The **Thailand AC 2013** questionnaire consisted of two parts. All holdings provided key agricultural structural items included in the first part (sections 1–10) of the questionnaire. A sample of holdings provided additional items included in the second part (sections 11–16) of the questionnaire.

The questionnaire covered all 16 core items recommended for the WCA 2010 round. The use of Computer–Assisted Personal Interviewing (CAPI) facilitated the operationalization of the short–long questionnaires.

For further details and more country examples, the reader may refer to FAO (2019).

A similar approach was followed in the United States of America, where seven regionalized versions of the main questionnaire were used for the Census of Agriculture 2012 to facilitate reporting on the crops most commonly grown within each region. Additionally, an American Indian report form was used to report operations on reservations in some states.

Some countries, such as Bangladesh, Thailand and Viet Nam (Asia), Mauritius (Africa), the Republic of Moldova (Europe), Saint Lucia (the Americas) and Samoa (Oceania), conducted a classical census using the short-long questionnaire concept. For instance, in Bangladesh, a short questionnaire was applied to all holdings, while a long, more detailed questionnaire was used to target a sample of holdings. Another example of the use of short-long questionnaires is presented in Box 5.1.

5.1.2 Field operations combined with the use of administrative registers

In recent years, a growing number of statistical offices, particularly in developed countries, have been moving towards making use of data from administrative sources in the statistical data production process. The use of registers and other administrative records as a source of census data in combination with field operations is relatively new for WCAs. The items collected directly from available administrative data sources are excluded from the field census questionnaire (Castano and Cara, 2019).

In this review, countries that reported the use of administrative registers as a source of census data for at least one census item are considered.¹¹ In the WCA 2010 round, 22 countries, all of which in Europe, reported the use of administrative registers as sources of census data. In all cases, this was used in combination with field operations to obtain the remaining census items (remotely or face-to-face). In Austria and Estonia, for instance, electronic questionnaires were personalized and prefilled with available administrative data. Farmers were asked to verify the information, complete missing data and, if necessary, make corrections.

This modality of the classical approach was used in Switzerland and many European Economic Area (EEA) countries, and EU countries. Many of these countries mainly sourced census data from the Common Agricultural Policy (CAP) records that supports the EU agricultural policy, such as subsidies for crops, bovine livestock and organic farming. The vineyard register was also used in France. In countries such as Finland and France, a significant proportion of census items were taken directly from statistical registers, which are regularly updated using statistical and administrative data sources. Box 5.2 presents some of these country experiences.

¹¹ The cases where only the identification items are taken from administrative sources (such as name, address and location of the holding) are not considered to be part of this census modality.

Box 5.2. Country examples on the use of registers as a source of census data**Finland: Agricultural Census 2010**

In Finland, questions required for statistical purposes were added to subsidy application forms in cooperation with the agricultural administration and the Information Centre of the Ministry of Agriculture and Forestry (Tike). The majority of the data for the AC 2010 were sourced directly from two statistical registers, the Farm Register and Horticultural Enterprise Register, which are regularly updated using statistical and administrative data sources. The remaining census data were collected through Computer-assisted Web Interviewing (CAWI) and Computer-assisted Telephone Interviewing (CATI).

Sweden: Agricultural Census 2010

The AC 2010 was conducted using Mail-out/Mail-back (MO-MB), CAWI and CATI for data collection, along with administrative registers as a source of other census data. In general terms, organic production data, cattle information, rural development payments and common land data were all sourced from administrative systems.

For further details and more country examples, the reader may refer to FAO, 2019.

In addition to the use of registers as a source of census data, many countries used administrative data for frame building, data control, editing and validation (see Chapters 7, 10 and 12).

5.2 MODULAR APPROACH

As stipulated in the WCA 2010, the modular approach consists of a clear distinguishable core module to be conducted on a complete enumeration basis and one or more supplementary modules to be conducted on a sample basis.

The modular approach was introduced to help countries (especially those without well-developed agricultural census and survey programmes) to complement the collection of key structural data with a wider range of data on various dimensions of the agricultural sector. In the 2010 census round, 11 countries conducted their ACs using the modular approach, 7 of which are in Africa and 4 in Asia.

Countries used different ways of implementing the modular approach:

- the census core module was conducted as a separate statistical operation in 70 percent of the countries, namely Cabo Verde, Cambodia, India, the Lao People's Democratic Republic, Myanmar, the Niger and Togo;
- the core module was an agricultural module/section in the PHC in the remaining 30 percent of the countries, to provide a frame for follow-up supplementary AC modules for holdings in the household sector. This modality was seen in Burkina Faso, the Congo,¹² Mozambique and Uganda.

Box 5.3 below presents two country examples. For more details regarding the linking of the AC with the PHC, see Chapter 8 (Section 8.1).

¹² As of mid-2020, the country was planning to implement the following supplementary modules: crops and livestock (household sector), commercial farms, fisheries and aquaculture.

Box 5.3. Country examples of ACs using the modular approach

Core module piggybacked onto the PHC: Burkina Faso Census of Agriculture 2006–2010

Census data collection was conducted in two phases:

Phase I – data collection sought to establish the census frame and to obtain the basic data on holdings: (i) for households engaged in own-account agricultural production, data were collected through an agriculture module within the PHC in December 2006; (ii) for holdings in the non-household sector, data on key frame items were collected through the listing of these holdings, from February to May 2007.

Phase II – data collection related to six supplementary/thematic modules was carried out from December 2007 to December 2008.

Core module conducted as a separate statistical operation: Myanmar Census of Agriculture 2010

The AC was carried out in two phases:

- During the first phase (from 15 February to 31 March 2009), the census core module was conducted.
- In the second phase (15 February to 31 March 2011), a supplementary module was conducted.

For the second phase, the 2009 frame for the supplementary modules was obsolete. Therefore, the modules used a two-stage sampling in February–March 2011. In the first stage, 20 percent of the villages in each township were selected using Probability Proportional to Size (PPS). Subsequently, a complete listing of all households was undertaken in all sampled villages to update the frame.

For further details and more country examples, the reader may refer to FAO (2019).

As recommended in the WCA 2010 and 2020, the supplementary modules should be carried out as closely as possible to the core module so that the frame can be readily used and the same reference period can be kept for all census items. However, in cases where the supplementary modules are carried out after a long period of time, some updates to the census frame may be necessary prior to the fieldwork, as was the case in Myanmar (see Box 5.3).

The number of supplementary modules used by countries varies from one as seen in the Lao People's Democratic Republic, to nine supplementary and "thematic" modules as observed in the Niger.

5.3 OTHER CENSUS METHODOLOGIES USED BY COUNTRIES

Some countries used mixed elements from different census approaches, while in other countries, the chosen census methodology was not fully applied as initially envisaged.¹³ In these cases, these censuses were classified in Table A1.4, Annex 1 and Table 5.1 (above) under "other" methodology.

In the first case, Eswatini, Lesotho and Malawi (Africa) and Kazakhstan (Asia) combined various elements from different census approaches. For instance, in Kazakhstan, the AC was conducted using complete enumeration, as in the classical approach. However, instead of in a one-off operation as recommended in the WCA, the census was carried out in two phases: in Phase I, to collect items related to the crop sector, and in Phase II, to collect items on the livestock sector and from units engaged in support activities (services) to agriculture. Lesotho, Eswatini and Malawi conducted their ACs on a sample basis or combined with complete enumeration in several phases,

¹³ For some countries, such as Eswatini, Jamaica and Palau, the classification of the census approach was difficult also because of the lack of all necessary information in the census reports available.

as in a modular census (and unlike in a classical census), but without clearly distinguishable core and supplementary modules.

In the second case, Côte d'Ivoire and Senegal (Africa), Lebanon and the Philippines (Asia) and Jamaica (the Caribbean) planned to use the modular approach, but only the core module was implemented (mainly in the household sector). The supplementary modules were not conducted mainly because of budget constraints.

In Palau (Oceania), key agriculture-related items were collected through a “Core agriculture and fishing” module in the Census of Population, Housing and Agriculture 2015, but no supplementary modules were conducted to collect other structural census items. Similarly, Sri Lanka (Asia) used the Economic Census – Agricultural Activities 2013/2014 to collect some core census items, but no subsequent supplementary modules were conducted to collect other agricultural census items.

6

Census enumeration and data collection methods

The census enumeration can be carried out in various ways, depending on country statistical capacity, national preferences and the availability of resources and data sources.

Section 6.1 of this chapter discusses country practices on census enumeration methods, namely complete enumeration, sample enumeration and a combination of both. Section 6.2 reviews the main sampling designs used in sample enumeration censuses. Section 6.3 discusses the various data collection methods used by countries, such as face-to-face interviewing and remote data collection techniques. The use of new technology for census data collection is especially highlighted. The section ends with a review of the use of objective measurements.

6.1 ENUMERATION METHODS: COMPLETE VERSUS SAMPLE ENUMERATION

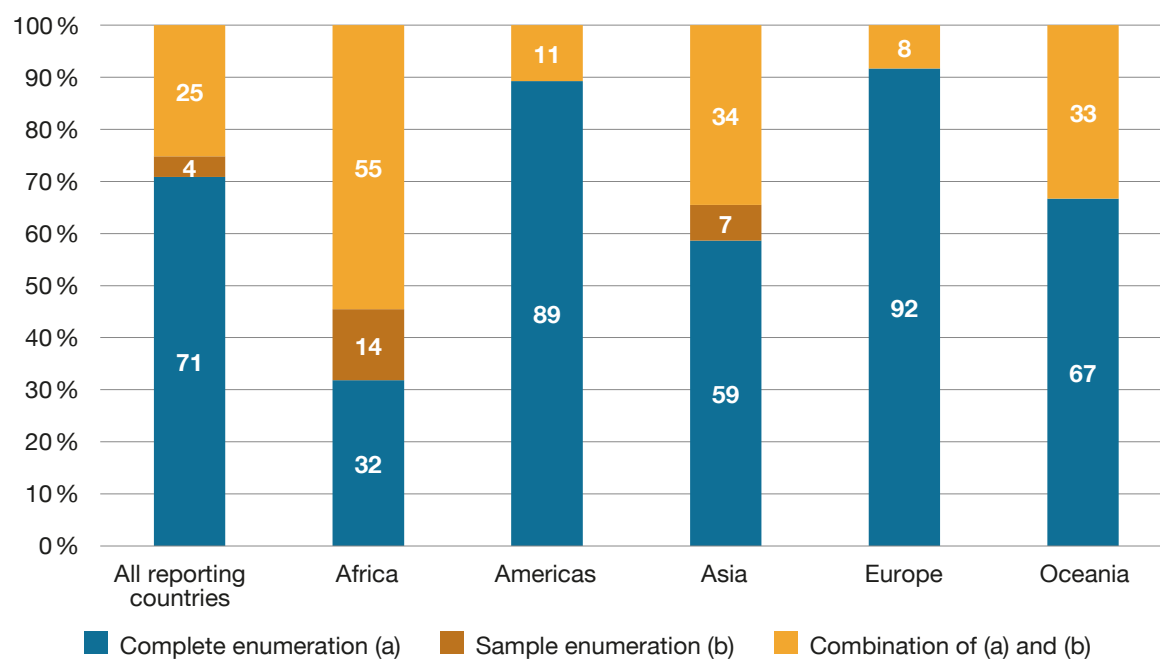
As noted in the WCA 2000 and WCA 2020, “the word ‘census’ implies a complete enumeration of all agricultural holdings. However, by extension, it can be conducted by a sample enumeration, provided the sample is large enough to generate sub-national data” (FAO, 2018). Some countries used sample enumeration in their ACs, either exclusively or in combination with complete enumeration. Usually, budget constraints are the main reason for this choice. A detailed discussion of the advantages and disadvantages of complete and sample enumerations is provided by FAO (2018). This section analyses national practices regarding enumeration methods applied by countries in the WCA 2010 round.

Table A1.4, Annex 1 provides detailed information for each of the 127 reporting countries on the enumeration method used. The sampling designs are also indicated where sampling was used either exclusively or in combination with complete enumeration. Table 6.1 summarizes the enumeration methods used by region.

Table 6.1 and Figure 6.1 illustrate that almost 71 percent of the agricultural censuses in the WCA 2010 round were conducted by complete enumeration, up from 67 percent in the 2000 round. This method of enumeration was quite common in Europe (92 percent of the countries), the Americas (89 percent), and Oceania (67 percent). In Asia, 59 percent of the countries used the above method, while in Africa over two thirds of the countries used sample enumeration exclusively or in combination with complete enumeration.

Table 6.1. Number of censuses of the WCA 2010 round by enumeration method

Region	Total	Enumeration method		
		Complete enumeration (a)	Sample enumeration (b)	Combination of (a) and (b)
All reporting countries	127	90	5	32
Africa	22	7	3	12
Americas	28	25	0	3
Asia	29	17	2	10
Europe	36	33	0	3
Oceania	12	8	0	4

Figure 6.1. Distribution of countries by census enumeration methods in the WCA 2010 round

Of the seven African countries and territories that conducted a complete enumeration census, Egypt and Réunion have longstanding experience in census taking; Seychelles and South Africa enumerated respectively only commercial holdings, and non-household farms and household holdings “producing mainly for sale”. Equatorial Guinea conducted the AC jointly with the PHC; Senegal conducted its AC as a module of the PHC; and Côte d’Ivoire conducted only the core module (using complete enumeration) of the planned modular census, due to financial constraints.

Only five countries conducted the census on a purely sample basis, down from 16 countries in the WCA 2000 round. Out of these, three were in Africa (the Gambia, Lesotho, Malawi) and two in Asia (Nepal and Pakistan).

In contrast, there was an increase in the number of censuses combining complete and sample enumeration in the 2010 census round. In fact, 32 countries (25 percent of the countries) combined these two enumeration methods, up from 22 countries (19 percent) in the previous round. The combined use of these enumeration methods was mainly observed in Africa (over half of the countries), Asia and Oceania (one third each).

Countries combine complete and sample enumeration methods in different ways:

1. The first type of combination is where complete enumeration is the dominant enumeration method. It comprises cases where complete enumeration is applied to agricultural holdings with the largest contribution to the agricultural production (e.g. some types of holdings and/or above a certain threshold), which usually constitute the bulk of the holdings. The remaining holdings (below a certain threshold or considered small in some other sense) are enumerated on a sample basis to ensure a complete picture of agriculture. This type of combination includes cases where (i) complete enumeration is used in the most important agricultural regions/areas of the country (such as rural areas or areas of the country where agricultural production is concentrated) and/or with easy access; and (ii) sample enumeration is used in other regions/areas of the country, where agriculture is marginal (for instance urban and peri-urban areas) and/or areas with difficult access.

For example, the Russian Federation used sample enumeration to cover the holdings in cities and urban settlements with more than 500 households, as well as to collect data on plots operated by “horticultural, kitchen-garden, livestock-growing and *dacha* non-profit associations” (FAO, 2019). All other holdings were covered by complete enumeration. In Suriname’s AC, complete enumeration was used in the Coastal Area, where the vast majority of agricultural holdings were located, while sample enumeration was used in Greater Paramaribo (district Paramaribo) and in the Interior (rural inland of Suriname). Box 6.1 describes the example from El Salvador.

2. The second type of combination is where sample enumeration is the dominant enumeration method. It comprises cases where sample enumeration is applied to small and medium-sized holdings (which usually constitute the bulk of agricultural holdings in countries with developing economies), while complete enumeration is used for the remaining holdings, such as large and other “special” holdings (which may account for a significant part of agricultural production).

Box 6.1. Combination of complete and sample enumeration: El Salvador Census of Agriculture 2007/2008

El Salvador Census of Agriculture 2007/2008

The AC 2007/2008 of El Salvador was conducted using the classical approach with a combination of complete and sample enumeration.

Rural areas were canvassed and all “segments” (6 218 segments) were covered. Holdings in urban areas were enumerated by sampling, using the information collected in the PHC carried out in 2007 (the PHC included a specific question about agricultural activities in the household). A sample of urban segments was selected from the PHC frame. Afterwards, the selected segments were canvassed and a screening form was applied to every household in the segment. All urban households with commercial agriculture were enumerated, while those with subsistence agriculture or backyard production were subsampled at a rate of 20 percent (using Simple Random Sampling).

For further details and more country examples, the reader may refer to FAO (2019).

In fact, such censuses may be considered sample-based censuses with one complete enumeration stratum. In many developing countries, the number of large and other “special” holdings, which usually belong to the non-household sector, is usually small compared to the number of the remaining holdings (mainly in the household sector), which justifies the use of complete enumeration under all census modalities. These “special” holdings need to be defined precisely, using country-specific criteria, in order to avoid overlaps or omissions in the ACs.

A review of countries’ practices show that the complete enumeration stratum may consist of:

- holdings in the non-household sector, as occurs for instance in Botswana and Namibia;
 - legal units (or in some countries “enterprises” or “business entities”), as in Croatia (see Box 6.3 below);
 - commercial holdings (e.g. Vanuatu);
 - holdings with a size above an established threshold (e.g. United Republic of Tanzania);
 - a combination of criteria. For instance, in Mongolia, the households with livestock production were covered by sample enumeration, while other agricultural holdings were enumerated completely.
3. The third type of combination refers to cases where some census items are collected from all holdings covered by the census, while more detailed items are collected on a sample basis. This type includes censuses using:
- the modular approach, where the core module is conducted using complete enumeration while thematic supplementary module(s) use sample enumeration; or
 - the short-long questionnaire concept (see Chapter 5).

6.2 SAMPLE DESIGNS

Table 6.1 shows that 37 countries used sample enumeration, either exclusively or in combination with complete enumeration. The sample designs can be classified based on the type of sampling frame used, i.e. list or area frames. Census frames are discussed in Chapter 7.

Table A1.4, Annex 1 reveals that most countries used sample designs based on list frames. Only three countries/territories used an area sample design component: American Samoa, Fiji (Oceania) and Puerto Rico (the Americas). These three countries used multiple frames consisting of combinations of area and list frames. The list frames were used for the complete enumeration, while the area frames were used for the sample enumeration. Box 6.2 below presents the experience of Fiji on the use of a multiple frame sample design.

Another way of classifying sample design is by the number of stages of sampling used in the census, namely one stage or multiple stages.

Box 6.2. Use of the multiple frame sample design: the Fiji National Agricultural Census (NAC) 2009

The National Agricultural Census (NAC) 2009 of Fiji was conducted using a Multiple Sampling Frame (MSF) that included list and area frame components. The list frame was used to identify large farms and other special farms, which were covered by complete enumeration.

The Area Sampling Frame (ASF) was established based on the enumeration areas (EAs) used for the PHC 2007. The EAs were used for stratum identification, construction and selection of segments. The segment size was targeted at 1 km² (100 ha). Because some of the smaller districts consisted of only a limited number of segments, all households in these districts were completely enumerated. These districts became part of the Small Island Strategy (SIS) and were removed from the “national land areas”. The remainder areas were stratified according to estimated agricultural intensity in the EAs. An overall rate of 10 percent was used in the area component of the sample.

For further details and more country examples, the reader may refer to FAO (2019).

In case of the list sample design, one-stage design refers to the case where the units of interest for the census (holdings to be enumerated or households to be screened for holdings) are selected directly from a list frame (FAO, 2018). Table 6.2 and Figure 6.2, which are derived from Table A1.4, Annex 1 shows that only 6 out of 37 countries (16 percent of the countries using sampling) used one-stage sample design. For instance, Mauritius used one-stage cluster sampling to enumerate the smallest holdings falling under the census threshold. Croatia, in turn, used element sampling¹⁴ (see Box 6.3).

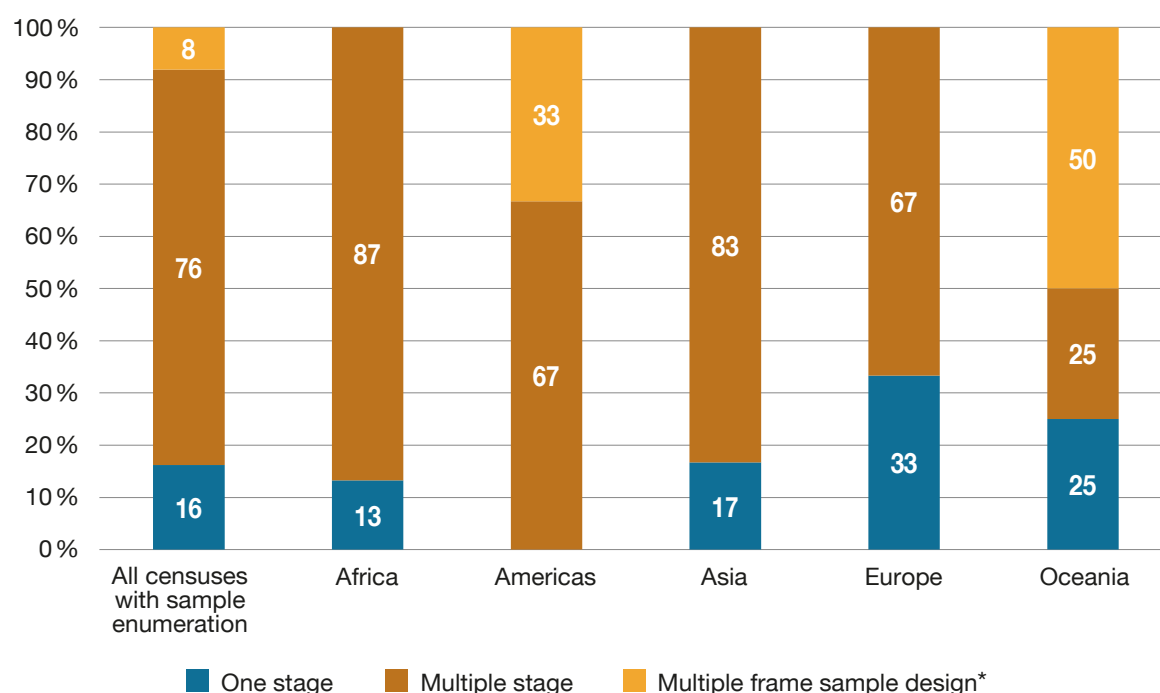
Multiple stage designs refer to the cases where holdings (or, in some countries, households engaged in own-account agriculture production) are selected at the last stage of the sample selection process after first selecting primary sampling units (PSUs), then selecting secondary sampling units (SSUs) from the selected PSUs, and so on. Usually, holdings are SSUs (in a two-stage sample design), but they can also be tertiary order units (in a three-stage sample design). Table 6.2 shows that multiple-stage sample design was preferred in 28 countries (76 percent). Out of these countries, only Namibia and Pakistan used three-stage sample designs.

Table 6.2. Number of censuses of the WCA 2010 round by sample design

Region	Total	List frame (LF) sample design			Multiple frame sample design ¹
		Total LF	One stage	Multiple stage	
All censuses with sample enumeration	37	34	6	28	3
Africa	15	15	2	13	0
Americas	3	2	0	2	1
Asia	12	12	2	10	0
Europe	3	3	1	2	0
Oceania	4	2	1	1	2

1 Sample design combining list and area frames.

¹⁴ Element sampling is appropriate when an exhaustive up-to-date list frame of agricultural holdings exists. It is much more demanding in terms of frame building and it is more difficult to apply (FAO, 2018).

Figure 6.2. Proportion of censuses of the WCA 2010 round, by sample design

* Sample design combining list and area frames

In the case of area sample design the ultimate units to be selected are usually segments of land, drawn with Probability Proportional to Size (PPS) (area). The segments are then associated with the holdings to be enumerated. Usually, the segments are selected through a two-stage procedure whereby first, larger land areas with recognizable boundaries (PSUs) are selected with PPS (area). Then, the selected areas are divided into segments and at the second stage, the segments (SSUs) are selected and all holdings in the selected segments are enumerated. Only three countries (8 percent) used multiple frame sample designs.

Table 6.2 and Figure 6.2, derived from Table A1.4, Annex 1 summarize countries' practices with respect to the sample designs used in the WCA 2010 round.

Most of the 28 countries that used multiple stage list sample designs were in Africa (13 countries) and Asia (10 countries). Two or more sampling stages allow greater flexibility to enhance the efficiency of the sampling design. In all cases except Pakistan, two-stage was the preferred design, with enumeration areas (EAs) or villages (or analogous administrative subdivisions) used as PSUs and agricultural holdings (or households screened for holdings) as SSUs. PSUs were sampled mainly with PPS, using the number of households with agricultural holdings as the size measure. In a few cases, the estimated number of households in each PSU was the size measure (e.g. the Lao People's Democratic Republic). The SSUs for two-stage sample designs were commonly agricultural holdings or households subsequently screened for holdings during the enumeration.

Box 6.3 below shows some country examples regarding the use of one-stage and multiple stage sampling.

Box 6.3. Country examples of sample designs using one and multiple stages

One-stage sample design: Croatia Farm Structure Survey (FSS) 2010

The Farm Structure Survey (FSS) was conducted using the combination of complete and sample enumeration. Agricultural enterprises (business entities) were covered by complete enumeration. Private family farms were enumerated using sampling.

The census frame was provided by the Statistical Register of Agricultural Holdings (SRAH), which has been regularly updated since the AC 2003, when it was established. The sampling frame was a list of all active family farms from the SRAH.

The sample design for family farms was a stratified random sampling. The population of family farms was divided into two parts: (i) family farms for which the farm's size in terms of European Size Units (ESUs) was calculated; and (ii) family farms without a calculated ESU.¹⁵ The biggest farms with a large ESU and utilized agricultural area (UAA, 9 806 farms) were included exhaustively in the sample. The farms without a defined ESU were stratified according to their UAA, area under orchards and area under vineyard. Stratified random sampling with explicit regional (NUTS 2) stratification was used.

Two-stage sample design: Census of Agriculture (CA) 2009/2010 in Mozambique

The modular approach was used in the Census of Agriculture (CA) 2009/2010. An agriculture module included in the PHC 2007 served as the core module for the CA. The data collection for six supplementary modules was carried out from January to November 2010 using CAPI (with notebooks).¹⁶

Based on the PHC data, 45 279 EAs were outlined for the CA 2009/2010. A special list frame was developed to identify large farm holdings in each district. These holdings were completely enumerated.

Two-stage sampling was used for the supplementary modules. During the first sampling stage, the EAs were selected systematically, with PPS within each stratum (district, urban and rural). The measure of size was the number of agricultural production households in the EA from the PHC 2007. All medium-sized holdings identified in the listing were included in the sample and a systematic sample of ten small holdings was selected in each sampled EA.

For further details and more country examples, the reader may refer to FAO (2019).

6.3 DATA COLLECTION METHODS

Data collection methods refer to the various ways of collecting census data from holdings. During the WCA 2010 round, face-to-face interviewing and remote data collection methods or a combination of both were used. Table A1.5, Annex 1 shows field data collection methods used by countries during the 2010 round.

Table 6.3 below summarizes the information by region. The table shows that face-to-face interviewing remained the most common data collection method, used in 90 percent of the reported censuses. This method was particularly favoured in Asia, Africa, the Americas and Oceania. Over 78 percent of the countries using face-to-face interviewing used the Paper and Pen Interviewing (PAPI) method.

¹⁵ These two parts were stratified separately. The final weights are products of sampling weights and nonresponse weights at the stratum level (two territorial units for statistics at the NUTS 2 level, combined with four size classes referring to production).

¹⁶ The enumeration period was extended to August 2011, as the extreme wet weather resulted in the postponement of the collection of production data in the northern part of the country.

Table 6.3. Censuses of the WCA 2010 round by field data collection method

Region	Total ¹	Face-to-face interviewing methods			Remote data collection methods				Objective measurement
		Total ¹	PAPI	CAPI	Total	CAWI	CATI/PATI	MO-MB/DO-PKE ²	
All reporting countries	127	113	90	26	37	21	12	25	11
Africa	22	21	14	7	4	0	0	4	10
Americas	28	27	21	8	3	1	2	2	0
Asia	29	29	24	5	3	2	0	1	1
Europe	36	26	21	6	25	17	10	16	0
Oceania	12	10	10	0	2	1	0	2	0

1 Totals may not add up due to the combination of different data collection methods.

2 Mail-out/Mail-back (MO-MB) and Drop-off/Pick-up by enumerators (DO-PKE)

Remote data collection methods were used by 37 countries in the WCA 2010 round, up from 18 countries in the previous census round. Out of these, 25 countries were in Europe, 4 in Africa, 3 each in the Americas and Asia, and 2 in Oceania. Postal enquiries, both Mail-out/Mail-back (MO-MB) and Drop-off/Pick-up by enumerators (DO-PKE), were the main remote data collection method, followed by Computer-assisted Web Interviewing (CAWI). Approximately 68 percent of the countries using remote methods used the post and 57 percent used CAWI.

The review shows a keener interest of countries in using new technologies for census data collection. The CAPI method was used in 26 censuses (20 percent of all countries). The CAWI method was adopted by 21 countries (17 percent) and Computer-assisted Telephone Interviewing (CATI) or Paper-based Telephone Interviewing (PATI) by 12 countries (9 percent).¹⁷ Table 6.4 details the countries that used new technologies in their data collection.

Table 6.4. Censuses conducted during the WCA 2010 round using new technologies, by data collection method

Data collection method ¹	Countries/territories	Number of censuses
CAPI	Brazil (2006), Colombia (2013/2014), Côte d'Ivoire (2014/2015), Equatorial Guinea (2015), Cabo Verde (2014/2015), France (2010), French Guyana (2010), Guadeloupe (2010), Iran (Islamic Republic of) (2014), Jordan (2007), Martinique (2010), Mexico (2007), Mozambique (2009/2010), Namibia (2013/2014), Oman (2012/2013), Réunion (2010), Thailand (2013), Saudi Arabia (2015), Senegal (2013), Venezuela (Bolivarian Republic of) (2008)	20
CAWI	Australia (2010/2011), Austria (2010), Belgium (2010), Georgia (2014), Hungary (2010), Italy (2010), the Netherlands (2010), Norway (2010), Republic of Korea (2015), Switzerland (2010) (2015), Switzerland (2010)	10
CATI/PATI	Slovakia (2010), Spain (2009/2010)	2
Combined (CAPI and/or CAWI, CATI/PATI)	Canada (2011), Denmark (2010), Estonia (2010), Finland (2010), Germany (2010), Iceland (2010), Latvia (2010), Lithuania (2010), Poland (2010), Slovenia (2010), Sweden (2010), United Kingdom of Great Britain and Northern Ireland (2010), United States of America (2012)	13

1 Methods of data collection using new technologies solely or in combination with PAPI and MO-MB or DO-PKE

¹⁷ These methods were used exclusively or in combination with other remote or/and face-to-face data collection methods.

As presented in Table A1.5, Annex 1 a number of countries used purely remote data collection techniques during the WCA 2010 round, such as: Austria, Canada, Denmark, Finland, Germany, Iceland, Ireland, the Netherlands, Norway, Sweden and the United Kingdom of Great Britain and Northern Ireland (Europe), and Australia and New Zealand (Oceania). In the Netherlands, prior to the census enumeration, each holder received a summons to participate in the AC by self-interviewing, using a paper or electronic questionnaire. The printed questionnaire was only made available on demand. As a result, most of the holders (85 percent) opted for CAWI. Box 5.7 presents the example of Canada.

Some countries combined CAWI with CATI. In Finland, for instance, once CAWI finished, non-respondents were followed up with via CATI. In the United States of America, CATI was also used to follow up on nonresponse. In the United Kingdom of Great Britain and Northern Ireland, CATI was used in cases when any records in the census questionnaires were flagged with issues (or were incomplete).

There were different ways of combining face-to-face and self-interviewing methods. One way was using MO-MB for holdings that were used to self-interviewing (mostly large farms and business entities), and face-to-face interviewing for the remaining holdings. This was the case of Croatia, Czechia, Hungary, Kazakhstan, the Republic of Moldova, the Russian Federation, Slovenia, Sri Lanka and the United States of America. Another way was using face-to-face interviewing to complement data collected through self-interviewing. Examples include Italy, Puerto Rico and South Africa. In South Africa, for example, face-to-face interviewing was used upon request (from micro, small and medium-sized enterprises) to assist respondents. In Puerto Rico, face-to-face interviewing was done to follow up with holdings that did not respond by post.

Box 6.4 presents some examples of data collection methods.

Box 6.4. Country examples on the use of different data collection methods

MO–MB in combination with CAWI and CATI methods: Census of Agriculture 2011 in Canada

Questionnaires were either MO–MB, CAWI or CATI (by calling the toll-free Census Help Line). Respondents were asked to complete and submit their questionnaires by “census day” (10 May 2011). A “reminder questionnaire” was sent in mid-May 2011 to non-respondents. From 1 June to 25 November 2011, outstanding questionnaires were followed up on by telephone.

PAPI in combination with MO–MB: Mauritius Agricultural Census 2014

The data collection for the AC 2014 was carried out using MO–MB for agricultural businesses and PAPI for holdings in the household sector.

CAPI in combination with PAPI: Mexico Census of Agriculture and Forestry 2007

CAPI (using personal digital assistant [PDA] devices) was the main method used. PAPI was used in production units located in high-risk areas.

MO–MB: New Zealand Agricultural Production Census (APC) 2012

The respondents were asked to complete and return by post the Agricultural Production Census (APC) questionnaires within 14 days of receipt. Questionnaires were posted to holdings carrying out farming, horticultural or forestry activities.

For further details and more country examples, the reader may refer to FAO (2019).

Table A1.5, Annex 1 shows that 11 countries included objective measurements in their censuses (down from 13 in the previous census round). Objective measurement was undertaken on a sample enumeration basis, as this is a very resource-intensive data collection method. Countries used this method when the holder's response was considered unreliable or there were no official records of the land area of the parcels being cultivated.

Objective measurement in the WCA 2010 round was seen in ten countries in Africa and one in Asia. Objective measurement was undertaken for areas in five countries (Botswana, Cabo Verde, Mozambique, Togo and Uganda); for areas and yields (crop-cutting) in other five countries (Eswatini, the Gambia, Lesotho, Malawi and Namibia); and for areas and livestock in one country (Saudi Arabia).

7

Census frames

7.1 CLASSIFICATION OF FRAMES USED

A census frame provides identification of the statistical units of the population of interest (i.e. agricultural holdings). It should cover all holdings in the country without omission or duplication, and without any units other than agricultural holdings. The availability of a frame is a prerequisite for both complete and sample enumeration censuses. A relevant sampling frame must provide a complete and up-to-date list of holdings or units of the population of interest. The two types of frame used to conduct an agricultural census are the area frame and the list frame. A combination of list and area frames is referred to as a multiple frame. The reader is referred to the WCA 2020 Operational Guidelines (FAO, 2018) for a detailed description of these types of frames.

Table A1.6, Annex 1 describes the types of frames used by the reporting countries in the WCA 2010 round. As shown in the table, the list frame was used by most countries. Only three reporting countries (American Samoa, Fiji and Puerto Rico) used area frames, and in combination with list frames (i.e. multiple frames)¹⁸ for census enumeration.

The list frames used can be classified into four categories:

1. A list of holdings compiled using farm registers maintained on a regular basis and/or other sources such as administrative sources (business registers, land cadastres, tax registers, etc.) and statistical sources (statistical registers maintained by statistical agencies, lists from previous agricultural censuses and surveys, etc.). In Table A1.6, Annex 1 such data sources for the list frame are designated as: (i) “Maintained farm register”; (ii) “Administrative sources”; (iii) “Non-administrative sources” (such as statistical sources, although this is rare); and (iv) “Administrative and non-administrative sources”, if the list frame was compiled using a combination of sources.
2. A list of holdings (or households engaged in own-account agricultural production) prepared during a listing operation. The listing operation could be conducted prior to the census enumeration (pre-census phase) or during the census enumeration. In Table A1.6, Annex 1 this type of frame is designated “listing operation”.
3. As explained in Section 8.1, the PHC can be used to build a preliminary list of households (HHs) engaged in own-account agricultural production using variables regarding, for example, economic activity status, occupation and industry. The PHC questionnaire can also contain

¹⁸ The trend is similar to that of the WCA 2000 round, when two reporting countries (Colombia and Ecuador) also used multiple frames.

some screening agriculture-related questions or an agriculture module to enable a more precise identification of agricultural holdings (AHs). In Table A1.6, Annex 1 the first type of frame is designated “List of HH from a PHC” or “Screening of HH” if a preliminary list of households engaged in own-account agricultural production was screened from the PHC. The second type is designated “List of Agricultural holdings (AHs)s from a PHC” if screening questions were used, or “PHC module” if an agricultural module was included in the PHC (e.g. a core module of a modular AC included in the PHC) to prepare a list of holdings.

4. Only a list of geographic or administrative units (mostly EAs but occasionally also administrative units such as villages, communes, districts and wards) was available from cartographic materials or administrative sources. The list of holdings is then created during the census enumeration by screening these territorial units. In Table A1.6, Annex 1 this type of frame is designated “Screening EAs” or “Screening villages”, depending on the type of geographic or administrative units screened. In the case of sampling, the word ‘selected’ is added.

7.2 FRAMES USED FOR CENSUSES CONDUCTED EXCLUSIVELY BY COMPLETE ENUMERATION

Table 7.1 summarizes the types of frames used for censuses conducted exclusively on a complete enumeration basis. Over 70 percent of countries (90 out of 127 countries) conducted their censuses by complete enumeration.

The table also shows that approximately 58 percent of the 90 countries prepared the frames using a compilation of lists of holdings from various sources, including administrative sources. This was observed mainly in Europe (88 percent) and the Americas (44 percent). The second most common type of frame practiced by approximately one fifth of the countries was a preliminary list of households or list of holdings screened from the PHC. Almost half of these countries were in the Americas.

Table 7.1. Number of complete enumeration censuses by type of census frame

Region	Total	Maintained up-to-date farm register	Compilation from various sources (including administrative)	Listing operation	Preliminary list of households from the PHC or list of holdings screened from the PHC	Screening territorial units (EAs, villages etc.)
All reporting countries	90	5	52	9	17	7
Africa	7	0	4	0	1	2
Americas	25	0	11	3	7	4
Asia	17	0	9	5	2	1
Europe	33	5	24	1	3	0
Oceania	8	0	4	0	4	0

The screening of EAs was used by 8 percent of the 90 reporting countries. However, some countries used other units for screening, such as villages and wards in Myanmar and Pakistan, respectively (refer to Table A1.4).

7.3 FRAMES USED FOR CENSUSES CONDUCTED BY SAMPLE ENUMERATION

Table 7.2 summarizes the types of sampling frames used in censuses that applied sample enumeration, either exclusively or in combination with complete enumeration. About 29 percent of the countries (37 countries) conducted their censuses using sample enumeration.

Table 7.2 shows that 43 percent of the 37 countries that carried out their censuses using sample enumeration built their frame by screening geographic or administrative units (selected units for the sample enumeration and all units for the complete enumeration). This practice was mostly used in Africa (eight countries) and Asia (four countries). The geographic or administrative units most used were EAs, although villages and wards were occasionally used.

The second most common frame practice used by countries using sample enumeration was preparing the frame based on screening questions in the PHC questionnaires (40 percent of the countries). This practice was mainly observed in Africa (40 percent of the African countries that implemented sample enumeration). The third most common frame practice was prelisting operations prior to the census enumeration (11 percent of the countries).

As discussed in Chapter 5, during the WCA 2010 round, 11 out of 127 countries conducted the census using the modular approach.

Table 7.2. Number of sample enumeration censuses by type of sampling frame

Region	Total	Compilation from various sources (including administrative)	Listing operation	Preliminary list of households from the PHC or list of holdings screened from the PHC	Screening territorial units (EAs, villages, etc.)
All reporting countries	37	2	4	15	16
Africa	15	1	0	6	8
Americas	3	0	0	2	1
Asia	12	1	2	5	4
Europe	3	0	1	1	1
Oceania	4	0	1	1	2

Table 7.3. Number of censuses that used the modular approach, by type of sampling frame for the core module

Region	Total	Listing operation	Preliminary list of households from the PHC or list of holdings screened from the PHC	By screening territorial units (EAs, villages etc.)
All reporting countries	11	3	5	3
Africa	7	1	4	2
Americas	0	0	0	0
Asia	4	2	1	1
Europe	0	0	0	0
Oceania	0	0	0	0

Table 7.3 describes the frames used by the 11 reporting countries for the core module. The table shows that the most common approach to build the sampling frame was to take advantage of information from the PHC (with screening questions or by screening a list of HHs or AHs from the PHC). Three countries, all in Africa (Mozambique, the Niger and Senegal), included a core module or an agricultural module in the PHC. In Asia, listing operations were the main means for building the frame for the core module (refer to Chapter 8 for broader insight on integrating the CA with other censuses).

8

Integration of the Census of Agriculture with other censuses

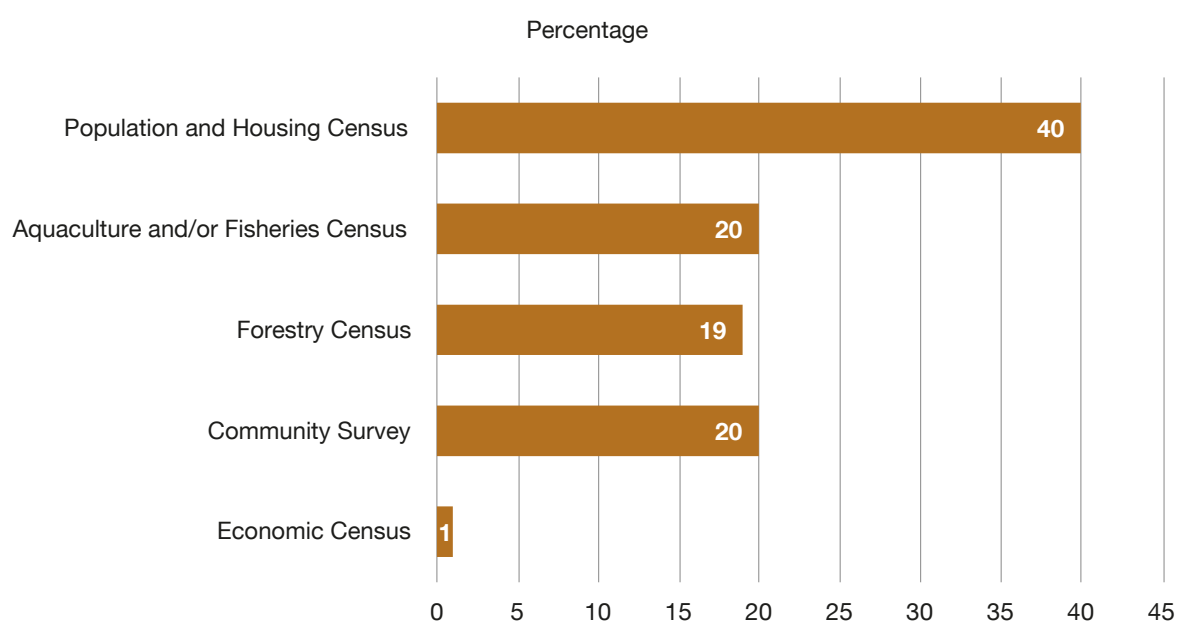
The census of agriculture is related to many other statistical operations in a country and should be carried out not in isolation, but as a component of the national statistics system. A feature of the WCA 2010 was to consider the agricultural census (AC) within the framework of an integrated agricultural statistics system. In such a system, the AC provides certain types of data as part of an integrated set of data on food and agriculture, needed for decision-making in food, agriculture and rural development. Its advantages are: (i) the possibility to plan and develop a comprehensive statistical programme without duplication of statistical activities or the release of conflicting statistics; (ii) the use of concepts, definitions and classifications in the different statistical activities that can be made compatible and allowing easy interpretation and analysis of related data from different sources; and (iii) each statistical collection can be restricted to a coherent and manageable set of items, in the knowledge that other related data are available in a comparable form from other sources.

The WCA 2010 advocated, like in previous rounds, to develop relationships with other censuses, especially with the PHC, the aquaculture census and the economic censuses.

For instance, synchronizing the AC with the PHC contributes to a more efficient conduct of both census operations, allowing reduction of costs, such as those related to building up a census frame for the AC (from the frame data provided by the PHC), cartographic material, information and communication technology and other equipment, development and implementation of a common communication and publicity strategy, and common logistics plans.

This chapter consists of five sections: Section 8.1 refers to the relationship between the AC and the PHC. Sections 8.2 and 8.3 deals with the linkages between the AC and forestry and aquaculture and/or fisheries censuses, respectively. Section 8.4 deals with the integration of an AC under the framework of an economic census. Section 8.5 provides examples of country practices of using the AC for collecting community-level data for various statistical purposes.

Figure 8.1 below shows the percentage of countries that integrated an AC with other operations. Forty percent of countries that participated in the WCA 2010 round linked the AC with the PHC, whereas 20 and 19 percent of the countries linked AC with aquaculture and/or fisheries and forestry censuses, respectively. Twenty percent of countries conducted an AC alongside a community survey. In contrast, only one country (Sri Lanka) conducted the AC jointly with the economic census. Details of the various linkages between an AC and other censuses is provided below.

Figure 8.1. Percentage of countries that integrated the AC with other operations

8.1 CENSUS OF AGRICULTURE AND THE CENSUS OF POPULATION AND HOUSING

The review shows that countries have several ways of linking the AC with the PHC. The WCA 2010 recommended conducting the AC immediately after the PHC. There were a few cases where the AC and PHC were carried out jointly.

Table 8.1. Types of linkages between the PHCs and ACs in the WCA 2010 round

Region	Common EAs or cartography	Agricultural (screening) items in the PHC	Agricultural module in the PHC
Africa	Botswana (2015), Congo (2014–2015), Côte d'Ivoire (2015), Eswatini (2012), Gambia (2011), Lesotho (2009/2010), Malawi (2006), Namibia (2013), Niger (2004–2008), Togo (2012), United Republic of Tanzania (2007).	Equatorial Guinea (2015), Mauritius (2014).	Burkina Faso (2006), Mozambique (2009), Senegal (2013), Seychelles (2011), Uganda (2008).
Americas	Argentina (2008), Brazil (2006), Costa Rica (2014), Saint Lucia (2007), Uruguay (2011).	Belize (2011), Antigua and Barbuda (2007), Canada (2011), El Salvador (2007), Grenada (2012), Nicaragua (2011), Panama (2011), Saint Lucia (2007), Suriname (2008).	
Asia	Cambodia (2013), Republic of Korea (2015), Philippines (2012).	Indonesia (2013), Jordan (2007), Mongolia (2011), Nepal (2011), Sri Lanka (2013), Viet Nam (2011).	
Europe		Albania (2012), Montenegro (2010), Serbia (2012).	
Oceania	Fiji (2009), Niue (2009).	Northern Mariana Islands (2009), Samoa (2009), Tonga (2015), Vanuatu (2007).	Palau (2015).

FAO (2005, 2012 and 2015) explain that the relationship between ACs and PHCs can cover:

- coordinating aspects of the two censuses in terms of:
 - use of common concepts, definitions and classifications;
 - sharing field materials;
- using the population census to build the frame for the household sector of the agricultural census; and
- collecting agricultural data as additional items in the population census, either as basic items or further supplementary modules.

The following aspects of the integration of the two censuses in the WCA 2010 are illustrated in Sections 8.1.1 – 8.1.3 below:

- the PHC is used to create a frame of households for the AC (household list, EAs);¹⁹ the PHC is used to collect additional agriculture-related items to create a frame of holdings for the AC;
- conducting the two censuses as a joint field operation.

Table 8.1 provides the list of countries according to the various types of linkages between the PHC and AC in the round.

8.1.1 The PHC as a household frame for the AC (household list, EAs)

Some countries implemented the AC fieldworks using the same EAs, maps and other field materials of the PHC. This approach provided the opportunity to link the two censuses. EAs from the PHC were used as PSUs for sample-based censuses in Botswana (2011), the Gambia (2011/2012), Lesotho (2009/2010), Malawi (2006/2007) and Niue (2009). In Fiji's AC 2009, the EAs from the PHC 2007 formed the basis for land use stratification. Box 8.1 shows country practices that used the EAs and household lists from the PHC as the frame for the AC.

Box 8.1. Population and housing census as a frame for the agricultural census

Botswana AC 2015

For the household sector, the sampling frame was built from 1 328 EAs demarcated during the PHC 2011. The frame excluded EAs from urban areas. These EAs served as PSUs during the AC. The frame for holdings in the non-household sector was built based on administrative registers.

Fiji National Agricultural Census (NAC) 2009

The EAs used for the Population Census 2007 formed the basis for land use stratification; the areas were adjusted depending on the uniformity of the land use. The NAC 2009 was conducted using an MSF that included the list and the area components.

¹⁹ The PHC does not cover agricultural variables, but other information on the economic activity status together with occupation and industry are used to construct a first frame for the agricultural census (e.g. a household list).

8.1.2 The PHC to collect additional agriculture-related items to create a frame for the agricultural census

Some countries included additional questions on agriculture in their PHC questionnaires to help identify agricultural holdings either at the household level or at the individual (person) level for the AC. At the household level, information was collected on whether any member of the household was engaged in own-account agricultural production activities at their place of usual residence or elsewhere, usually during a long reference period. Agriculture-related items were collected through the PHC questionnaire, either as a few screening questions or as a full module on agriculture.

In the Albania PHC 2011, screening questions were added to the questionnaire to identify household units involved in agricultural activities. The Burkina Faso AC 2006–2010 was conducted using the modular approach. An agricultural module was included in the PHC 2006, which enabled the collection of core items for holdings in the household sector and the establishment of a list of agricultural holdings, and served as a sampling frame for supplementary/thematic modules. The Mozambique AC 2009/2010 was also carried out using the modular approach. An agricultural module included in the PHC 2007 served as a core module for the AC 2009/2010. The frame for the AC 2009/2010 consisted of all agricultural holdings identified during the PHC 2007. The Uganda AC 2008/2009 also used the modular approach. An agricultural module in the PHC 2002 was used to create the list frame for holdings in the household sector that facilitated the conduct of the three supplementary modules during the AC 2008/2009.

Box 8.2 shows country practices that included agriculture variables/items in their PHC questionnaires to identify agricultural holdings. These items were consistent with the list of items FAO recommended for the AC core module that provided a frame for the supplementary modules.

Box 8.2. Screening items or modules included in the PHC to identify agricultural holdings

SCREENING ITEMS

Albania PHC 2011

In the PHC 2011 questionnaire, screening questions were added to identify households engaged in own-account agricultural activities. These questions were:

1. Does the household have a kitchen garden larger than 200 m²?
2. Does the household use any other agricultural land in Albania? (Land rented out or given to other people is not to be taken into consideration).
3. Does the household have livestock or bees?

Belize PHC 2010

In the PHC 2010 questionnaire, a short section on agriculture (Section 3: Agriculture) included the following questions:

1. Do you or any member of your household own or lease any land that is currently being used, or is intended for farming?
2. Do you or any member of your household engage in any of the following agricultural activities?
 - a. Grow more than 0.5 acres of crops.
 - b. Own 2 or more sheep, goats, pigs, heads of cattle (combined).
 - c. Own 10 or more chickens, ducks, turkeys, geese (combined).
 - d. Have any aquaculture ponds for farming fish.
 - e. Have more than 0.5 acres of fallow farm land and/or pasture land.
 - f. Engage in fishing as a major source of income.
 - g. Have 5 or more fruit trees.

cont./

AGRICULTURE MODULES

Burkina Faso PHC 2006

In its PHC 2006, Burkina Faso included an agricultural module with the following items:

1. Types of annual crops by season.
2. Types of horticultural crops by season.
3. Number of fruit trees of different types.
4. Whether the household practices silviculture.
5. Whether the household is engaged in fisheries.
6. Number of livestock by type.
7. Number of draught animals by type.
8. Number of items of machinery owned.

Mozambique PHC 2007

The PHC 2007 included an agriculture module that served as the core module for the AC 2009/2010, with the following items:

1. Does any member of this household practices agricultural activity on his or her own?
2. Does this household have aquaculture tanks?
3. Does any member of this household practice artisanal fishing?
4. Does this household have cashew trees?
5. Does this household have coconut trees?
6. How many of these animals does the household raise?

8.1.3 Conducting the two censuses as a joint field operation

The strongest link between the AC and the PHC is when both censuses are undertaken together as a joint operation. In the WCA 2010 round, some countries conducted a full-scale AC jointly with the PHC to collect data from the agricultural holdings in the household sector. Each of the censuses retained its separate identity and used its own questionnaire, but field operations were synchronized so that the two data collections were conducted by the same or different enumerators. Box 8.3 shows country practices in conducting the PHC and AC as a joint field operation to collect data from the agricultural holdings in the household sector.

Box 8.3. Conducting the two censuses as a joint field operation

Canada 2011

Canada coordinated the data collection for both censuses jointly. Although the AC and the PHC were conducted at the same time, they had separate questionnaires for self-completion. Most of the development, testing, processing, data validation and preparation for disseminating data for the AC and the PHC was handled by different groups within Statistics Canada. A question on the census of population questionnaire was used to identify farm operators and supplement the AC frame. If someone answered 'yes' to the question, the census representative either confirmed that a Census of Agriculture Form had been delivered to the household or made arrangements to deliver it. The census enumerator's job was simply to distribute questionnaires because both censuses were self-enumerated.

Cook Islands 2011

Agriculture-related data were collected through both the census of agriculture and fisheries (CAF) and the Census of Population and Dwellings (CPD) 2011. There were two separate teams of supervisors and enumerators, one for the CPD and another for the CAF. In each EA, the CPD was first conducted and the households engaged in agriculture and fisheries activities were identified. This list of households was passed to the CAF team, which then visited them to complete the CAF. The northern group of islands presented a particular challenge for data collection, because they are sparsely populated and are only accessible by boat. For this reason, the CAF enumeration was conducted simultaneously with the CPD, with the two censuses sharing transport costs.

cont./

Georgia 2014

The AC 2014 in Georgia was conducted in conjunction with the General Population Census (GPC). The questionnaire of the GPC consisted of four forms. Form 4 was the questionnaire on agriculture (four pages). The forms of the questionnaire were linked to each other with special unique codes. As the PHC covered all households, a threshold was not used for the AC. Therefore, the questionnaire on agriculture was filled in for all households engaged in own-account agricultural activities. The questionnaire on agriculture did not include information on the holder. The socioeconomic information on the holder and the members of his/her household were available in the PHC questionnaires. For holdings in the non-household sector, a separate data collection was conducted by self-interviewing using an online questionnaire (CAWI).

Occasionally, the two censuses were undertaken at the same time using the same enumerators. This approach poses logistical and methodological challenges but some countries chose this option, especially to obtain savings on data collection costs.

8.2 CENSUS OF AGRICULTURE AND FORESTRY CENSUS

The WCA 2010 recommended that economic units engaged solely in forestry and logging activities should not be considered as agricultural holdings and should be excluded from the census of agriculture. For agricultural holdings for which forestry was a secondary activity, the Programme recommended a restricted range of items, namely area of forest and other wooded land as both primary and secondary land uses, main purpose of forest and other wooded land, and whether agro-forestry is practised.

However, forestry and logging activities were important in certain countries, which therefore included economic units engaged solely in forestry in the census coverage and collected more detailed information about these activities. Thus, it may be considered that their agricultural census included a small-scale census of forestry. The Indonesia AC 2013 included forestry activities as part of the census program, but the data were collected in a separate survey of forestry holdings conducted in 2014. For the Mongolia AC 2011, the census scope included all households, business units and organizations engaged in agricultural (crop and livestock) production, forestry and other activities (fisheries and hunting sectors). Specific questionnaires were used for each type of unit and activity.

Some countries (e.g. Argentina 2008, Austria 2010, Brazil 2007, Colombia 2013, the Congo 2014, New Zealand 2011 and Uruguay 2011) covered agricultural holdings that were also engaged in forestry activities in their census scopes, but detailed information on forestry activities were not included in their AC questionnaires. These countries collected mostly items on the presence of forestry activities on the holding and land area used for forestry.

Other countries undertook a full-scale census of forestry together with the census of agriculture. Chile (2006/2007), Japan (2015), Republic of Korea (2015) and Mexico (2007) conducted a full-scale forestry census jointly with the agricultural census, officially naming their census activity 'Census of Agriculture and Forestry'.

Table 8.2 below shows that 24 countries included forestry activities or covered forestry holdings in their agricultural census.

Table 8.2. Countries that included forestry activities or covered forestry holdings in their agricultural census

Region	Countries	Number
Africa	Burkina Faso (2006–2010), Cabo Verde (2015), Congo (2014–2015), Côte d'Ivoire (2015/2016), Namibia (2011), Senegal (2013).	6
Americas	Argentina (2008), Bolivia (Plurinational State of) (2007), Brazil (2006), Chile (2006/2007), Colombia (2014), Mexico (2007), Uruguay (2011).	7
Asia	Bhutan (2009), China (2006), Indonesia (2013), Japan (2015), Republic of Korea (2015), Mongolia (2011), Viet Nam (2011).	7
Europe	Austria (2010), Germany (2010), North Macedonia (2007).	3
Oceania	New Zealand (2012).	1

Box 8.4 shows some country examples in conducting censuses of agriculture together with censuses of forestry.

Box 8.4. Censuses of agriculture and forestry

Chile Census of Agriculture and Forestry (CAF) 2006/2007

One questionnaire was used for data collection. Section 9 (“*superficie forestal*”) of the questionnaire was allocated to the forest area of some specific forest trees. Although detailed items on forestry activities were not included in the questionnaire, it is regarded by the country as a census of forestry jointly conducted with the census of agriculture.

Japan Census of Agriculture and Forestry (CAF) 2015

Three questionnaires were used for CAF data collection: (i) a questionnaire for agriculture and forestry management entities; (ii) a questionnaire for rural municipalities; (iii) a questionnaire for rural communities. A single questionnaire for agriculture and forestry management entities was sent to management entities within the established threshold. Sections 12–17 of the questionnaire collected detailed information on forestry activities from forestry management entities. The survey on rural municipalities collected additional information on forest area and forest and grazing land area.

Mexico Census of Agriculture and Forestry (CAF) 2007

Two types of statistical units were defined in the CAF: (i) the agricultural production unit (UPA) and the non-agricultural production unit (UPNA). UPAs included units engaged in agricultural and/or forestry activities. One single questionnaire was used for production units within the established threshold. Part of the questionnaire was allocated to forest exploitation and destination of timber and non-timber products. Detailed information on forestry activities was collected from production units engaged in these activities.

8.3 CENSUS OF AGRICULTURE AND AQUACULTURE AND/OR FISHERIES CENSUS

Aquaculture has become more important in many countries. The WCA 2010 encouraged countries to conduct an aquaculture census in conjunction with the census of agriculture where there was a need for aquacultural data. The modular approach facilitated the integration of the two censuses. The core module provided a core item to identify aquaculture holdings, and a subsequent sample-based supplementary aquaculture module aims at providing at least five detailed structural items (e.g. areas according to type site and production facility, type of water, source of water and type of organism).

Figure 8.1 shows that 20 percent of countries integrated the aquaculture and/or fisheries census with the AC. Some countries included additional items in their PHC questionnaire if an aquaculture and/or fisheries census was to be conducted in conjunction with the AC (e.g. Cook Islands [2015]).

Box 8.5 below shows country practices in conducting censuses of agriculture together with censuses of aquaculture and/or fisheries.

Box 8.5. Census of agriculture and aquaculture and/or fisheries census

Mozambique Census of Agriculture 2009/2010

The AC was conducted using the modular approach where one of the supplementary modules was about aquaculture. Agricultural holdings were enumerated and those with aquaculture activities were targeted with a two-stage sampling design. The aquaculture module collected information on number of tanks used for aquaculture, estimated total tank area, type of water used, source of water for aquaculture, type of the aquaculture organism grown, location of aquaculture tanks and type of production infrastructure used.

The Philippines Census of Agriculture and Fisheries (CAF) 2012²⁰

The census covered agricultural activities, as well as aquaculture and fisheries activities. The CAF 2012 enumerated all farms engaged in agricultural, aquaculture and fisheries activities, regardless of their size. The following data items were included in the census:

1. characteristics of the aquafarm such as type, location, area/volume, water environment, and the type of species cultured;
2. characteristics of the fisheries activity such as category of fisheries, tonnage of boat/vessel used, number of boats/vessels used, and kind and number of fisheries gears/accessories/devices.

Viet Nam Rural, Agricultural and Fisheries Census 2011

The census was undertaken by complete enumeration of rural, agricultural and fisheries households within the established threshold. The census could be considered as a full-scale census of aquaculture jointly conducted with the census of agriculture, as all identified households were enumerated on a complete enumeration basis. Detailed information was collected from farms with fisheries and aquaculture activities in one section of the farm questionnaire. Items on capture fisheries and aquaculture were included, such as total area used for aquaculture breeding, fish capture, total cages/rafts used for aquaculture and production value from fisheries and aquaculture. There were also questions on the area and quantity of water used for aquaculture, if the farm had motorized boats and ships for aquaculture, if the farm had aquaculture product dryers, and if the farm has aquaculture food processing machinery.

²⁰ The 2012 CAF was supposed to conduct one or more sample-based census supplementary modules, which would collect more in-depth structural data on specific concerns on irrigation, cropping pattern, aquaculture and fisheries. Due to the transition of former statistical agencies into the Philippine Statistics Authority (PSA), however, these modules were not carried out.

Table 8.3. Countries that included aquaculture and/or fisheries activities or covered aquaculture and/or fisheries holdings in their agricultural census

Region	Countries	Number
Africa	Burkina Faso (2006–2010), Cabo Verde (2015), Congo (2014/2015), Côte d'Ivoire (2015), Egypt (2009/2010), Namibia (2011), Uganda (2008/2009).	7
Americas	Belize (2011), Bolivia (Plurinational State of) (2013), Brazil, (2006) Colombia (2014), Suriname (2008).	5
Asia	Azerbaijan (2015), Cambodia (2013), China (2006), Indonesia (2013), Mongolia (2011), Republic of Korea (2015), Lao People's Democratic Republic (2010/2011), Myanmar (2010), Philippines (2012), Sri Lanka (2013/2014), Thailand (2013), Viet Nam (2011).	12
Europe	North Macedonia (2007).	1
Oceania	Cook Islands (2011).	1

Table 8.3 also shows the 26 countries that integrated units with aquaculture and/or fisheries activities in their census. The Philippines AC 2012 and the Republic of Korea AC 2015 conducted a full-scale census of agriculture in conjunction with the fisheries census. Myanmar conducted a census of agriculture that integrated an aquaculture module in its supplementary modules targeting aquaculture units; the census was conducted on a complete enumeration basis.

8.4 CENSUS OF AGRICULTURE AND ECONOMIC CENSUS

In the WCA 2010 round, Sri Lanka was the only country that integrated the AC with an economic census. The Sri Lanka Economic Census (EC) 2013/2014 covered: (i) the agriculture sector (“EC 2013/14 – Agricultural activities” (AA)); and (ii) the industry, trade and service sectors (“EC 2013/14 – Industry, Trade and Services”). The EC-AA 2013/2014 programme included a community survey and a survey on household food security.

8.5 CENSUS OF AGRICULTURE AND COMMUNITY SURVEY

A strong demand for community-level data prompted the inclusion of community-level components in the AC under the WCA 2010. Community-level data provide useful data on infrastructure aspects and economic activities. Some countries conducted a community survey jointly with an AC to comprehend all aspects of agriculture and to ensure a link between holding-level and community-level data. The programme recommended a separate statistical unit for the AC and the community survey. Most countries that conducted an AC jointly with a community survey used a separate community-level questionnaire alongside the AC questionnaire. Table 8.4 shows that community surveys and ACs were jointly conducted in Asia (13 countries), Africa (9 countries) and the Americas (4 countries).

Table 8.4. Countries that conducted an agricultural census jointly with a community survey

Region	Countries	Number
Africa	Congo (2014–2014), Côte d'Ivoire (2015/2016), Eswatini (2012/2013), Gambia (2011/2012), Lesotho (2009/2010), Malawi (2006/2007), Senegal (2013), United Republic of Tanzania (2007/2008), Togo (2012–2014).	9
Americas	Bolivia (Plurinational State of) (2013), Haiti (2008/2009), Nicaragua (2011) and Venezuela (Bolivarian Republic of) (2008).	4
Asia	Armenia (2014), Cambodia (2013), India (2010/2011), Iran (Islamic Republic of) (2014), Japan (2015), Republic of Korea (2015), Lao People's Democratic Republic (2010/2011), Mongolia (2011), Myanmar (2010), Nepal (2011/2012), Philippines (2012), Sri Lanka (2013/2014) and Viet Nam (2011).	13

Box 8.6 shows country practices in conducting censuses of agriculture together with a community survey.

Box 8.6. Census of agriculture and community survey

Islamic Republic of Iran Census of Agriculture 2014

The census followed the classical approach. There were two questionnaires, the holding and the village questionnaires. The village questionnaire covered:

- Agricultural water resources
- Agricultural machinery
- Agricultural machinery services
- Animals for transportation and riding

Lao People's Democratic Republic Census of Agriculture 2010/2011

The AC followed the modular approach. The census had three questionnaires, namely the household, holding and village questionnaires. The village questionnaire covered the following items:

- Weather assessment
- Socioeconomic conditions
- Agricultural infrastructure
- Village infrastructure
- Village organization

Togo Census of Agriculture 2012–2014

The AC followed the modular approach. In addition to the core module and six supplementary modules, a village questionnaire was used for community-level data collection. The village questionnaire covered:

- Basic infrastructure
- School infrastructure and training centres
- Sanitary and social infrastructure
- Socioeconomic infrastructure
- Existence of communication networks
- Natural resources of the village
- Socioeconomic organizations
- Main difficulties in the selected areas

9

Themes and items covered in censuses

As mentioned in Chapter 2, the WCA 2010 introduced a new census methodology: the modular approach. The modular approach for the census of agriculture envisaged a core census module based on complete enumeration to collect key data, and a number of sample-based supplementary modules to collect more in-depth data. The core module provides the frame for the supplementary modules. The WCA 2010 presented the census items under two headings: (i) 16 core census items recommended for inclusion in the core census module; and (ii) 89 supplementary items to be considered by countries for inclusion organized under 12 themes. WCA 2010 facilitated the integration of agricultural census with other censuses (aquaculture and forestry) by the inclusion of core items on the presence of aquaculture and the presence of forest and other wooded land on the holding.²¹ The 2010 Programme also introduced the community survey, to be conducted in parallel with the census and to obtain data on the common infrastructure and services available to farmers.

This chapter consists of three sections. The first section provides an overview of country practices in covering the recommended 16 core items. The second section takes stock of the census themes and supplementary items covered by countries. This section is made of 12 subsections (one per theme) with examples of country practices. The third section reviews the country practices in community-level data collection.

9.1 CENSUS CORE ITEMS

The following 16 core items were recommended for inclusion in the census regardless of the census methodological modality as shown in Table 9.1.

Table 9.1. List of core items recommended for WCA 2010

No.	Items
01	Identification and location of agricultural holding
02	Legal status of agricultural holder
03	Sex of agricultural holder
04	Age of agricultural holder
05	Household size

cont./

²¹ More details on integration of agricultural census with other censuses can be found in Chapter 8 of this publication.

No.	Items
06	Main purpose of production of the holding
07	Area of holding according to land use types
08	Total area of holding
09	Land tenure types on the holding
10	Presence of irrigation on the holding
11	Types of temporary crops on the holding
12	Types of permanent crops on the holding and whether in compact plantations
13	Number of animals on the holding for each livestock type
14	Presence of aquaculture on the holding
15	Presence of forest and other wooded land on the holding
16	Other economic production activities of the holding's enterprise

Table 9.2 below shows the coverage of the 16 core items by countries across the regions. Detailed information on the core items covered by countries are shown in Table A1.9, Annex 1.

Item-wise, most countries and territories (more than 95 percent of the countries and territories) covered Items 01 "Identification", 03 "Sex of agricultural holder", 04 "Age of agricultural holder", 07 "Area of holding according to land use types", 08 "Total area", 11 "Temporary crops", 12 "Permanent crops" and 14 "Livestock", while Items 14 "Presence of aquaculture on the holding", 15 "Presence of forest and other wooded land on the holding" and 16 "Other economic activities" were the least covered (82 percent or less of the countries). The remaining core items were relatively well covered by 90 to 95 percent of the countries.

Table 9.2. Number of censuses by coverage of census core items by region

Region	Total	Core items															
		01	02	03	04	05	06	07	08	09	10	11	12 ²	13	14	15	16
All countries	127	127	115	122	121	118	113	123	127	118	117	126	126	126	103	104	90
Africa	22	22	14	22	22	20	16	20	22	17	21	22	22	22	16	16	16
Americas	28	28	28	27	27	27	28	28	28	28	27	28	28	28	22	25	20
Asia	29	29	26	28	28	29	26	28	29	27	28	29	29	28	24	21	14
Europe¹	36	36	36	36	36	35	35	36	36	36	33	36	36	36	35	34	36
Oceania	12	12	11	10	10	10	11	11	12	10	6	11	11	12	7	8	4

1 Europe includes items collected in SAPMs conducted together with the ACs in some EEA countries. The SAPM was compulsory for EU, EEA and EFTA (European Free Trade Association) countries.

2 120 countries covered the second part of Item 12, 'whether in compact plantations', namely: Africa (20 countries), Asia (28), Europe (33), the Americas (28) and Oceania (11).

Region-wise, Europe showed the best coverage of all 16 core items, with only 10 “Presence of irrigation on the holding” and 15 “Presence of forest and other wood land” being the least covered items (94 percent of the countries). This was followed by the Americas, where Items 16 “Other economic activities” and 14 “Aquaculture” were the least covered (71 and 79 percent, respectively) compared to other items, which were covered by 96 to 100 percent of the countries. Asia was third in coverage, with Core Items 16 “Other economic activities” (48 percent), 15 “Forestry” (72 percent) and 14 “Aquaculture” (79 percent) being the least covered. Africa was a close fourth, with the following core items being less covered: 02 “Legal status”, 06 “Main purpose of production”, 14 “Presence of aquaculture”, 15 “Forestry and other wood land”, and 16 “Other economic activities” (from two thirds to less than three quarters of the countries). Oceania fared last, with a comparatively low level of coverage being given to Core Items 16 “Other economic activities” (33 percent), 10 “Presence of irrigation on the holding” (50 percent), 14 “Aquaculture” (58 percent), and 15 “Forestry” (67 percent).

9.2 CENSUS THEMES

As mentioned before, the WCA 2010 proposed, for countries’ consideration, 12 census themes comprising the recommended census core items (theme-related) and up to 89 supplementary items for possible inclusion in census questionnaires. Table 9.3 presents the 12 census themes.

In this review, a theme is considered to be covered by a country if at least one item from that theme (either a core or a supplementary item) was included in the census questionnaires.

Table 9.3. List of census themes proposed in the WCA 2010

No.	Theme's title
01	Land
02	Irrigation and water management
03	Crops
04	Livestock
05	Agricultural practices
06	Agricultural services
07	Demographic and social characteristics
08	Farm labour
09	Household food security
10	Aquaculture
11	Forestry
12	Management of the holding

Table 9.4. Number of censuses by coverage of census themes and region

Region	Total	Themes											
		Land	Irrigation	Crops	Livestock	Practices	Services	Demography	Labour	Food security	Aquaculture	Forestry	Management of the holding
All countries	127	127	116	126	127	121	74	124	109	18	104	104	21
Africa	22	22	21	22	22	22	16	22	19	8	16	16	5
Americas	28	28	29	28	28	27	22	28	25	2	22	25	8
Asia	29	29	29	29	29	26	16	28	22	7	24	21	6
Europe¹	36	36	33	36	36	36	15	36	36	0	35	34	1
Oceania	12	12	6	11	12	10	5	10	7	1	7	8	1

1 Europe includes themes collected in SAPMs conducted together with the ACs in some EEA countries. The SAPM was compulsory for EU, EEA and EFTA countries.

Table A1.10, Annex 1 shows theme coverage per country and Table 9.4 provides a summary by region. Table 9.4 shows that the most covered themes across regions were “land”, “livestock”, “crops”, “agricultural practices” and “demographic and social characteristics” (95 percent of the countries or more), while the least covered were “management of the holding” (17 percent of all countries) and food security (14 percent). Other less covered themes were “aquaculture”, “forestry” and “agricultural services” (from one third to half of the countries). The lack of coverage for “management of the holding” was probably due to the fact that the concepts of sub-holding²² and sub-holder introduced to capture the gender role in the holdings were too complex to implement, while food security, aquaculture, forestry and agricultural services were not relevant for inclusion by all countries in their agricultural censuses.

From the regional perspective, Table 9.4 shows that half of the themes were well covered by all regions (land, crops, livestock, agricultural practices, demography and labour were covered by at least two thirds of the countries). The Americas was the region with more themes covered. This region covered irrigation, forestry and agricultural services better than other regions. Africa, Europe and Asia followed closely in term of themes’ coverage. Africa covered “food security” better than any other region (36 percent of the countries). Asia made good coverage of irrigation (86 percent) and aquaculture (59 percent). European countries count with several surveys (e.g. the SAPM) to cover core and supplementary items not covered by the census. In contrast, Oceanian countries had a limited coverage of the various themes, in comparison with other regions. The items listed under each theme depend strictly on countries’ census questionnaires.

Figures 9.1 and 9.2 below show the percentage of most and least covered census themes by region and world total.

²² A subholding was defined as a single agricultural activity or group of activities (e.g. a livestock operation associated with a plot, field or parcel) managed by a particular person or group of persons in the holder’s household on behalf of the agricultural holder. A subholder was the person responsible for managing a subholding on the holder’s behalf.

Figure 9.1. Most covered census themes by region and world total

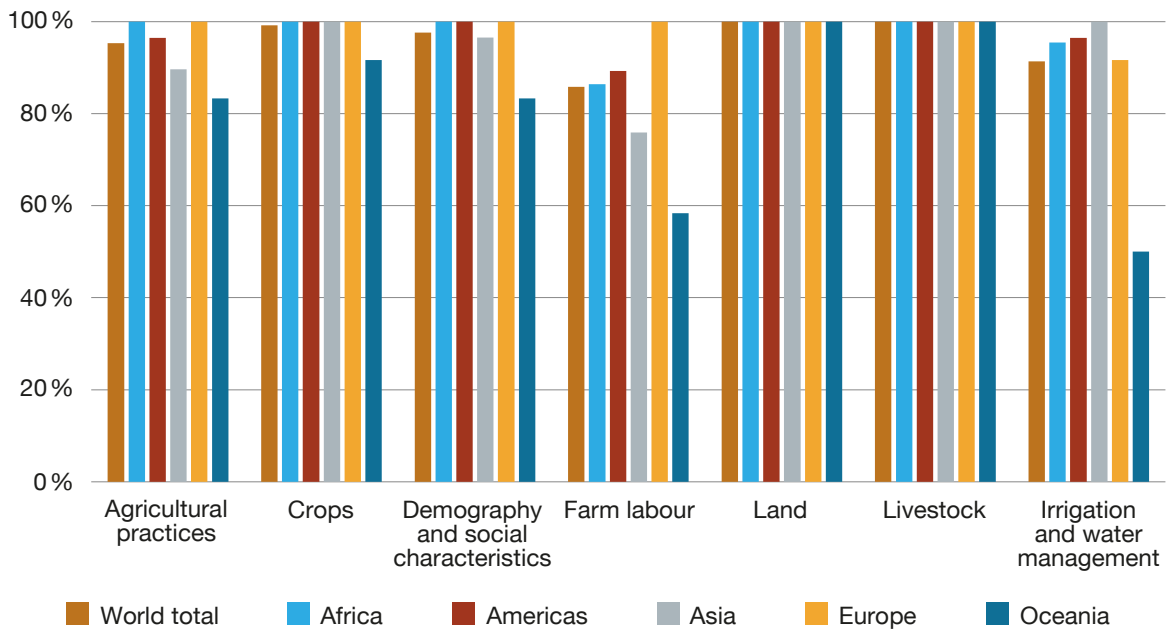
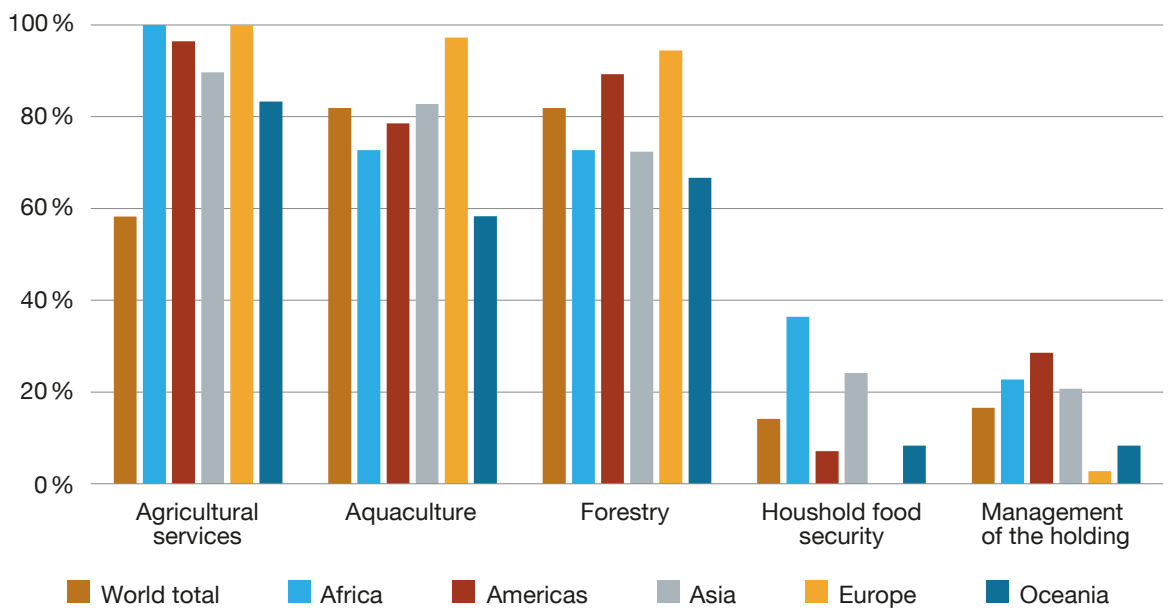


Figure 9.2. Least covered census themes by region and world total



9.2.1 Land

Under this theme, the WCA 2010 recommended three core items²³ and seven possible supplementary items.²⁴ Land and livestock were the only themes covered by all the participating countries across regions. For land use, the programme recommended seven standard basic classes to countries: land under temporary crops, land under temporary meadows, land temporarily fallow, land under permanent crops, permanent meadows and pastures, forest or other wooded land and other land. Figure 9.1 shows that all countries covered land.

The review shows that most of the countries employed national classifications, due to the existence of well-established national standards and needs. Land data were collected at holding level by most countries, and data on total land area of the holding were derived by summing the area of each parcel. More than 70 percent of countries were able to identify landless holdings (e.g. holdings raising livestock only on communal land). Four land tenure types (legal ownership or legal owner-like possession, non-legal ownership or non-legal owner-like possession, rented from someone else, and other types of land tenure) on the holding were recommended to countries. Item 09 (land tenure types) was a core item recommended in the WCA 2010 to capture the various land tenure types of the holding. For international comparability, it was recommended that countries use the four land tenure types listed above. However, this was not possible for most countries, as different land tenure types were used across regions. In Europe, three land tenure types (land owned, land rented and land under share cropping, and other land tenure forms) were used by most countries. Identification of parcel location for each holding was reported by more than 90 percent of countries that participated under this round. The land items “presence of shifting cultivation”, “number of years since cleared” and “presence of soil degradation” were mostly not included in census questionnaires by countries, as collection of these data were considered difficult and questionnaires needed to be designed carefully.²⁵

9.2.2 Irrigation and water management

The WCA 2010 recommended one core item²⁶ and, optionally, up to seven supplementary items²⁷ under this. Figure 9.1 shows that approximately 91 percent of the participating countries collected irrigation data. Information on the area irrigated was collected by more than 85 percent of these countries, while less than one quarter of the countries collected data on irrigable area. Most countries reported area irrigated according to method of irrigation, as recommended in the WCA 2010. Three irrigation methods were recommended (surface irrigation, sprinklers and localized irrigation), but other classifications of irrigation methods were employed by many countries according to national practices. Few countries reported area irrigated for each crop type. The WCA 2010 recommended nine possible sources of irrigation water, but other sources of irrigation water were reported by many countries according to national practices. Payment terms for irrigation water and presence of irrigation equipment were not covered by most countries.²⁸

²³ Area of the holding according to land use types (0007), total area of holding (0008) and land tenure types on the holding (0009).

²⁴ Location, area, land tenure, terms of rental, presence of shifting cultivation, number of years since cleared and presence of soil degradation.

²⁵ [Country examples on coverage of items under the theme are available at http://www.fao.org/index.php?id=92193.](http://www.fao.org/index.php?id=92193)

²⁶ Presence of irrigation on the holding (0010).

²⁷ Area of land irrigated according to land use type, area irrigated according to method of irrigation, area irrigated for each crop type, source of irrigation water, payment terms for irrigation water, other types of water management practices and presence of drainage equipment.

²⁸ [Country examples on coverage of items under the theme are available at http://www.fao.org/index.php?id=92193.](http://www.fao.org/index.php?id=92193)

9.2.3 Crops

Under this theme, 2 core items²⁹ were recommended and up to 14 supplementary items³⁰ were suggested for inclusion in countries' census questionnaires.

Figure 9.1 shows that 99 percent of the countries collected information on at least one item in this theme. Ninety percent of the countries collected information on the area for each temporary crop, either as "harvested area", "sown area", "cultivated area", "planted area" or "cropped area". For some countries with more than one cropping season, the total crop area for successive crops was reported in accordance with the recommendation in the Programme.

Country practices in reporting permanent crops varied according to the region, ranging from all of Europe and certain countries in the Americas collecting information on the areas of permanent crops in compact plantations, to countries in Oceania reporting mainly number of trees on the holding (e.g. Vanuatu's AC 2007). Africa was the region with the least coverage of areas of permanent crops in compact plantations.

Most countries included the use of fertilizers in their census questionnaires. Countries in Europe collected detailed information mostly on the use of organic fertilizers and manure, as the use of environmental friendly inputs are on the rise. Information on the area of cropped land under protective cover was rarely covered as this item was not considered essential by most countries.³¹

9.2.4 Livestock

The WCA 2010 recommended 1 core item³² and up to 11 supplementary items³³ for countries' consideration under this theme. Livestock was, together with land, the most covered theme, recurring in 100 percent of the countries. Most countries collected information mostly on the sedentary livestock production system, as nomadic and semi-nomadic livestock production systems are often less common or difficult to collect in the AC. Some countries conducted a separate livestock census to collect detailed information on the livestock sector. The Niger, for instance, conducted nomadic and transhumant livestock enumeration in a separate period and with a different methodology. Mongolia, which conducts livestock census annually, linked its 2011 livestock census with the agricultural census that year to cover all livestock production units. However, Togo's AC 2012/2014 covered sedentary and transhumant livestock. Pakistan included nomadic livestock holdings in the AC 2010.

Saudi Arabia's 2015 Agricultural Census also included herders in the desert in their census scope. Livestock composition varied from one region to another in terms of weather condition, traditions

²⁹ Types of temporary (0011) and permanent crops on the holding and whether in compact plantations (0012).

³⁰ Area of temporary crops harvest, area of temporary crops harvested according to end-use, production of temporary crops harvested, area of productive and non-productive permanent crops in compact plantations, number of permanent crop trees in compact plantations and scattered plantings, area of productive permanent crops in compact plantations according to end-use, production of permanent crops, area of land used to grow temporary crops as a secondary land use, use of each type of fertilizer, area fertilized for each type of fertilizer and major crop type, source of seed inputs for each major crop type, type of seed for each major crop type, area of nurseries, and area of cropped land under protective cover.

³¹ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

³² Number of animals on the holding for each livestock type (0013).

³³ Type of livestock production system, use of veterinary service, number of animals: age and sex, number of animal according to purpose, number of milking animals according to milk status, number of animal born, number of animal acquired, number of animals slaughtered, number of animals disposed of, number of animals died from natural causes, types of feed.

and religion. Throughout the dry belt, sheep and goats are the most common animals, while cattle are the least common, as hot and arid climates do not suit them. More than 95 percent of countries that collected livestock data included number of animals, either by age, sex or both, in their census questionnaire. In terms of the use of veterinary services, this information was covered mainly by developed countries.³⁴

9.2.5 Agricultural practices

Under this theme, one core item³⁵ was recommended and up to seven supplementary items³⁶ were proposed for possible inclusion in the census questionnaire. Figure 9.1 shows that over 95 percent of the countries covered this theme in the WCA 2010 round. More countries reported data on main purpose of production, as this item is important to understand the contribution of agricultural holdings to the market economy. In EU, EEA and EFTA countries, the main purpose of production is always to produce for sale, as producing only for own consumption is not considered an economic activity. The use of agricultural pesticides was collected by more than 70 percent of countries, as this information was considered essential for studying crop production systems. The use of organic agricultural practices was covered mostly by countries in Europe and the Americas.

In terms of the coverage of machinery and equipment, this ranged from information on tractors, harvesting machines, machine-powered ploughs, etc. in advanced countries, to hand-powered equipment in less developed countries. This information was essential to countries to ascertain the level of mechanization of the holdings in the country. In Fiji's AC 2009, for instance, hand-powered equipment included hoes, axes, shovels, planting sticks and big knives/machetes. Information on the source of machinery and equipment were mainly reported by countries either as owned, rented or shared.³⁷

9.2.6 Agricultural services

In the WCA 2010, seven items under this were proposed as supplementary items³⁸ only. Therefore, this theme was optional. Agricultural services play a supporting role in helping farmers to make the most of the resources they have and enriching their knowledge in order to produce quality products that meet market demand. Figure 9.2 shows that just 58 percent of the countries covered this theme. The items most covered were receipt of credit for agricultural purposes and source of credit (over 60 percent of the countries covering this theme). These items were considered essential for governments to ascertain their country's investment in agriculture. Type of collateral for loan and period of loan or credit were rarely covered. Sources of agricultural information and extension services were reported by most countries, to assess the role of government and non-government entities in providing extension services to farmers. As shown in Figure 9.2 above, this theme was mainly covered in the Americas (79 percent) and Africa (73 percent).³⁹

³⁴ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

³⁵ Main purpose of production of the holding (0006).

³⁶ Use of agricultural pesticides, use of good agricultural practices, use of organic agricultural practices, use of genetically modified crops according to crop type, selected machinery and equipment used on the holding by source, non-residential buildings, percentage of each major agricultural product sold.

³⁷ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

³⁸ Receipt of credit for agricultural purposes, source of credit, type of collateral for credit, period of loan or credit, sources of agricultural information, sources of agricultural extension services, travelling time to nearest periodic or permanent agricultural produce market.

³⁹ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

9.2.7 Demographic and social characteristics

Under this theme, one core item⁴⁰ was recommended, while seven supplementary items⁴¹ were optional for inclusion in countries' census questionnaires. The number of members of holder's household was the item recommended for agricultural holdings in the household sector, but some countries also collected this information from the non-household sector. The country practices for collecting household size information varies. For countries that conducted an agricultural census jointly with the population census, data on demographic and social characteristics were collected in the population census questionnaire. The WCA 2010 recommended measuring household size by the number of persons who are usually resident in the household (*de jure* concept), but some countries measure it based on the persons present on the day of enumeration.

Differences in agricultural practices between different national or ethnic groups prompted some countries to collect information on national/ethnic group of the agricultural holders. The sex and age for each household member, including the household head, was reported by more than 90 percent of countries that collected demographic data. Not all countries collected individual data for each household member, but some of them collected data for certain age groups and sex. Some countries reported more complex relationships between the household members and the household heads. Most countries did not include information on marital status in their census questionnaire. Data on educational attainment of the household heads and their spouses were covered by 30 percent of countries, possibly to examine its effects on cropping systems and agricultural practices.

Figure 9.1 shows that this theme was one of the most covered as 98 percent of countries that participated under this round reported at least one item under this theme.⁴²

9.2.8 Farm labour

This was another optional theme with eight supplementary items.⁴³ This theme described two types of labour inputs, namely labour provided by household or family members, and paid outside workers. For countries that conducted a joint AC and PHC, information on farm labour was collected along with information on demographic characteristics in the PHC questionnaire. Figure 9.1 shows that approximately 86 percent of the countries collected at least one item on this theme.

Country practices show different approaches to the collection of employment data on household members. For identification of the economically active persons in the household, a lower minimum age limit was set by some developing countries where children participated in agricultural work. Most countries collected information on the employment status for each economically active household member to determine if the member was an employee, own-account worker, contributing family worker etc., as recommended in the WCA 2010 and according to national conditions and practices. The Programme suggested that countries distinguish between skilled and unskilled workers according to their national criteria. The concept of time worked in main job and on the holding for each economically active household member was introduced under the WCA 2010 as recommended by the International Labour Organization (ILO); however, most countries used the

⁴⁰ Household size (0005).

⁴¹ Whether holding is part of an agricultural household, national/ethnic group of household head or agricultural holder, sex, age, relationship to household head or other reference person and marital status, educational attainment.

⁴² Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

⁴³ Activity status, status in employment of main job, occupation of main job, time worked in main job, time worked on the holding, number of employees on the holding: time worked and sex, form of payment for employees and use of contractors for work on the holding according to type.

concept of permanent and occasional worker as recommended in the past agricultural census programmes. The form of payment for each employee varied from country to country, and it was not reported by most countries under this Programme. The information on the use of contractor on the holding was reported by less than 40 percent of countries. It was linked *inter alia* to challenges to distinguish between the use of agricultural service contractors and hired employees working on the holding. Figure 9.1 also shows that Europe was the only region where all countries covered farm labour.⁴⁴

9.2.9 Household food security

The WCA 2010 introduced an optional supplementary theme for countries wishing to assess food security in the census of agriculture. The programme proposed two broad food security indicators: food shortages faced and fear of a food shortage. Figure 9.2 shows that with only 14 percent of countries' censuses, this was the least covered theme of the 2010 round. At least one item on food shortages faced was reported by 17 countries. Other items were rarely covered. Figure 9.2 also shows that while over one third of African countries covered household food security in their censuses, in Europe this theme was not relevant and was not covered.⁴⁵

9.2.10 Aquaculture

The WCA 2010 recommended one core item⁴⁶ and suggested five optional supplementary items⁴⁷ for this theme. Aquaculture was particularly relevant in countries where holdings had aquaculture activities, i.e. farming of aquaculture organisms (fish, crustaceans, molluscs and plants) integrated with agricultural production.⁴⁸ Figure 9.2 shows that 82 percent of the countries covered at least one item of this theme. The programme recommended the exclusion of aquaculture activities carried out independently without any agricultural production. Data on area of land under water used for aquaculture according to type of site and production facility were the most reported items under this theme. The type of aquaculture site and production facility varied from country to country, as most countries reported aquaculture site and production facility according to their national practices. Most countries that collected detailed information on aquaculture activities reported data on the type of water, sources of water and type of aquaculture organism cultivated.

Figure 9.2 also shows that 83 percent of countries in Asia and 97 percent of countries in Europe covered aquaculture in their ACs, compared to only 58 percent of countries in Oceania.⁴⁹

9.2.11 Forestry

Under this theme, a core item⁵⁰ was recommended and four optional supplementary items⁵¹ were suggested for coverage. Figure 9.2 shows that almost 82 percent of the countries covered at least one item on forestry. For countries that covered forestry activities in their census scope,

⁴⁴ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

⁴⁵ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

⁴⁶ Presence of aquaculture on the holding (0014).

⁴⁷ Area of aquaculture according to type of site, area of aquaculture according to type of production facility, type of water, sources of water for aquaculture, and type of aquacultural organism cultivated.

⁴⁸ Aquacultural activities such as in rice-cum-fish culture or when agriculture and aquaculture share the same inputs, such as machinery and labour.

⁴⁹ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

⁵⁰ Presence of forest and other wooded land on the holding (0015).

⁵¹ Area of forest and other wooded land as primary land use, area of forest and other wooded land as a secondary land use on agricultural land, main purpose of forest and other wooded land, whether agro-forestry is practiced.

the information on the area of forest and other wooded land as primary land use was collected through the land use classification in Core Item 07 (Area of holding according to land use types). Less than 20 percent of countries reporting forestry activities included information on the area of forest and other wooded land as a secondary land use on agricultural land, while the main purpose of forest and other wooded land were reported by most countries. Information on whether agro-forestry is practised was reported rarely, except for countries that collected detailed information on forestry activities or countries that conducted a census of agriculture jointly with a census of forestry. Figure 9.2 shows that 94 percent of countries in Europe and 89 percent in the Americas covered forestry activities.⁵²

9.2.12 Management of the holding

The WCA 2010 introduced this theme to assess the role of gender in the management of the holding, for those countries wishing to cover it. This was an optional theme and proposed six supplementary items⁵³ only. In this theme, a sub-holder was defined as responsible for managing a sub-holding, i.e. an agricultural activity or group of activities on behalf of the agricultural holder. This theme was often complemented by the demographic and social characteristics theme, which provided information about the sub-holders (e.g. sex). Figure 9.2 shows that after food security, management of the holding was the least covered theme, with only 17 percent of the countries. Figure 9.2 shows that the Americas (29 percent of the countries), Africa (23 percent) and Asia (21 percent) were the regions that covered this theme the most.⁵⁴

9.3 COMMUNITY-LEVEL ITEMS

The WCA 2010 provided, for the first time, guidelines for collecting data on infrastructure issues affecting farmers' incomes – notably, access to agricultural infrastructures and services, economic opportunities for farmers' families, development projects, etc. – at the community level. Community-level data are in some cases collected together with the agricultural census, as it is more practical to collect certain items at the community level rather than at the holding level (e.g. access to services, infrastructure, communal grazing land and forest). Community-level data can be useful for analysis in relation to holding-level data. Table 9.5 shows that 20 percent of the countries and territories that participated under the WCA 2010 round⁵⁵ conducted a community survey along with an agricultural census.

In WCA 2010, up to 33 possible community-level items were recommended for coverage under four major groups:

- geography⁵⁶

⁵² Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

⁵³ Identification of sub-holdings, identification of sub-holders, sex of sub-holder, age of sub-holder, area of crops managed for each crop group and number of livestock managed for each livestock group.

⁵⁴ Country examples on coverage of items under the theme are available at <http://www.fao.org/index.php?id=92193>.

⁵⁵ Côte d'Ivoire, Democratic Republic of the Congo, Eswatini, the Gambia, Lesotho, Malawi, Senegal, United Republic of Tanzania, Togo (Africa); Plurinational State of Bolivia, Haiti, Nicaragua, Bolivarian Republic of Venezuela (Americas); Armenia, Cambodia, India, Islamic Republic of Iran, Japan, Republic of Korea, the Lao People's Democratic Republic, Mongolia, Myanmar, Nepal, the Philippines, Sri Lanka and Viet Nam (Asia).

⁵⁶ Location, agro-ecological, climatic, topographical or soil types, land use, area of communal grazing land, area of communal forest, travelling to the nearest major urban centre (by season, if applicable), whether the community has year-round access to the nearest urban center by a motorable road, whether the community is prone to natural disasters such as droughts and floods (if applicable).

- socio-economic conditions⁵⁷
- community infrastructure and services⁵⁸
- development programmes.⁵⁹

Most countries that conducted a community survey included between 10 to 20 items. Usually, countries use the village as the statistical unit for community surveys. In most cases, the village chief, often assisted by the village council, was interviewed using the village questionnaire; for example, see the Congo (2014), the Gambia (2011), Lesotho (2009/2010), Malawi (2006), the Niger (2004), United Republic of Tanzania (2007–2008) and Togo (2012–2014).

Table 9.5 also shows that Asia (45 percent of the countries) and Africa (41 percent) were the regions that most frequently covered community-level items. Europe and Oceania, instead, did not cover them. Geography and community infrastructure and services were the most covered groups of items most covered (by 85 percent of countries that conducted a community survey).⁶⁰

Table 9.5. Number of censuses by coverage of groups of community-level items

Region	Total	Geography	Socio-economic conditions	Community infrastructure and services	Development programmes
All countries	26	22	20	22	10
Africa	9	7	7	7	6
Americas	4	4	4	4	1
Asia	13	11	9	11	3
Europe	0	0	0	0	0
Oceania	0	0	0	0	0

⁵⁷ Population according to different population groupings, number of households, economic status (if applicable), economic activities, whether there are seasonal food shortages (if available).

⁵⁸ Presence of a fertilizer dealer; if not, travelling time to the nearest fertilizer trading centre (by season, if applicable), Presence of a pesticides dealer; if not, travelling time to the nearest pesticides trading centre (by season, if applicable), Presence of a seed dealer; if not, travelling time to the nearest seed trading centre (by season, if applicable), Presence of a credit institution; if not, travelling time to the nearest credit institution (by season, if applicable), Presence of irrigation facilities, Area equipped for irrigation, Availability of veterinary services; if not, travelling time to the nearest veterinary services (by season, if applicable), Presence of a periodic or permanent agricultural produce market; if not, travelling time to the nearest periodic or permanent agricultural produce market (by season, if applicable), Existence of agricultural produce collection network, Presence of food storage facilities, Presence of agricultural processing facilities, Presence of facilities for maintaining agricultural machinery, Existence of farmers' associations, cooperatives, and other bodies providing support and services to farmers, Availability of agricultural extension service, Whether electricity is connected, Presence of a primary school; if not, travelling time to the nearest primary school (by season, if applicable), Presence of a health facility; if not, travelling time to the nearest health facility (by season, if applicable), Presence of radio, telephone, and Internet services, and Availability of public transport: bus, train, boat.

⁵⁹ Presence of specific development projects in the community.

⁶⁰ Country examples on coverage of items under community-level data are available at <http://www.fao.org/index.php?id=92193>.

10

Data processing, archiving and anonymization

Data processing includes data coding and capture, editing, imputation, validation and tabulation. Traditionally, data processing consists of both manual and electronic data processing. If CAPI, CAWI or CATI are not used, manual processing may involve checking, editing and coding the forms prior to data entry or data capture. The electronic data processing starts from the data entry stage up to tabulation.

This chapter reviews the data processing activities conducted by countries that participated in the WCA 2010 round. It consists of three sections. In the first section, countries' practices in data processing are reviewed, including the computer programs used. The second section deals with classification variables for tabulation. It briefly recalls FAO recommendations under the WCA 2010 and then reviews countries' practices in the use of size classes for key classification variables. The third section deals with methods used for data archiving and anonymization.

10.1 DATA PROCESSING

Data processing, conducted after fieldwork, is a critical phase because it is time-consuming, resource-intensive and requires proficient staff and expertise in this area of specialization. This phase could have significant impact on the quality of the census results. The main activities in data processing include data coding, entry/capture, editing, imputation, validation and tabulation.

There is a variety of methods of data entry/capture in censuses of agriculture. They include:

- manual data entry (key punching);
- scanning (intelligent character recognition [ICR] systems and optical mark recognition [OMR] systems);⁶¹
- data collection and capture through CATI;
- data collection and capture with CAPI using mobile devices;
- data collection and capture through CAWI.

In the WCA 2010 round, 20 percent of the countries reported the use of CAPI (with smartphones, notebooks, PDAs, etc.). The use of remote data collection methods, such as CAWI, CATI/PATI and postal enquiries,⁶² was reported by 29 percent of countries, solely or in combination with CAPI (see

⁶¹ Optimal character recognition (OCR) was gradually replaced by ICR in the 2010 round. However, the use of OCR was reported by few countries, namely Australia, China, Czechia, Greece, Ireland, Norway and the Russian Federation.

⁶² MO-MB and/or DO-PKE.

Table A1.5, Annex 1). All reporting countries used computer facilities for consistency checking and for the tabulation of census data. Nevertheless, manual processing was still common at some early stages of the census data processing when PAPI was used, and to produce preliminary results.

Most countries collected data through paper questionnaires either via PAPI (71 percent) or remote data collection methods (22 percent, such as CATI/PATI and/or MO-MB and DO-PKE). The data were then entered into the computer either by scanning or using a manual data entry programme.

Table 10.1 shows that the Census and Survey Processing System (CSPPro) was the most commonly used package in the WCA 2010 round for data entry (16 percent). Scanning was also widely used under the WCA 2010 round (26 percent of reporting countries). CSPPro was mainly used in Africa (64 percent of reporting countries). Scanning was mainly used in Oceania (42 percent), Europe (33 percent), the Americas (25 percent) and Asia (24 percent).

Table 10.2 shows that for other data processing activities, the Statistical Package for Social Sciences (SPSS) was the most commonly used software (15 percent of the countries, mostly in Africa, the Americas and Asia). Statistical Analysis System (SAS) was used mostly by countries in Europe (22 percent). Some countries, such as Brazil, developed their own specific software for data processing activities.

Table 10.1. Reporting countries by main computer software package used for data entry/capture

Region	Software used for manual data entry				Optical scanning
	CSPPro	Blaise software	Access	Other	
Africa	Botswana, Burkina Faso, Congo, Côte d'Ivoire, Eswatini, Gambia, Mauritius, Mozambique, Namibia, Niger, Senegal, Togo, Uganda		Lesotho	Cabo Verde, Egypt, Seychelles, South Africa	Malawi, United Republic of Tanzania
Americas	Suriname		Grenada	Brazil, Chile, Panama, Venezuela (Bolivarian Republic of), Antigua and Barbuda, El Salvador, Haiti, Jamaica, Argentina	Canada, Costa Rica, Belize, Peru, Puerto Rico, United States of America, Uruguay
Asia	Armenia, Lebanon, Mongolia, Myanmar, Nepal		Bhutan, Palestine	Pakistan, Kazakhstan, Azerbaijan, Bangladesh, Cyprus, India, Iran (Islamic Republic of)	China, Indonesia, Philippines, Republic of Korea, Sri Lanka, Viet Nam, Thailand
Europe		Belgium, Luxembourg		Bulgaria, Germany, Hungary, Lithuania, Malta, Montenegro, Portugal, Russian, Slovakia	Albania, Croatia, Czechia, Denmark, Iceland, Ireland, Norway, Republic of Moldova, Serbia, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland
Oceania	Niue			Palau, Samoa	Australia, Cook Islands, Guam, Northern Mariana Islands, New Zealand

Table 10.2. Reporting countries by main computer software package used for tabulation¹

Region	CSPRO	SPSS	STATA	SAS	R	EXCEL	Other
Africa	Botswana, Côte d'Ivoire, Eswatini, Gambia, Mauritius, Senegal	Burkina Faso, Congo, Lesotho, Malawi, Mozambique, Niger, United Republic of Tanzania, Togo	Namibia, Uganda				Cabo Verde, Egypt
Americas		Bolivia (Plurinational State of), Costa Rica, Paraguay, Suriname, Saint Lucia, Grenada		Argentina, United States of America			Haiti, Mexico, United States Virgin Islands, Venezuela (Bolivarian Republic of), Panama, Uruguay
Asia	Cambodia, Lebanon, Myanmar	Armenia, Mongolia, Nepal, Palestine, Viet Nam		China, Republic of Korea		Bhutan	Georgia, India
Europe		Belgium		Albania, Croatia, Denmark, Finland, North Macedonia, Slovenia, Sweden	Iceland		Hungary, Lithuania, Montenegro, Norway, Portugal
Oceania				Australia		Cook Islands	Palau

¹ Post-data entry activities are also included.

10.2 CLASSIFICATION ITEMS AND CLASSES USED FOR TABULATIONS

The WCA 2010 identified nine main classification items for tabulations of the core and supplementary modules. These classification items are:

- a. Administrative or agro-ecological zone
- b. Legal status of holder
- c. Area of holding
- d. Area of agricultural land
- e. Number of livestock (for a particular livestock type)
- f. Main purpose of production
- g. Household size
- h. Sex of holder
- i. Age of holder

All nine classification items correspond to core items of the WCA 2010. Tabulation classes were recommended for each classification item.

a. *Administrative or agro-ecological zone*

The distribution of census data into administrative or agro-ecological zones was one of the key tabulation requirements of the WCA 2010. Tabulating number of holdings, area and other core

census items according to administrative or agro-ecological zone enables understanding the production structure of the country, as well as which areas have high production and low production potential.

b. Legal status of holder

The WCA 2010 recommended the following tabulation classes for legal status:

- Household sector
 - multiple-holding household
 - single-holding household
 - partnership of two or more households
- Non-household sector
 - corporation
 - cooperative
 - government
 - other

Most countries (75 percent) used this classification variable in their tabulation programme or collected data that provided this information. Box 10.1 gives some examples of the legal status classes used by selected countries.

c. Area of holding

This classification item envisaged classifying holdings using mutually exclusive classes according to the total area of the holding. The following size classes were recommended by the WCA 2010:

- (a) holdings without land;
- (b) holdings with land (ha): <0.1, 0.1 – <0.2, 0.2 – <0.5, 0.5 – <1, 1 – <2, 2 – <3, 3 – <4, 4 – <5, 5 – <10, 10 – <20, 20 – <50, 50 – <100, 100 – <200, 200 – <500, 500 – <1 000, 1 000 – <2 500, 2 500 and over.

Box 10.1. Legal status classes adopted by certain countries

Albania 2012

Civil persons (an individual, two or more individuals), juridical persons (legal entities).

Canada 2011

Sole proprietorship, partnership without a written agreement, partnership with a written agreement, family corporation, non-family corporation, and other operating arrangements.

Fiji 2009

Individual, household, corporation, cooperative.

Japan 2015

Family-owned farm management entities (commercial farm households included), and organized management entities.

South Africa 2007

Individual, close corporation, family, partnership, private company, other.

Box 10.2. Size classes of total area of holding used by some countries**Burkina Faso 2006–2010**

Less than 1 ha, 1–1.99 ha, 2–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–49.99 ha, 50–99 ha.

Plurinational State of Bolivia 2013

Less than 0, 1 ha, 0.10–0.19 ha, 0.20–0.49 ha, 0.50–0.99 ha, 1–1.99 ha, 2–2.99 ha, 3–3.99 ha, 4–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–49.99 ha, 50–99.99 ha, 100–199.99 ha, 200–499.99 ha, 500–999.99 ha, 1 000–2 499.99 ha, 2 500–4 999.99 ha, 5 000 ha and over.

Fiji 2009

Less than 1 ha, 1–2.99 ha, 3–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–49.99 ha, 50–99.99 ha, 100 ha and over.

Germany 2010

Less than 2 ha, 2–5 ha, 5–10 ha, 10–20 ha, 20–30 ha, 30–50 ha, 50–100 ha, 100 ha and over.

Viet Nam 2006 and 2011

Less than 1 ha, 1–1.99 ha, 2–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–49.99 ha, 50–99 ha, 100–199 ha, 200–499 ha, 500–999 ha, 1 000 ha and over.

Over half of the 127 countries that participated in the WCA 2010 round used this classification item in their tabulation programme. However, none of them followed exactly all of the recommended classes. In practically all cases, it was impossible to derive the proposed classes by data aggregation. Interpolation was used to estimate the recommended classes presented in Table A2.4, Annex 2. Most countries did not single out holdings without land, rather including them in the smallest size class. Box 10.2 presents some country examples of size classes used for the classification item “total area of holding”.

d. Area of agricultural land

Area of agricultural land measures the area of the holding used mainly for crop production and grazing. This variable is naturally the most widely used classification item for agricultural census tables, as it usually enables assessment of production and yield. Some countries used other land measures, such as arable land (land under temporary crops, temporary meadows, pastures and fallow) and cropland (arable land plus land under permanent crops) as classification items.

For the total area of agricultural land, the WCA 2010 recommended the same classes as for the total area of holding. Box 10.3 presents some examples of country practices in this respect.

Box 10.3. Size classes of area of agricultural land or its proxies used by some countries**Belgium 2010**

Less than 2 ha, 2–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–29.99 ha, 30–49.99 ha, 50–99.99 ha, 100 ha and over.

Cabo Verde 2015

Less than 1 ha, 1–1.99 ha, 2–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–49.99 ha, 50–99.99 ha, 100–199.99 ha, 200 ha and over.

India 2010/2011

Less than 1 ha, 1–1.99 ha, 2–2.99 ha, 3–3.99 ha, 4–4.99 ha, 5–7.49 ha, 7.5–9.99 ha, 10–19.99 ha, 20 ha and over.

Mexico 2007

Less than 2 ha, 2–4.99 ha, 5–9.99 ha, 10–19.99 ha, 20–49.99 ha, 50–99.99 ha, 100–999.99 ha, 1 000–2 499.99, 2 500 ha and over.

Niue 2009

Less than 0.4 ha, 0.4–0.8 ha, 0.8–1.2 ha, 1.2–2.0 ha, 2.0–4.0 ha, 4.0 ha and over.

e. Number of livestock (for a particular livestock type)

The WCA 2010 stressed that the number of livestock of a particular type is a suitable measure of the size of livestock activity, where there is one predominant kind of livestock in the country and where livestock raising is a major activity. The WCA 2010 recommended the following size classes for the various types of livestock:

For cattle/buffaloes:

- (a) holdings with no cattle/buffaloes;
- (b) holdings with cattle/buffaloes (heads): 1–2, 3–4, 5–9, 10–19, 20–49, 50–99, 100–199, 200–499, 500 and over.

For sheep/goats/pigs:

- (a) holdings with no sheep/goats/pigs;
- (b) holdings with sheep/goats/pigs (heads): 1–4, 5–9, 10–19, 20–49, 50–99, 100–199, 200–499, 500 and over.

For poultry:

- (a) holdings with no poultry;
- (b) holdings with poultry (heads): 1–9, 10–49, 50–99, 100–199, 200–499, 500–999, 1 000–4 999, 5 000–9 999, 10 000 and over.

f. Main purpose of production

This classification item is a useful measure in analysing holdings according to their marketing behaviour and their access to and use of markets. The WCA 2010 recommended two classes for this classification item: (a) producing mainly for home consumption; and (b) producing mainly for sale. The population of interest for this classification was holdings in the “single-holding household” sector.

Under the WCA 2010, this information was available for 89 percent of the reporting countries. This is a real improvement compared to the WCA 2000, when only 10 percent of the countries collected such information.

Box 10.4. Household size classes used by some countries**Republic of Korea 2015**

1 person, 2–3 persons, 4–5 persons, 6–7 persons, 8 persons and over.

Lesotho 2009/2010

1 person, 2–3 persons, 4–5 persons, 6–7 persons, 8–9 persons, 10 persons and over.

Russian Federation 2006

1–2 persons, 3–4 persons, 5–6 persons, 7 persons and over.

g. Household size

The target population for collecting this item were single-holding households. The classes recommended in the WCA 2010 for the holder's household size were: 1 person, 2 to 3 persons, 4 to 5 persons, 6 to 9 persons, 10 persons and over. Most of the reporting countries (93 percent) collected information on the household size. In some cases, the size classes followed the recommendations of the WCA 2010. Other countries used different size classes, some of which permitted aggregation to the recommended size classes, and some of which did not. Box 10.4 provides some countries' examples for household size.

h. Sex of holder

The sex of holder allows to capture the role of women in agriculture and the disadvantages they may face. The population of interest for this classification item is holdings in the "single-holding household" sector. In the case of more than one co-holder, the WCA 2010 recommended the following classes: co-holders are male only, co-holders are female only and co-holders are both male and female. Information regarding holder's sex was available for 96 percent of the reporting countries.

i. Age of holder

This classification item provides a way of studying the ageing of holders, comparing holdings' characteristics between young and old farmers, and studying the effects of emigration from rural areas on holdings. The following classes were recommended by the WCA 2010 for holder's age:

- (a) holder is an individual: under 25 years, 25 to 34 years, 35 to 44 years, 45 to 54 years, 55 to 64 years, 65 years and over;
- (b) more than one co-holder.

Information regarding age of holder has been collected by 95 percent of the reporting countries. A few of them (11 percent) followed the classes recommended by the WCA 2010. Box 10.5 shows some country practices.

Box 10.5. Holder's age classes used by some countries**American Samoa 2008**

Under 35 years, 35 to 44 years, 45 to 54 years, 55 to 64 years, 65 years and over.

Eswatini 2012–2013

Under 19 years, 20 to 29 years, 30 to 39 years, 40 to 49 years, 50 to 59 years, 60 to 69 years, 70 to 79 years, 80 to 89 years, 90 years and over.

India 2010/2011

18 to 30 years, 31 to 40 years, 41 to 50 years, 51 to 60 years, 61 to 65 years, 66 years and over.

Mexico 2007

14 to 19 years, 20 to 29 years, 30 to 39 , 40 to 49 years, 50 to 59 years, 60 to 69 years, 70 years and over.

Serbia 2012

Under 35 years, 35 to 44 years, 45 to 54 years, 55 to 64 years, 65 years and over.

10.3 DATA ARCHIVING AND ANONYMIZATION

Data archiving refers to all actions, tools and methods implemented to maintain census metadata documents and microdata files in the medium and long term for further use or benchmark. Data anonymization is a process that consists of using a set of techniques to make impossible, in practice, any re-identification of the statistical unit (e.g. a holder) by any means. It is an irreversible process. This process guarantees the confidentiality of census data and that the risk of revealing information about the respondent is minimal.

There are two main anonymization procedures:

- The first method is **randomization**. It consists in modifying the attributes in a data set so that they are less precise. The attributes to be modified are for example: names, addresses, telephone numbers, detailed locations of agricultural holdings, geographic coordinates, location of sample segments, plot locations or segment locations. This process should preserve the global distribution.
- The second is **generalization**, which makes it possible to generalize the attributes of the data set by modifying their scale or their order of magnitude in order to ensure that they are common to a set of people. This technique avoids the individualization of a data set. It also limits the possible correlations of the data set with others.

Table 11.3 in Chapter 11 shows that 28 countries provided safe online access to census microdata files. If it is assumed that all these countries applied anonymization techniques, only seven countries reported about it. Slovakia explicitly reported the technique used: “replacing the identification number by a randomly assigned sequence number”.

Only 14 countries clearly reported on their use of data archiving methods. Although the archiving method was often not specified, the most common method was archiving by means of a computer database. Databases provide faster access to data for internal use, but not online access for external users. Box 10.6 below presents some countries' practices.

Box 10.6. Data archiving methods of certain countries**Colombia 2014**

An Integrated Monitoring and Operational Control System (SIMCO) served as the centralized system for data processing and archiving for the third AC. Four types of validation process were defined, according to the level of aggregation.

Côte d'Ivoire 2015/2016

All data collected and documents produced (reports, methodology, manuals) were archived in a database administered by the Directorate of Statistics, Documentation and Informatics (DSDI) of the Ministry of Agriculture (MINAGRI). A backup copy of the data was made.

Georgia 2014

Geostat implemented a microdata archiving system to save the census data.

Paraguay 2008

The SPSS programme was used, based on the tabulated design of the 1991 census for comparability. The archives are placed on a central server and are managed through networks.

11

Dissemination of census results

The census of agriculture is not completed until the information collected is made available to users in a form that suits their needs. As the WCA guidelines pointed out (see FAO, 1996, 2000, and 2018), the census is a costly operation and census results are a valuable public good that should be widely disseminated and promoted to enhance its use by the various users. The role of census dissemination is to enable timely public access and the use of census data in their decision-making. The dissemination programme, including the publication list and dates of releasing, is as important as other components of the census operations. The dissemination of census results is an important first step toward knowledge transmission and practice change.

Previous WCA guidelines emphasized the need for the census results to be published as early as practically possible. Some of the recommendations made by FAO included the publication of a short preliminary report with advanced census results, a final census report (in one or several volumes), an atlas and a technical report aimed at describing in detail how the whole operation had been conducted, and the methodology, choices made, concepts and definitions applied. The technical report should also include details about the sample design if sampling was used, a description of the quality control techniques used, and the results of the evaluation of census data, including the results of the PES, if conducted.

The WCA guidelines also recommended that the priority tables be released as soon as possible. The priority tables usually include the main census results regarding all holdings enumerated, but with limited cross-tabulations to enable early dissemination. More detailed census results could be provided at a later stage by releasing additional cross-tabulations, making disaggregated data to users for special analyses available. Facilities for providing wide access to websites to retrieve the information from standard tables, and for the production of special tables requested by users in addition to the census data released in the census reports, could also be made available. However, countries should implement measures that meet the principles of data protection and avoid data disaggregation below the level that professional statisticians would accept as valid.

11.1 TIME GAP BETWEEN ENUMERATION AND PUBLICATION

As recommended by the various WCA guidelines, countries should make every effort to reduce the time gap between the end of the census enumeration period and the publication year of the census results. The importance of the time factor should be kept in mind because the usefulness of statistical information decreases in proportion to the length of time taken to provide it. This interval can be shortened by publishing preliminary results from rapid processing, the summation of the field control records, or based on a subset of the census data, which could be either a representative sample or a geographic subset; the full and detailed results could follow later.

Table 11.1. Distribution of censuses of the WCA 2010 round according to the time gap between the end of field enumeration and the publication of census results by region

Region	Total number of reported censuses	Time gap					Without information
		Same year	Next year	2 years	3 years	More than 3 years	
All participating countries	127	26	48	31	9	7	6
Africa	22	4	5	4	4	2	3
Americas	28	7	8	7	2	1	3
Asia	29	4	14	7	2	2	0
Europe	36	10	15	10	0	1	0
Oceania	12	1	6	3	1	1	0

Country-level information about the period of enumeration and the year of publication of census reports is provided in Table A1.3, Annex 1. Table 11.1 summarizes by region the time gap between the end of the enumeration period and the year of publication of the main census report.⁶³ The country practices show the efforts made to ensure the immediate availability of census results. For approximately 20 percent of the censuses, results were published the same year; for 38 percent, the results were published the next year, as the enumeration period ended. This means that over half of the censuses published their results within the first year. Moreover, out of the 121 censuses for which reports were available, 13 percent of the countries made their publications available the third year or later. In only six cases,⁶⁴ FAO did not receive the census reports at the time this publication was prepared.

The use of new technology for dissemination has been expanding over the previous rounds of censuses, transforming data presentation, storage and communication. The period covered by the WCA 2010 round witnessed a keen interest in the use of new technologies. The use of new technology in data collection, for instance, has resulted in significant efficiencies and has drastically reduced the time lag between data collection and data analysis (see Table 11.2). Some countries used them as auxiliary data collection methods. For example, in addition to MO-MB, Canada also used CAWI to collect data in its census of agriculture 2016. During the WCA 2010 round, there was an increased use of CAPI, computer-assisted self-interviewing/web-interviewing (CASI), CAWI and CATI. Table 11.2 below shows that 80 percent of the countries that have used these electronic data collection methods disseminated their census results in the same or next year.

⁶³ It refers to census reports on final results.

⁶⁴ The countries for which FAO did not receive census reports were Antigua and Barbuda (2007), Argentina (2008), Belize (2011), Cabo Verde (2015), Equatorial Guinea (2015) and Eswatini (2012/2013).

Table 11.2. Countries using electronic data collection methods and the time gap between the end of field enumeration and the publication of census results

Data collection method ¹	Countries/territories	Number of censuses	Time gap		
			Same year	Next year	2 years or more
CAPI	Brazil (2006), Colombia (2013/2014), Côte d'Ivoire (2014/2015), France (2010), French Guyana (2010), Guadeloupe (2010), Iran (Islamic Republic of) (2014), Jordan (2007), Martinique (2010), Mexico (2007), Mozambique (2009/2010), Namibia (2013/2014), Oman (2012/2013), Réunion (2010), Thailand (2013), Saudi Arabia (2015), Senegal (2013), Venezuela (Bolivarian Republic of) (2008).	18	5	11	2
CAWI	Australia (2010/2011), Austria (2010), Belgium (2010), Georgia (2014), Hungary (2010), Italy (2010), the Netherlands (2010), Norway (2010), the Republic of Korea (2015), Switzerland (2010).	10	1	6	3
CATI/PATI	Slovakia (2010), Spain (2009/2010).	2	0	1	1
Combined (CAPI and/or CAWI, CATI/PATI)	Canada (2011), Denmark (2010), Estonia (2010), Finland (2010), Germany (2010), Iceland (2010), Latvia (2010), Lithuania (2010), Poland (2010), Slovenia (2010), Sweden (2010), the United Kingdom of Great Britain and Northern Ireland (2010), United States of America (2012).	13	5	7	1

1 Methods of data collection using new technologies solely or in combination with PAPI and MO-MB or DO-PKE.

Source: Castano, 2018 and FAO, 2018.

11.2 PRODUCTS AND DISSEMINATION METHODS

Approximately 96 percent of the countries that participated in the WCA 2010 round produced a final census report (printed and/or soft version) with their census results. The type and depth of the census publications varied greatly, ranging from one volume, for example in many of Caribbean countries, to nine volumes in the Russian Federation.

Details of the census organization, timetables and other administrative aspects, as well as census methodology and main definitions and concepts, are common in final reports. Figure 11.1 below shows the most common dissemination products and the percentage of countries publishing them.

Remarkable developments in Information and Communication Technology (ICT) during the WCA 2010 round enabled the use of innovative and user-friendly methods of dissemination and access of census results. Methods include providing access to aggregated data, including macro-databases, using interactive Web products (e.g. dynamic tables, data visualization, interactive infographics and thematic GIS maps), social media and safe access to anonymized microdata, including metadata, for more in-depth analysis.

Figure 11.2 below shows that online dissemination was the most common way to disseminate census results in the WCA 2010 round in all regions and the world as a whole. As illustrated below, 91 percent of countries published their census results online, while 55 percent published their census results in printed format; 52 percent of them used both formats. Only 20 percent of the countries continued to use CD-ROMs to disseminate census results. Online census products included soft reports (press releases, preliminary/final/thematic reports, tables, statistical databases), thus expanding dissemination to a wider range of users. Region-wise, all countries in Europe (36 countries) and in Oceania (12 countries) disseminated their results on their websites. The 2010 national census results for the EU Member States, as well as for Iceland, Montenegro, Norway and Switzerland, are

also disseminated on the Eurostat database (Eurostat, 2020). In the Americas and Asia too, online dissemination was the dominant channel. Printed products were still widely used in Africa and Asia where more than two thirds of the countries printed their census results.

Figure 11.1. Dissemination products and percentage of countries

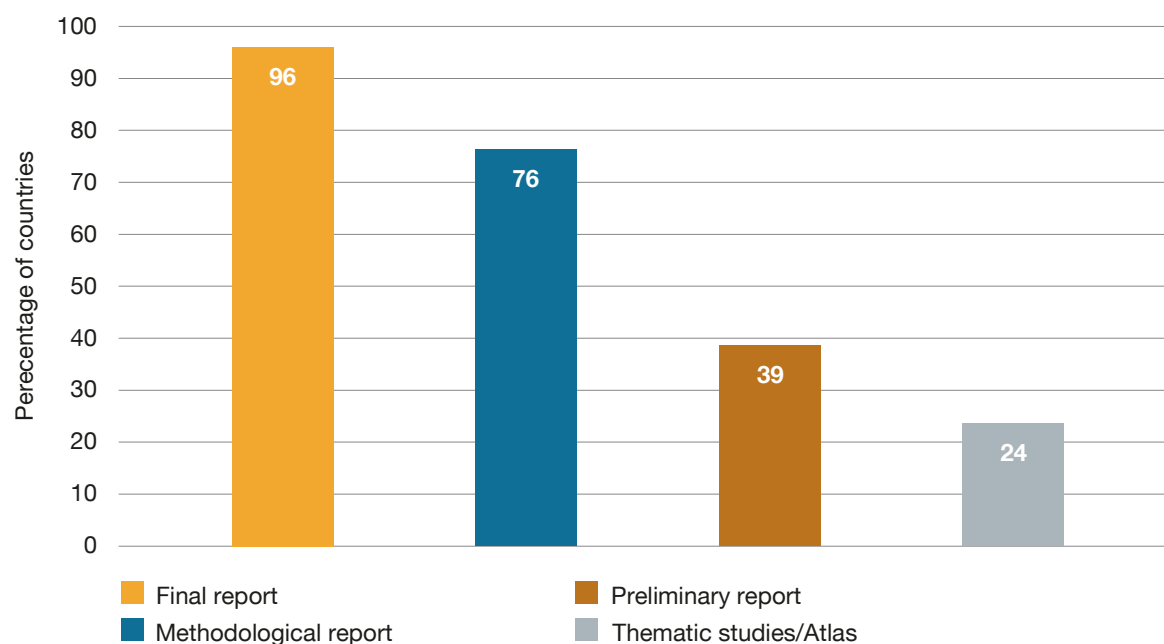
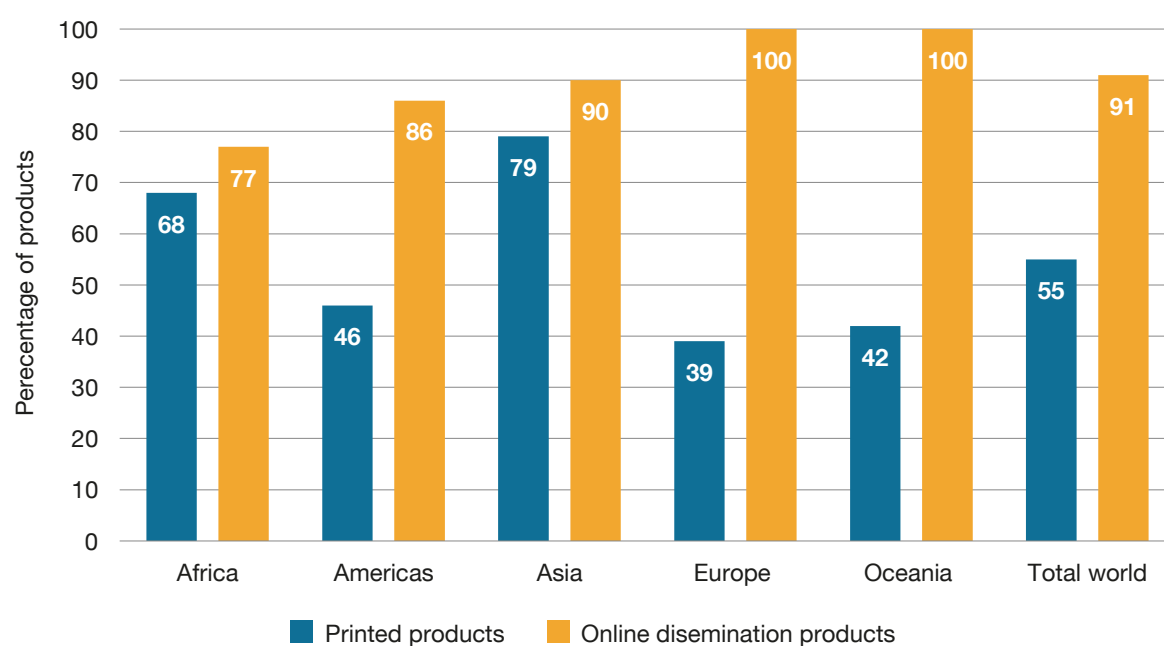


Figure 11.2. Regional and global use of printed and online census dissemination products (percent)



Some countries, such as Australia, France,⁶⁵ Italy, Serbia, Sweden and the United States of America⁶⁶ gave access to online statistical databases where users can retrieve census data by selecting pre-determined queries. Box 11.1 presents a good country practice.

Box 11.1. Example of good practice in reporting census results. Italy – Agricultural Census 2010

The National Institute for Statistics of Italy (Istat), in accordance with its dissemination plan, published the final results of the Sixth General Census of Agriculture in the following way:

I. Web dissemination

The web constituted the main form for disseminating census data through a data warehouse (I.Stat). I.Stat enables building customized statistical tables and extracting data of interest for further analysis, and is available at: <http://dati-censimentoagricoltura.istat.it/index.aspx>.

The specific tools available in I.Stat are:

- **Single exit point:** the generalized system for dissemination via web–service data in the chosen format through I.Stat SDMX standards;
- **E–books:** a website platform with 30 summary tables and dynamic graphics, up to the regional level, extracted from the I.Stat Agriculture Census data warehouse and Istat eXplorer (see below);
- **Explorer:** an interactive and dynamic graphics display system: <http://censimentoagricoltura.istat.it/explorer/index.html#story=0>

II. Traditional form of paper dissemination

A. General publications:

1. Structural characteristics of agricultural holdings
 - a. National publication
 - b. Regional publications
 - c. Provincial publications
2. Typological characteristics of agricultural holdings
 - a. National publication
 - b. Regional publications
 - c. European Member Sixth General Census of Agriculture
 - d. Legal framework
 - e. The organization of the revelation and the census information
 - f. The integrated IT system
 - g. The census on the territory
 - h. Quality evaluation

B. Thematic publications

1. Human capital and social stratification in agriculture in Italy
2. Atlas of Italian agriculture
3. Use of water resources for irrigation purposes

All of the above publications are available on the Istat website: <http://censimentoagricoltura.istat.it/> and <https://www4.istat.it/it/censimento-agricoltura/agricoltura-2010>

For further details and more country examples, the reader may refer to FAO (2019).

⁶⁵ Including French territories (French Guyana, Guadeloupe, Martinique and Réunion).

⁶⁶ Including United States Territories and Outlying Areas (American Samoa, Guam, the Northern Mariana Islands, Puerto Rico and the United States Virgin Islands).

Table 11.3. Countries providing safe access to (anonymized) census microdata files

Region	Countries	Number of countries
Africa	Namibia (password protected), United Republic of Tanzania (password protected).	2
Americas	Bolivia (Plurinational State of), Brazil, Chile, Colombia, Mexico, Nicaragua, Peru, Uruguay, United States of America.	9
Asia	Armenia, Indonesia (upon request), Republic of Korea, Lao People's Democratic Republic, Nepal, the Philippines (upon request), Viet Nam.	7
Europe	Estonia (under special contract), the Netherlands, Portugal (based on an established protocol), Slovenia (under specific conditions), Slovakia; Cyprus,* Denmark,* Finland,* Malta,* Poland*, Spain*.	11
Oceania	Cook Islands (Pacific community website, password protected).	1

* In EUROSTAT (only Scientific Use Files [SUF] are available upon request and for a limited period of time)

In terms of safe access to census microdata, while during the WCA 2000 round countries rarely provided this type of access, during the WCA 2010 round, 28 countries provided access to (anonymized) census microdata, as illustrated in Table 11.3. In most cases, users can access microdata files upon request under specific conditions or protocols.

The launch of the census results and promotion of the use of census data should be highly visible, to ensure maximum public awareness of data availability. The review shows that countries undertook promotional activities on the census agency's website and through press releases and social media to disseminate census results. For example, Austria, Georgia, Latvia and South Africa disseminated their results through press releases, while Peru used the national television and radio for the same purpose. Other countries, such as Armenia, Cambodia, Botswana, the Congo, Lesotho, Mauritius, Mozambique, Namibia and Seychelles, organized national dissemination workshops to ensure maximum media attention.

Some countries used social media platforms to promote the use of census data and provide a better understanding of census results among users. For instance, Colombia, El Salvador, Nicaragua and Saint Lucia⁶⁷ used Facebook, Twitter and YouTube to disseminate their census results in the form of videos, sketches and online video-clips.

⁶⁷ Colombia: <https://www.dane.gov.co/index.php/estadisticas-por-tema/agropecuaria/censo-nacional-agropecuaria-2014>; El Salvador: <https://www.youtube.com/watch?v=NtNyqpk1g78>; Nicaragua: <https://www.inide.gob.ni/docs/Cenagro/INFIVCENAGRO/IVCENAGROINFORME/assets/basic-html/index.html#1>; Saint Lucia: Regional Roundtable on World Programme for the Census of Agriculture 2020 Port of Spain, Trinidad and Tobago, 22-26 May 2017.

12

Quality assurance of census data

The modern concept of data quality places the emphasis on user needs and satisfaction (or fitness for purpose), as opposed to quality being only associated with accuracy; this focuses more on minimizing errors (sampling and non-sampling). Currently, quality assurance is seen as a framework starting at the design stage and covering seven dimensions: namely relevance, accuracy and reliability, timeliness and punctuality, coherence and comparability, accessibility, clarity and interpretability (FAO, 2018). The focus of the WCA 2010 was mainly on accuracy and, thus, the emphasis of this chapter is on this dimension.

The census of agriculture is a large and complex operation and errors are unavoidably committed at different phases of the census, such as in preparatory activities, data collection and data processing. These errors can be grouped into two main categories, sampling and non-sampling errors, which are briefly described below (detailed further in FAO, 2018).

- **Sampling errors** occur when sampling is used, because only a sample of units (holdings) and their values (items) is observed.
- **Non-sampling errors** appear in all censuses and sample surveys. They are the result of mistakes committed in various phases of the census and survey work, including data collection.

This chapter presents country practices in reducing non-sampling errors in the WCA 2010 round. All countries participating in the round practised some type of quality assurance procedures and quality check. These procedures can be classified according to the phase in the census process:

- (a) **quality assurance during the preparatory phase of the census:** quality check of census frames, pre-test of the questionnaire and questions (to test logic, formulation, duration), pilot census (a mini-census to test all aspects, including logistics and data processing);
- (b) **quality assurance during the fieldwork:** checks on the internal consistency of data in all filled census questionnaires (supervision); re-visits to a sample of holdings to verify the information provided by the respondent;
- (c) **quality assurance post-census enumeration:** consistency checks during data entry, adjustments for non-response and under-coverage, database cleaning, PES, comparisons with other data sources and validation.

The following sections present the country practices in each of these three types of quality assurance procedures.

12.1. QUALITY ASSURANCE DURING THE PREPARATORY PHASE OF THE CENSUS

All countries made significant efforts to ensure that the census frame accurately covered the target population without undercoverage (omission of units) or overcoverage (duplication or erroneous inclusion of units). Country practices in this respect are reviewed in Chapter 8. However, no matter how much effort is made, it is practically impossible to ensure a flawless census frame.

Pre-test surveys and pilot censuses are powerful procedures undertaken at the preparatory stage of the census for reducing non-sampling errors. *Pre-test surveys* (usually more than one) are mostly confined to testing the concepts and definitions used, census instruments (census questionnaires, instruction manuals, etc.), duration of interviews, and evaluating alternative methodologies and data collection methods. A *pilot census*, in turn, is a 'dry run' for the main census but on a limited scale, and aims to evaluate all aspects of the census operation to resolve any outstanding problems. The results serve to adjust the final plans and logistics and to fine-tune not only the census methodology and instruments, but also the final calculations of resource requirements for the census. Box 12.1 describes two countries' experiences in testing the census instruments and processes.

Most countries conducted pre-testing of the census instruments, but a smaller proportion conducted a pilot census. Some of the countries that reported undertaking pilot censuses included Senegal and South Africa (Africa); Armenia, Bangladesh, Lebanon, Nepal, Oman, the Philippines,

Box 12.1. Examples of quality assurance during the preparation phase

Canada (2011) – Review and testing of questionnaires

Statistics Canada's Questionnaire Design Resource Centre (QDRC) reviewed and tested the census questionnaire. They closely reviewed the preliminary design to ensure that the questionnaire was standardized and that the length was reasonable for respondents. They looked at questions that might lead to difficulties for respondents, and specific probing questions were developed prior to field testing to further explore these potential problems. The experts then went out to the field to test all new and revised questionnaires and assess respondents' ability to answer the questions in all data collection modes (CAWI, mail). This was done both in English and French, the country's two official languages.

The questionnaire testing was undertaken in several phases. The initial modular phase was used to test new questions. The second modular phase was used to validate new questions that were redesigned and improved based on the feedback on the first testing phase. The third phase was an integrated test where the new content and questions from the previous census were tested.

Different types of holders were asked to complete the questionnaire at the time of the field visit, and to "think aloud" as they completed the questionnaire. Issues related to the understanding of the questions, recalling information and formulating responses to the questions were dealt with extensively. Questionnaires were also reviewed with regards to wording and sequencing of questions, as well as the length, format, and respondent- and interviewer-friendliness.

Colombia (2014) – Pre-tests and pilot census

During the preparation phase, four levels of testing were performed in order to evaluate, among other things, the functionality of the census questionnaire, the productivity of the enumerator during the interview and the strategy for communication with the holder:

1. Desktop tests: to test the questionnaire content;
2. Field pre-tests: to test some specific contents in the field;
3. Pilot pre-tests: to test the whole questionnaire content and the whole field process;
4. Pilot census: to test all aspects of the census processes.

CAPI and PAPI were used as the data collection methods. The supervisor/enumerator ratio used was 4:1, with a daily workload of six questionnaires per enumerator. The fieldwork was implemented in two ways, namely a sweep tour (in well-delimited areas with easy access) and routes (in jungle areas not well delimited).

Sri Lanka and Tajikistan (Asia); Austria, Bulgaria, Estonia, Hungary and Republic of Moldova (Europe); and Colombia, Costa Rica and El Salvador (the Americas).

12.2. QUALITY ASSURANCE DURING THE FIELDWORK

Census field staff, both supervisors and enumerators, play a critical role in ensuring the quality of data collected from holders. While enumerators are responsible for accurately recording all required information on the agricultural holdings, supervisors are responsible for performing quality checks on fieldwork operations, including:

- **observing interviews during enumeration** – useful during the initial period of an enumerator’s work to take immediate measures to correct any noticeable shortcomings.
- **checking holdings already enumerated** – checking a random subsample of EAs and holdings to assess the nature and extent of errors committed by enumerators and necessary corrections.
- **checking coverage of the EA** – reconciling the forms in the enumeration record with the maps. In CAPI, the software provides information on the coverage.
- **reviewing completed census forms** – checking a sufficient sample of filled questionnaires to ensure their completeness, accuracy and consistency.
- **reviewing monitoring and evaluation data for the area under supervision** – monitoring the progress of enumeration for the EAs under supervision.

A review of experiences show that the above supervisor’s quality checks are routinely practiced in most countries’ censuses of agriculture.

When CAPI and CAWI are used as data collection methods (see Chapter 6), data entry and a first round of processing takes place at the same time as responses are recorded electronically. The data entry software performs several checks to minimize errors, including range checks and internal consistency checks. This process involves prompts, warnings and verification questions popping up while the electronic questionnaire is completed.

CAPI enabled with Global Positioning System (GPS) also provided a powerful tool for monitoring and supervising fieldwork by showing, almost in real time, the progress of each enumerator’s fieldwork and daily productivity. CAPI paradata (e.g. GPS location, start time, end time, approval, etc.) allows supervisors to visualize and monitor the progress of the census enumeration in real time and make timely adjustments. The GPS capabilities are also useful for the location of georeferenced holdings, optimizing fieldwork logistics and supporting enumerators in their displacements within the EAs.

Besides the routine supervisor’s work and the quality checks and monitoring of modern data collection methods, some countries took additional measures to ensure census data quality during the fieldwork. Box 12.2 below presents some country examples in this respect.

Box 12.2. Examples of quality assurance during the fieldwork**Croatia (2010) – Telephone verification**

The census office contacted field supervisors and, if necessary, farmers by telephone to verify certain responses. Once corrections and adjustments were made, the data was processed and the results were checked at the macro level, and compared with results from surveys.

Mauritius (2014) – Post follow-up

MO–MB was the data collection method used for holdings in the non–household sector. Statistics Mauritius (SM) sent reminders to all non–respondents a month later. Finally, SM agents visited the remaining non–respondents.

Palestine (2010) – Random re-interviews

As a measure of control of data quality, census supervisors and team leaders in each governorate conducted re-interviewing of holdings through random visits on a sample basis. This included filling out parts of the listing and census questionnaires.

United States of America (2012) – CATI follow-up

MO–MB was the primary data collection method. It was supplemented with CAWI. Non–responses were followed up by CATI and face–to–face interviewing.

12.3. QUALITY ASSURANCE DURING POST-CENSUS ENUMERATION

During the WCA 2010 round, countries undertook various types of quality assurance procedures after the census enumeration. These procedures included computer-assisted consistency checking and validation of the data, data editing, imputation of missing data, estimation of undercoverage, introduction of adjustment weights for allowing for non-response and validation with other data sources.

As stressed earlier, despite all the control measures taken during the fieldwork, some coverage and content errors are unavoidable in census data. Thus, it is important to measure, analyse and report on these errors so that census organizers are aware of data quality and users are aware of data limitations. This could be done via an independent PES or any other relevant source such as administrative registers. In the case of the PES, its quality and relevance depends on the time lag compared to the census enumeration. Only a limited number of countries carried out a PES in the WCA 2010 round. Table 12.1 provides the list of countries that reported having conducted a PES to assess the coverage and/or the content errors of census data. Box 12.3 shows some country examples of quality assurance during post-census enumeration.

Table 12.1. Countries that reported having conducted a PES in the WCA 2010 round

Region	Countries	No. of countries
Africa	–	0
Americas	Canada, El Salvador, Nicaragua, Paraguay, Suriname, Venezuela (Bolivarian Republic of).	6
Asia	Azerbaijan, Armenia, Bangladesh, China, Georgia, Indonesia, Iran (Islamic Republic of), Republic of Korea, Thailand, Viet Nam.	10
Europe	Albania, Italy, Republic of Moldova, Montenegro, North Macedonia, Romania, Serbia.	7
Oceania	Cook Islands, Niue.	2

Box 12.3. Examples of good practices in quality assurance during post-census enumeration

Canada (2011) – Data validation

Statistics Canada has established a certification committee (comprising census managers and subject matter experts in agriculture) that, after data processing, reviews and officially certifies the results. Each census variable is reviewed and certified by geographic area. The information presented to the certification committee to support the review should:

- anticipate the census results (forecast, other surveys, consultations with industry experts);
- align the results with the current socioeconomic context;
- compare results with historical data, administrative data, survey data and other correlated variables;
- outline the impact of the processing and validation on the raw data;
- outline the impact of holders that left the industry, newcomers and large players; and
- recommend to the committee that data be:
 - a. published;
 - b. published with a cautionary note;
 - c. deferred for more investigation before publication; or
 - d. not published.

Egypt (2009/2010) – Comparisons with administrative records

The Central Department for Agricultural Census of the Ministry of Agriculture and Land Reclamation (MALR) compared the census results and some administrative data sources for validation purposes. These sources include data on total area of holdings and cultivated area, on livestock numbers and on agricultural machinery.

Nicaragua (2011) – PES

The aim of the PES was to assess the quality (in terms of coverage) of the Fourth Agriculture Census (CENAGRO IV), 2011. Based on earlier experiences, a sample of 4 percent of the total EAs was drawn for the PES. Overall, the sample involved 100 EAs and 8 900 holdings. The methodology for the selection of EAs was a stratified cluster one-stage random sampling with proportional allocation in each stratum. All holdings located within each selected EA were surveyed. The results showed an undercoverage of 2.9 percent and an overcoverage of 2 percent. The National Institute of Development Information (INIDE) considered these levels as highly acceptable.

South Africa (2007) – Comparison of census data

For the Census of Commercial Agriculture (CoCA), Statistics South Africa made comparisons with the frame and with the estimates of the CoCA 2002, with the estimates from the annual agriculture and related services survey and with various other sources that reported on the sector.

Thailand (2013) – Post-enumeration survey (PES)

After the completion of census fieldwork, the NSO carried out a PES to evaluate the quality (both in terms of coverage and response) of census data. The PES was conducted for all holdings in selected EAs throughout the country. The PES sample design was as follows:

- stratified single-stage sampling was applied;
- four strata referring to four regions – Central, North, Northeast and South;
- provinces in each region were represented as substrata;
- within each substratum, the EAs were systematically selected;
- the total sample size was 1 280 EAs.

Thereafter, the holding data of the agricultural census and the PES were processed for matching checks on census coverage and content, such as information on livestock, planted rubberwood, permanent crops and field crops.

13

Main findings on the censuses' results

13.1 SCOPE OF TABLES

This part of the publication makes a global comparison of census results based on the 14 tables in Annex 2. The tables were prepared with data extracted from the publication “Main results and metadata by country” (SDS 17; FAO, 2019), national census reports and FAOSTAT. The tables in Annex 2 provide a meaningful comparison with as much data as possible. An effort was made to include, in the comparisons, all the data conforming to the concepts and definitions recommended by FAO. However, footnotes are given in the tables, where necessary, to inform users about specificities and variations in the concepts. Relevant concepts and definitions are given at the end of the publication to clarify any vagueness in the table headings, which have been deliberately kept short for aesthetic reasons. If non-standard indicators are calculated and included in the tables for drawing conclusions, clarifications have been included in the tables by indicating the formula used for their calculation. In case of doubt relating to data for any specific country, the user should refer to the national concepts and definitions followed for collecting and presenting the data, available in the national reports and SDS 17.

13.2 HIGHLIGHTS FROM THE TABLES

An analysis of the cross-country comparisons available in the Annex 2 tables enables highlighting structural characteristics of agriculture worldwide. These main structural characteristics are discussed below.

13.2.1 Trends in number and area of holdings

Table A2.1, Annex 2 presents the number and area of agricultural holdings as available from agricultural censuses since the WCA 1930 round, which could be used to observe broad global, regional and national tendencies. Readers should pay attention to possible changes in the political boundaries, methodologies, concepts and definitions used for the various censuses, while making comparisons over time and across countries. Information in this respect has been added as notes and footnotes to the table. The structure of agriculture varies greatly across countries and regions due to differences in topography, climate, soil, availability of resources and agricultural practices, as well as to diversity in human activities.

The limited availability of comparable data at global level impedes the objective of tracking changes over time in different regions. In total, 96 countries conducted an agricultural census in both the 2010 and 2000 WCA rounds, out of which only 75 reported both total number of holdings and total area of holdings. Table 13.1 below provides totals for these 75 countries grouped by regions.

Table 13.1. Number and area of holdings in the 2000 and 2010 WCA rounds

Region (number of countries)	WCA 2000		WCA 2010		Variation between WCA 2000 and WCA 2010	
	Holdings (million)	Area (million ha)	Holdings (million)	Area (million ha)	Holdings (%)	Area (%)
World total (75)						
Africa (10)	14.8	27.5	18.1	44.2	22.6	60.6
America (12)	10.6	933.8	11.2	966.5	6.1	3.5
Asia (18)	196.8	268.7	206.1	275.0	4.7	2.3
Europe (27)	18.1	228.5	12.8	222.0	-27.7	-3.1
Oceania (8)	0.2	471.5	0.2	424.1	-5.6	-10.0

If the countries covered in the regions in Table 13.1 are taken as a representative sample of their regions, it emerges that the region with the most expansion in coverage of agriculture in terms of area (up 60.6 percent) and number of holdings (up 22.6 percent) is Africa. A similar trend was observed for the region at the end of the WCA 2000 round (see SDS 13). These large increases are explained by similar increases in most of the countries, particularly in Botswana and Namibia. In the case of Namibia, it was due to differences in concepts and coverage. The country reported cultivated area in the WCA 2000 and total area in the WCA 2010. In addition, it excluded holdings from the non-household sector and a number of regions (7 regions of the country out of 13 were not covered) in the WCA 2000, but included them in WCA 2010. These changes impacted the overall changes for Africa.

On the other hand, a slight increase was observed in the Americas in the number of holdings (6 percent) and in the operated area of the holdings (about 3.5 percent). This increase was driven by countries in South America. Slight increases were also observed in Asia, both in the number of holdings (4.7 percent) and in the operated area of the holdings (2.3 percent). Europe and Oceania experienced a decrease in the number of holdings and operated area. In Europe, there was a huge drop in the number of holdings (30.8 percent) against a slight decrease in the area operated (5.5 percent), suggesting a process of consolidation of holdings.⁶⁸ On the contrary, in Oceania, which is very much driven by Australia, the drop was more marked in the area operated (-10 percent) compared to the fall in the number of holdings (-5.6 percent).

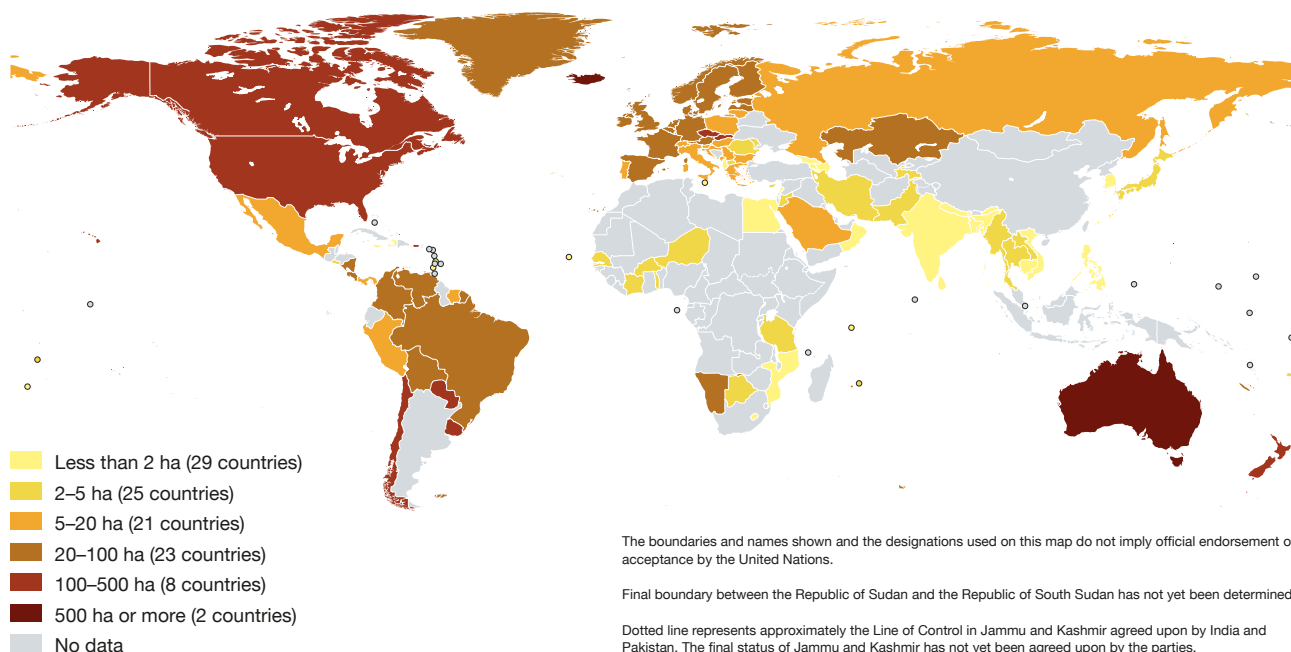
Map 13.1 shows average area per holding as obtained from the WCA 2010 round. Table A2.6, Annex 2 presents the average land size of the holdings since the WCA 1930 round. The pooled averages and the medians of national averages have been calculated for each region and for the whole world, to identify broad regional trends. It is clear that in the last 60 years, the median size of holdings' land in the world has steadily declined from 15.3 ha in the 1950 round to approximately one quarter thereof (4.4 ha) in the 2000 round. The global median size of the holding rebounded in the 2010 round, rising to 5.5 ha (see also Figure 13.1 below).

⁶⁸ However, the data regarding the decrease in the number and area of holdings should be treated with some caution, as census coverage has decreased in some countries due to the raising of the minimum size threshold for agricultural holdings to be included in the census coverage.

Some of the trends observed in Table 13.1 are confirmed by the regional average sizes reported in Table A2.6, Annex 2. In Africa and Asia, the holdings are becoming fragmented, while a consolidation of holdings is taking place in Europe. This is demonstrated by the fact that in the last five decades, the average size in Africa and Asia fell from 9.4 ha and 2.2 ha to 2.6 ha and approximately 1.7 ha, respectively, whereas the average size in Europe grew from about 11.5 to 18.2 ha over the same period.

The increase in the size of holdings in Europe could be a result of the drop in the number of holdings, which could be linked to structural changes arising out of technological developments in the agricultural sector and the disappearance of smaller holdings due to ageing of the holders and other socioeconomic influences. In Africa, the average holding size declined steadily until the 1990s, perhaps due to redistribution of land in newly emerging countries but also due to the increased participation, in the census rounds, of countries with more diversified agriculture. In the Americas, averages fluctuated from the 1960 to the 2000 round, and fell sharply in the 2010 round, with the exception of Argentina, Canada, the United States of America and Uruguay. In South America, the leading meat-producing countries such as Argentina and Uruguay, have big holdings and display an increasing trend in the size of holdings. The average holding size in both Australia and New Zealand have increased or remained relatively stable over the last 60 years, whereas other countries in Oceania that have participated intermittently in the census rounds showed a general tendency towards fragmentation and smaller holdings.

Map 13.1. Average area per holding (2006–2015)



Note: Map produced by the Statistics Division of FAO, 2020.

Source: WCA, 2010 conforms to UN World Map, 2020.

13.2.2 Global and regional trends in land size of holdings

Table A2.3, Annex 2 presents the number and area of the agricultural holdings in the reporting countries by size classes, and Table A2.5 shows the average land size of holdings and number of parcels per holding. These tables show a great diversity between countries across the world in terms of the average size of holdings and in the distribution of holdings by size. For example, India has 65 times more holdings than the United States of America, but its total area is less than half of the area in the latter country. Thus, the mean size of Indian holdings is approximately 150 times smaller than the mean size of the US holdings (1.2 ha against 176 ha). Also, the mean size of Indian holdings, as well as of most of the Asian countries, is a small fraction of the average size of an Australian holding, which is a staggering 3 020 ha, certainly due to the prevalence of extensive livestock-raising practices with large areas of land being used for permanent meadows and pastures. The above is reflected in the distribution of holdings by land size. Only one third of the holdings in India (45.3 million) are bigger than 1 ha, while only 11 percent of holdings (or 223 635) in the United States of America are smaller than 4 ha. Conversely, out of 138.4 million Indian holdings, 92.8 million holdings are smaller than 1 ha, representing approximately two thirds of all Indian holdings. In other countries in Asia, such as Viet Nam and Indonesia, 81 percent and 74 percent of the holdings, respectively, are smaller than 1 ha.

Eight countries have remarkably huge mean farm sizes: Australia (3 020 ha), Iceland (988 ha), Uruguay (365 ha), Canada (315 ha), New Zealand (248 ha), Czechia (221 ha), the United States of America (175 ha), Slovakia (125 ha), Chile (121 ha) and Paraguay (107 ha). For all other countries, the mean size never exceeds 100 ha. However, the situation varies by continent:

- In **Africa**, except Namibia, only five countries have a mean size of holding between 4 and 4.2 ha. Namibia reported a mean size of holding of 60 ha. Over 95 percent of the agricultural land in Namibia is managed by large commercial farms, mainly for grazing. Notably, some African countries even have a very low mean size of holdings, such as Cabo Verde (0.8 ha), Egypt (0.8 ha) and Seychelles (0.9 ha).
- In **the Americas**, more than half of the countries had very large holdings, with a mean holding size greater than 20 ha. The countries with the largest mean size of holdings were Uruguay (365 ha), Canada (315 ha), the United States of America (175 ha), Chile (121 ha) and Paraguay (107 ha). In contrast, the American countries with the lowest mean size of holdings (between 1 and 2.3 ha) were El Salvador, Grenada, Haiti, Jamaica and Saint Lucia.
- In **Asia**, only two countries reported an average holding size bigger than 5 ha: Saudi Arabia (9.9 ha) and Kazakhstan (27 ha).
- In **Europe**, few countries' averages exceeded 100 ha, but a number of countries had relatively large averages, such as Iceland (988 ha), Czechia (222 ha) and Slovakia (125 ha). In these countries, large proportions of land (more than 50 percent) are allocated to "Permanent meadows and pastures" and "wooded area". Other countries are Finland (98 ha), the United Kingdom of Great Britain and Northern Ireland (97 ha) and some Nordic countries like Sweden (95 ha), Norway (86 ha) and Denmark (73 ha). Nine more countries have an average holding size between 31 and 63 ha. The countries with averages lower than 5 ha are in descending order: Romania, Republic of Moldova, North Macedonia, Albania and Malta.
- In **Oceania**, very large holdings are found in Australia and New Zealand, and very small holdings in the small Pacific Islands.

The marked differences noted above make it obvious that any cross-country comparison, based on averages or any other criteria, will need to consider the vast differences in the scale of operation of farms in Australia or the United States of America, on one hand, and in Asia and Africa on the other.

Map 13.2, prepared on the basis of Table A2.2, Annex 2 shows the proportion of small farms (with less than 1 ha of land). The highest proportion of these small farms is found in Oceania (100 percent in Palau), Asia (84 percent in Bangladesh) and Africa (81 percent in Egypt). Australia, many of European countries and the United States of America do not enumerate small holdings because they are few and do not contribute significantly to the national agricultural output; thus, they do not correspond to their legal definition of holding. In 20 countries in Asia, 65 percent of agricultural holdings were smaller than 1 ha, accounting for 14 percent of the operated area. If the limit is extended to 2 ha, 82 percent of holdings accounting for 28 percent of the operated area is covered. This regional analysis hide some discrepancies among countries. In six Pacific countries (American Samoa, Cook Islands, Fiji, Guam, the Northern Marina Islands and Samoa), 28 percent of holdings with 1 ha and below constituted only 5 percent of the total area. Holdings smaller than 2 ha accounted for 39 percent of total holdings and operated only 10 percent of land. Figures 13.1 and 13.2 show the global and regional trends in the average land size of holdings.

Figure 13.1. Global trend in average land size of holding

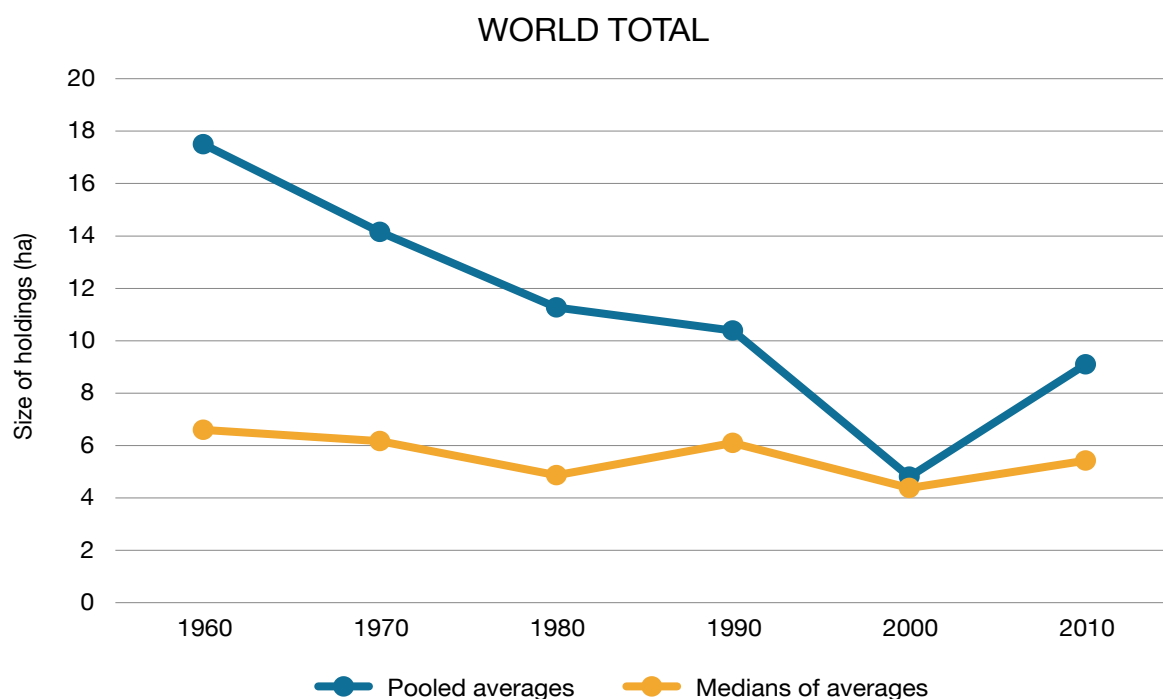
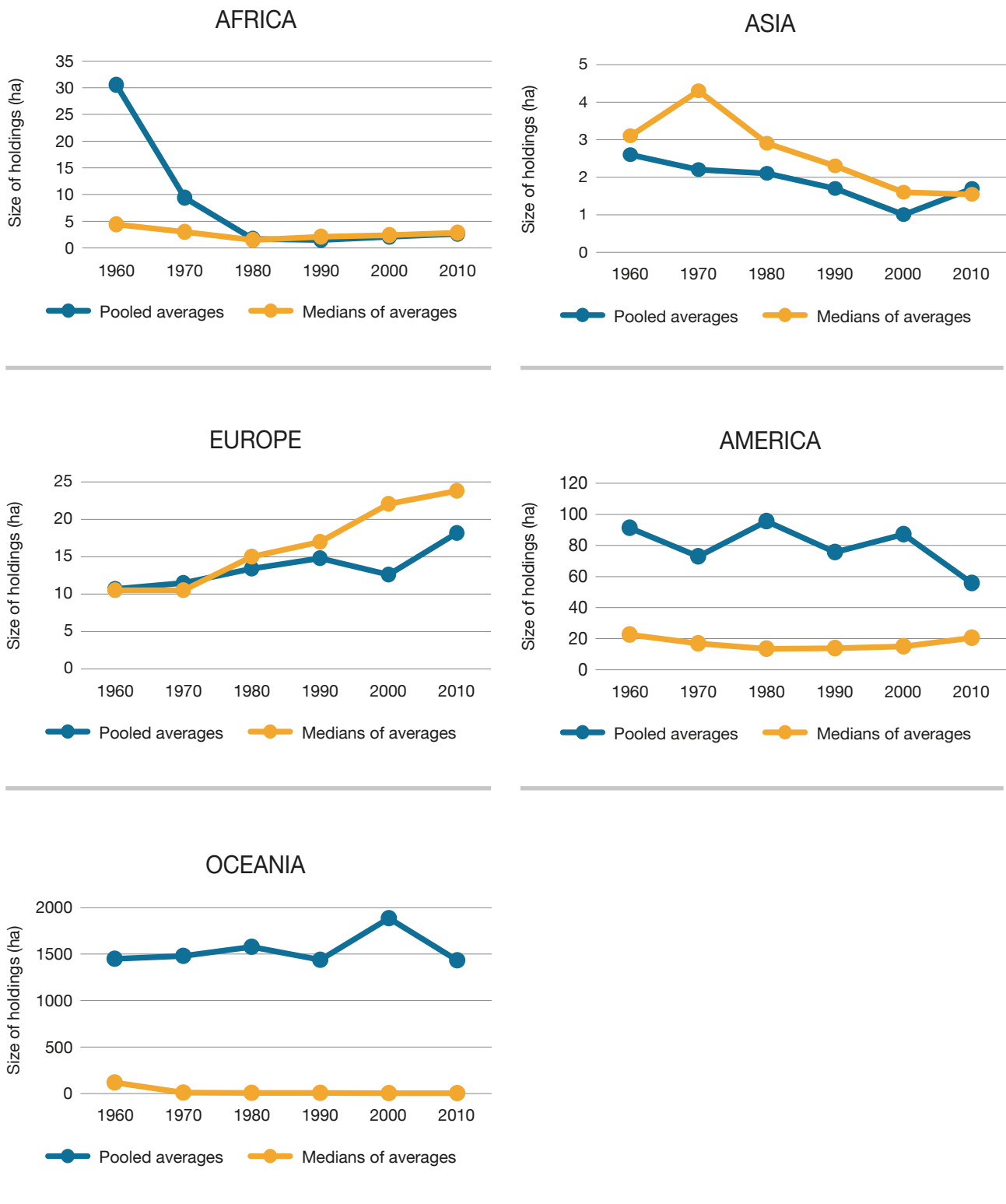
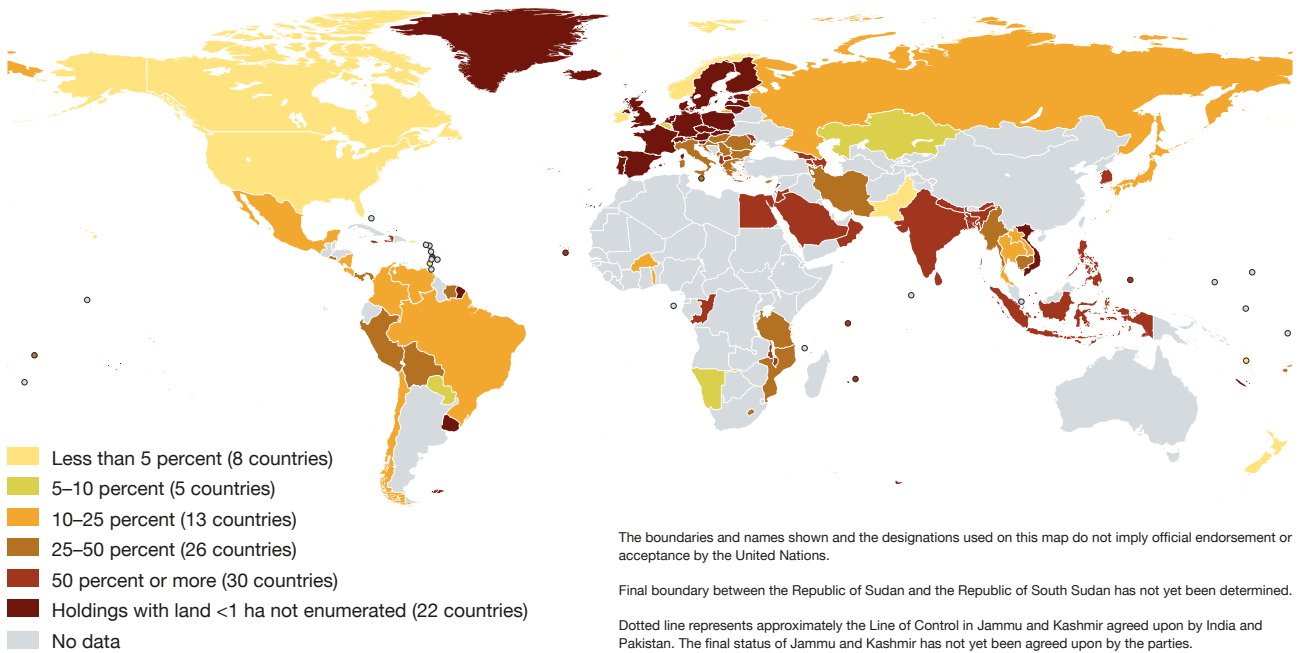


Figure 13.2. Regional trends in the average land size of holdings⁶⁹



⁶⁹ The average land size of holdings for the incomplete WCA 1950 round was removed to avoid distorting the data provided in the regional charts.

Map 13.2. Proportion of farms with less than 1 ha of land

Note: Map produced by the Statistics Division of FAO, 2020.

Source: WCA, 2010 conforms to UN World Map, 2020.

The concept of small farm still lacks an agreed definition. For the purposes of international comparison, Table 13.2 has divided the holdings into three size classes: 0–5 ha, 5–50 ha and above 50 ha. The table indicates that globally, around 92 percent of the holdings are smaller than 5 ha, indicating the predominance, to a large extent, of small subsistence or semi-subsistence farms at world level. With 5 ha taken as a benchmark for a small farm, in Asia 96 percent of farms are small, in Africa 93 percent and in Europe almost 72 percent. Farms larger than 50 ha are found mostly in the Americas and in Oceania, with nearly 12 percent and 20 percent of the holdings, respectively (see Table 13.2 below).

Table 13.2. Percentage of holdings in different size classes of operated area

Regions (Number of countries)	Total (%)	Size classes of operated area		
		0–5 ha	5–50 ha	Above 50 ha
World Total (105)	100	91.7	7.1	1.2
Africa (12)	100	93.2	6.7	0.0
Americas (22)	100	56.9	31.3	11.9
Asia (25)	100	96.1	3.9	0.1
Europe (36)	100	71.9	22.7	5.4
Oceania (10)	100	58.3	21.8	20.0

13.2.3 Land fragmentation

Table A2.5, Annex 2 provides a snapshot of the fragmentation or consolidation of holdings' land, which could be gauged using the average number of parcels by holding. Only 27 out of 127 countries that participated in the WCA 2010 round provided information on number of parcels. Based on the available data, 32 and 24 percent of countries in Africa and Asia, respectively, that participated under this round covered land fragmentation. This indicator was also reported by countries in the Americas (21 percent), Europe (14 percent) and Oceania (17 percent). Due to insufficient and poor coverage of these data, global and regional comparisons and analyses of the fragmentation of holdings will not be meaningful in this publication; however, the figures in Annex 2 have been retained to inform readers about this aspect.

13.2.4 Gender

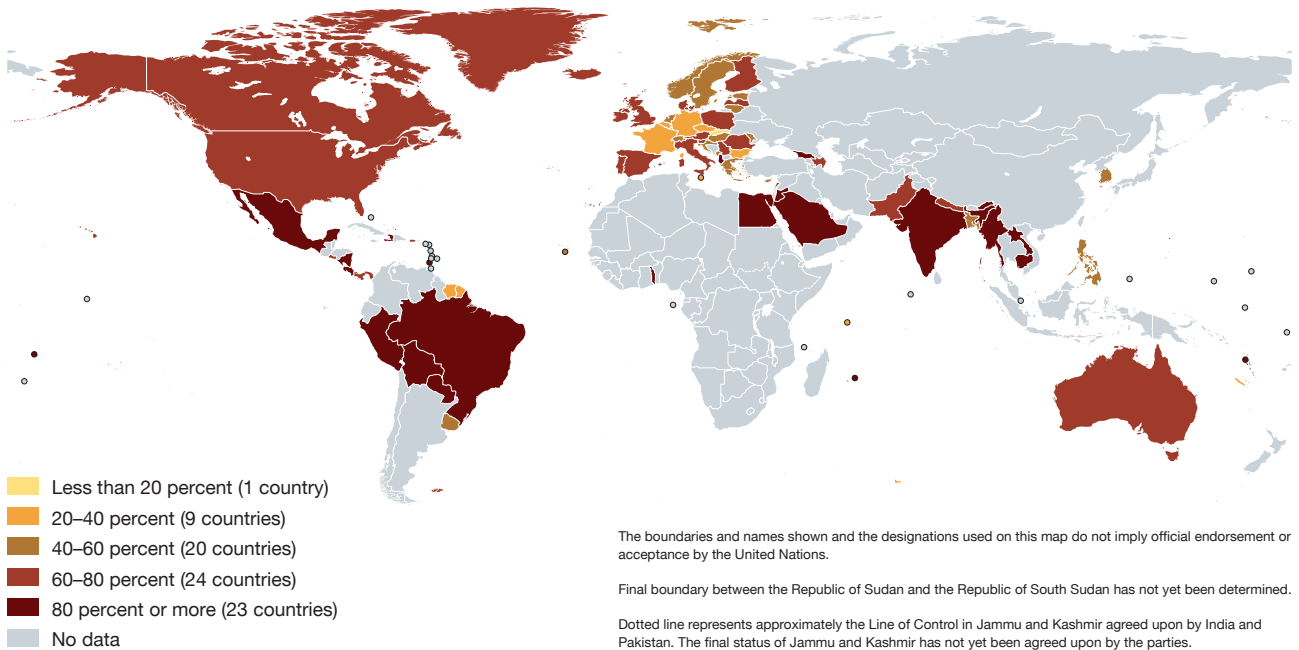
The WCA 2010 introduced "Management of the holding" and the concept of sub-holding as an attempt to better measure the role of gender in the management of the holding. Table A2.7, Annex 2 shows the breakdown of holdings operated by civil persons based on the sex of the agricultural holder. The table contains data from 90 out of 127 countries that reported this information. In the world, most agricultural holdings operated by civil persons are managed by males (85 percent). This means that only 15 percent of the holdings are managed by females. Europe (28 percent), the Americas (18 percent) and Africa (17 percent) were above the world's average in terms of female-headed holdings, whereas Asia and Oceania were below the world's average (13 percent each). Some countries stood out in each region because they showed a more balanced gender situation: particularly, Latvia and Lithuania in Europe; Eswatini and Lesotho in Africa; Suriname, Panama and Peru in the Americas; and Niue and Samoa in Oceania.

The gender of the agricultural holders may not be the most suitable indicator for measuring the contribution of women to agriculture in all situations. In Africa, due to the forms of tenure arrangements and practices relating to the sociocultural aspects of management of a family's productive assets, the sex of the holder is not a valid indicator for measuring the contribution of women. This is particularly the case in regions where the land is owned by the head of the household but a significant part is allotted to female members of the family for their independent management.

13.2.5 Land tenure

Table A2.8, Annex 2 presents data on land tenure of holdings according to the FAO classification, as available from 81 countries. Land owned by the holder or held in owner-like possession represents the most common form of land tenure. In most regions, except Europe, over 50 percent of the holdings' land belong to this category, with the biggest shares being in Asia (92 percent), Africa (86 percent), the Americas (79 percent) and Oceania (65 percent). In Europe, the category represents only 52 percent. Map 13.3 illustrates the proportion of holding area owned by holders across the world.

Within the regions, few countries reported rented land from others as the most common land tenure type in terms of area. These countries were Seychelles in Africa; Cyprus in Asia; Belgium, Bulgaria, Czechia, Germany, Luxembourg, Malta, and Slovakia in Europe; Suriname in the Americas; and the Northern Mariana Islands in Oceania.

Map 13.3. Proportion of holdings' operated area owned by holders

Note: Map produced by the Statistics Division of FAO, 2020.

Source: WCA, 2010 conforms to UN World Map, 2020.

Table A2.8, Annex 2 shows that 11 countries also reported area operated by holdings under more than one form of tenure (e.g. without disaggregation of tenure type). This was mainly observed in Africa and, to a lesser extent, in Asia, where holdings' land was more fragmented.

13.2.6 Legal status of the holder

Table A2.9, Annex 2 shows that only 83 countries reported data on the legal status of holdings. Information on this item is very important and recommended by FAO because it enables comparing holdings operated by individuals (mainly in the "household sector") with those operated by juridical persons (mainly in the "non-household sector"). It also enables measuring the economic importance of farms operated by juridical (public or private) persons. These may not be numerous in a given country, but may occupy a large part of the national productive resources and employ several workers.

The available data on the legal status of the holders seem to confirm the hypothesis that corporations, cooperatives and government entities, although few, can manage large areas of land. In most countries, farms operated by juridical persons are fewer than 10 percent. Only 10 countries have more than 10 percent of the farms operated by juridical persons: France (22 percent), Uruguay (17 percent), Guam (16 percent), Czechia, Iceland, South Africa (14 percent each), Costa Rica, the United States of America (12 percent each), and Switzerland (10 percent). However, juridical persons control a significant part of the agricultural sector by operating a large proportion of the land: for instance, Namibia (95 percent of the total holding area), Slovakia (88 percent), Mauritius (80 percent), Czechia (79 percent), Bulgaria (66 percent), Peru (64 percent) and Hungary (62 percent).

Conversely, in some countries, a very small number of holdings with juridical persons controlled a sizeable holding area. In Namibia, these farms represented 2 percent of all farms but managed 95 percent of the land. In the Russian Federation and Hungary, these farms represented 2 percent or less of all farms but operated 98 and 62 percent of the holdings' land, respectively.

13.2.7 Demography and farm labour

Table A2.10, Annex 2 presents the available information on demography of farms and source of farm labour. The data confirm the previous census round's conclusion that agriculture is a sector that mainly absorbs family labour. Out of the 97 countries reporting on employment, 72 reported using household members and 48 reported using hired workers. Most of the countries reporting household members engaged in agricultural activities were in Africa and Asia. Agriculture remains an important source of employment for holders' household members. In fact, the percentage of household members engaged in the holding were high in Brazil (98 percent), Viet Nam (94 percent), Uruguay (83 percent), the Lao People's Democratic Republic (77 percent), Burkina Faso (72 percent), Japan (70 percent), Namibia (67 percent), Tonga (65 percent) and Vanuatu (64 percent).

The importance of the use of hired workers is measured by the number of hired workers per holding. For countries that reported this information, the average number of hired workers per holding is usually lower than 1. Only two countries that reported this information had more than one hired worker per holding: Colombia with 1.9 and Oman with 2.3.

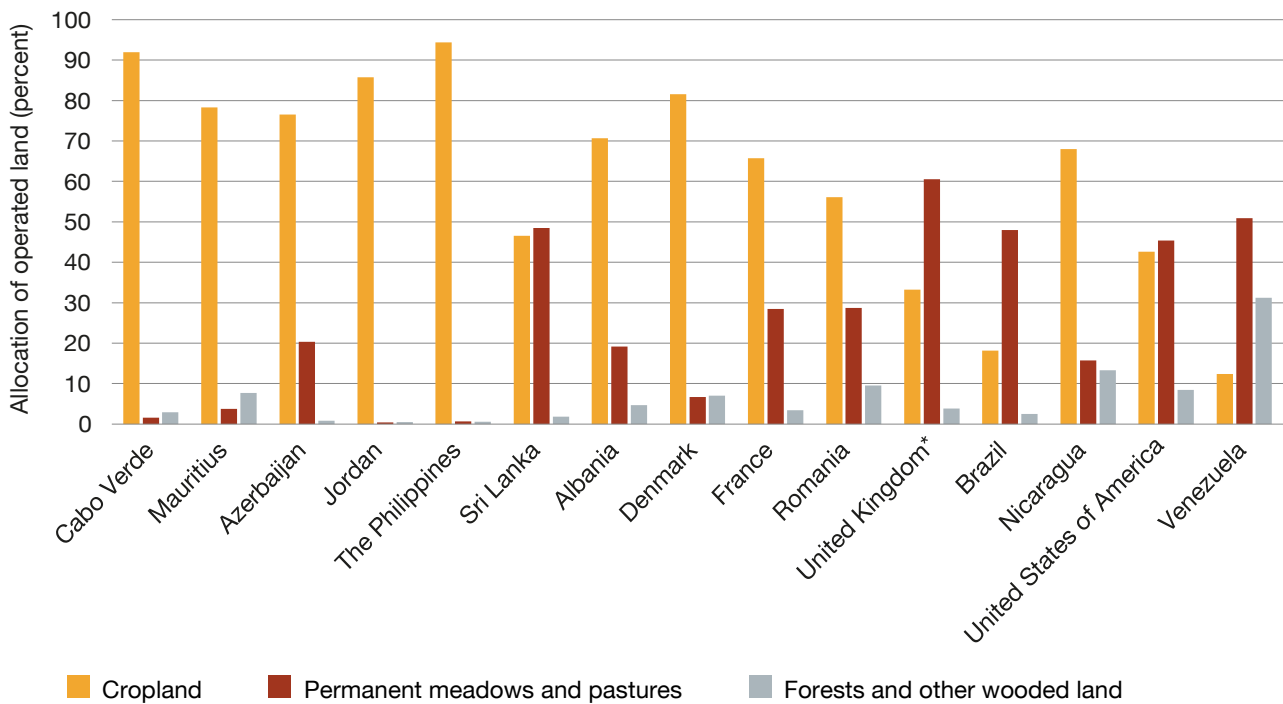
13.2.8 Land use and cropping intensity

In Asian and African countries, cropland (arable land and land under permanent crops) accounts for the greatest part of the area operated by holdings, except in Kazakhstan and Tajikistan. In other words, holders in these countries tend to limit their agricultural activities to crop cultivation. Cropland represents more than 75 percent of the operated land in these countries. Since livestock production is also an important activity in these regions, meadows and pastures may be collective/public property and are probably not counted in the agricultural census as being used by holdings. The existence of nomadic and transhumant livestock is not an uncommon practice in central Asia and Africa. Table A2.12, Annex 2 shows that Kazakhstan and Tajikistan devoted most of their agricultural land operated by holdings to permanent meadows and pastures.

On the other hand, holdings in the Americas and Europe generally devote a significant part of permanent meadows and pasture to their livestock. They are also the ones maintaining significant areas of woodland and forests as part of their holdings' land, perhaps in view of organizing rotations with meadows. The share of cropland seems to be smaller in some South American countries, confirming that livestock-keeping is the main agricultural activity in this region.

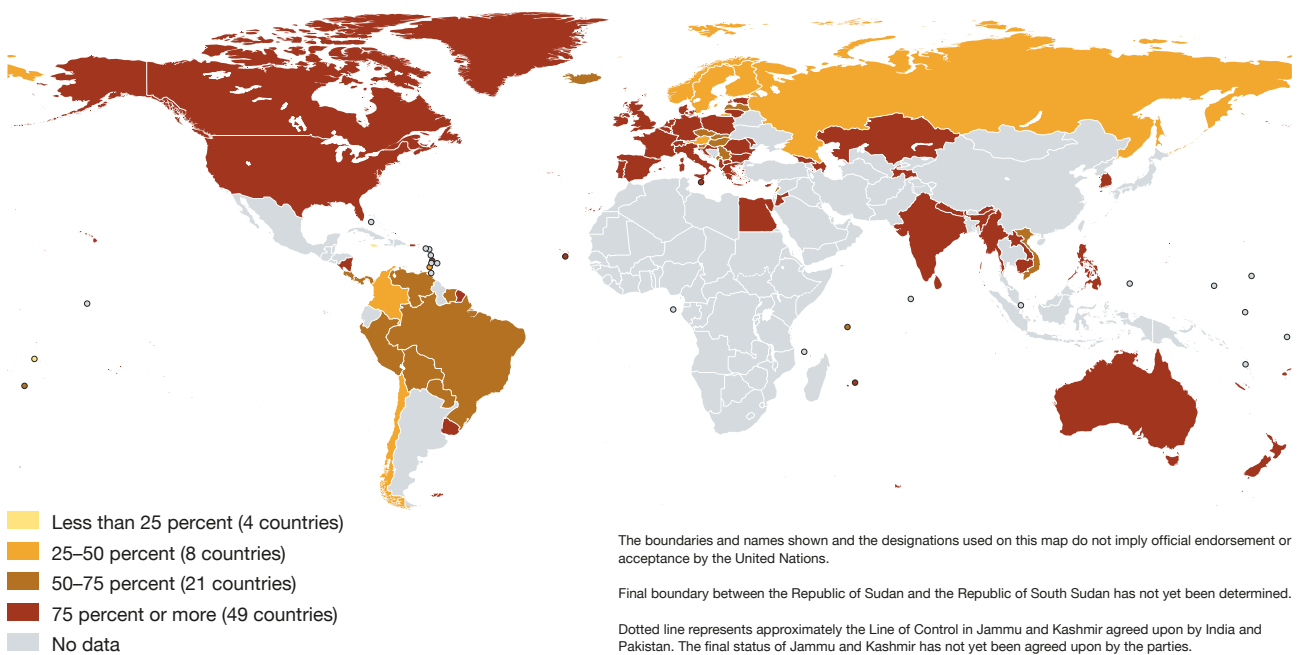
Figure 13.3 below is based on data from Table A2.11, Annex 2. It shows land use in selected countries across the regions. Map 13.4, based on Table A2.11, Annex 2 presents the use of land for agriculture purposes in different countries.

Figure 13.3. Shares of cropland, land under permanent meadows and pastures, and forests in the area operated by holdings



* United Kingdom of Great Britain and Northern Ireland.

Map 13.4. Percentage of agricultural land in total area of holdings' operated land



Note: Map produced by the Statistics Division of FAO, 2020.

Source: WCA, 2010 conforms to UN World Map, 2020.

13.2.9 Agricultural machinery

Table A2.13 Annex 2 provides data on the use of agricultural machinery by holdings in 69 countries. This includes 23 countries in Asia, 18 in Europe, 17 in the Americas, 6 in Africa and 5 in Oceania. Very few countries reported data separately for “4-wheel tractors” and “track-laying tractors”. From the limited data available, the use of machinery, measured by the number of tractors of all kinds per holding, can be calculated for a limited number of reporting countries. In Africa, the indicator is approximately 1 tractor per 100 holdings, except for Lesotho, which reported 4 tractors for 100 holdings. Burkina Faso has the lowest rate among the reporting countries, with 3 tractors per 1 000 holdings. In Asia, the rate is higher than in Africa. Four countries reported 5 to 13 tractors per 100 holding (Cambodia, China, Lebanon and Thailand). Higher rates were seen in Cyprus (32 tractors per 100 holdings), the Republic of Korea (25 tractors per 100 holdings) and the Islamic Republic of Iran (1.2 tractors per holding). In the Americas, there was greater variability (from 6 to 75 tractors per 100 holdings). Higher rates were seen in Canada (3 tractors per holding) and the United States of America (2 tractors per holding). In Europe, Croatia, Iceland and Luxembourg reported 2 to 3 tractors per holding, while other countries reported 11 to 63 tractors per 100 holdings. Albania and Romania reported the lowest ratios, with 5 to 6 tractors per 100 holdings.

13.2.10 Irrigation

An attempt was made to compile data on at least two common indicators of irrigation, the number of holdings using irrigation and area irrigated. Table A2.14, Annex 2 shows that only 54 countries reported this information, half of which are European countries. In Africa, only four countries reported the use of irrigation. In the United Republic of Tanzania, 5.5 percent of the holdings used irrigation, with an irrigated area representing almost 2 percent of the total holdings’ area. In Asia, ten countries reported the use of irrigation in more than 50 percent of the holdings, and with an irrigated area ranging from 2 to 100 percent of holding area. Two Persian Gulf countries (Oman and Saudi Arabia) reported that 100 percent of the holdings’ area was irrigated.

In Europe, 26 out of 36 countries reported the use of irrigation, with wide variations. The leading countries were North Macedonia (68 percent of holdings and 24 percent of the UAA), Greece (53 percent of holdings and 20 percent of the UAA), Portugal (51 percent of holdings and 13 percent of the UAA) and Spain (39 percent of holdings and 13 percent of the UAA). In Oceania, only two countries (Guam and Northern Mariana Islands) reported the use of irrigation by holdings. In the Americas, 12 countries (43 percent of the region’s reporting countries) reported the use of irrigation by holdings. Two countries stood out in the region: the United States Virgin Islands (45 percent of holdings) and Chile (40 percent). In Saint Lucia, only 15 percent of the holdings used irrigation but 27 percent of the holdings’ area was irrigated.

Annexes

NOTES TO THE ANNEX TABLES

Annex 1

Table A1.2

1. The year of participation refers to the year in which the census enumeration took place. If the enumeration took place over several years, all years are shown separated by a dash. If a country conducted more than one census during a round, all years are shown separated by an ampersand.
2. For some European countries taking agricultural censuses annually, the year of the round is indicated with the word 'annual' in parentheses next to it.
3. The Farm Structure Survey (FSS), conducted on a sample basis, such as Croatia's FSS 2010, was also included in this publication. Other types of surveys (such as annual national agricultural production sample surveys) were not included.
4. For comparability purposes, in the calculation of the subtotals and totals, censuses conducted by special estimates are not taken into account.
5. Footnotes are provided for countries that changed their names.

Table A1.3

1. In case a country conducted more than one census during the WCA 2010 round, all columns of the table refer to the last census year.
2. In calculating the time gaps, the following simplifying assumptions were made:
 - (a) if a country conducted several censuses during the WCA 2010 round, the time gap indicated is between the last two censuses of the round;
 - (b) if a census was taken over more than one year, the last year of the census (when it was actually completed) is used in the calculations; and
 - (c) the time gap for countries that participated in the WCA 2010 round for the first time is given as "Zero".

Table A1.4

1. For the various census modalities, the abbreviations used in the table include: C=Classical, M=Modular, O=Other, C+A= Use of administrative registers (to source at least one census item) in combination with field data collection.
2. For sampling units, the abbreviations used are as follows: AS=Area segment, EA=Enumeration Area, AH=Agricultural holdings, HH=Households, V=Village, and W=Ward.

Table A1.5

1. Objective measurements are abbreviated as follows: A=Area Measured, Y=Yield Measured, and L=Livestock counting.
2. For data collection methods, the abbreviations used are: PAPI= Paper-and-Pen Interviewing, CAPI=Computer-assisted Personal Interviewing, MO-MB=Mail-out/mail-back, DO-PKE=Drop-off or pick-up by enumerators, CASI=Computer-assisted Self-interviewing, CAWI=Computer-assisted Web Interviewing, CATI=Computer-assisted Telephone Interviewing, PATI=Paper-based (or -assisted) Telephone Interviewing.

Table A1.6

1. The abbreviations used for frame types are: Adm. & non-adm. sources=Administrative and non-administrative sources, AH=Agricultural holdings, PHC=Population and housing census, HH=Households, NHS=Non-Household Sector, and EA=Enumeration area.

Table A1.8

1. Only the censuses that have reported a threshold are listed.

Table A1.10

1. A theme is considered to be covered by a country if at least one item from the theme (either a core or a supplementary item) was included in the census questionnaires.

Annex 2

Tables A2.1 & A2.2

1. The reported censuses under the WCA rounds refer to countries that reported information on the total area and number of holdings. Thus, the world and regional totals in the first column do not represent the total number of countries that participated in the WCA 2010 round.
2. In most countries, area is considered consist of “total area = agricultural land + forest and other wooded land + other land”; however, in some countries, such as Norway, “total area = agricultural land” is reported in WCA 2010.

Tables A2.3 and A2.4

1. Classifications of holding size and interpolation

Rationale

The WCA 2010 recommended that countries report results with detailed classifications (FAO, 2005, Figure 12.1) of total operated area of holdings (and area of agricultural land) so that international data could be presented in comparable land size classes. Not many countries followed the recommended classes exactly. Table A2.3, Annex 2 uses the FAO recommended classification for land size, adapted with the implementation of an uniform linear interpolation method. Holdings without land were added to the land size class “Less than 1 ha”.

Interpolation method

The interpolation method used to standardize the land size classes is based on the assumption of a uniform pattern. The number and area of holdings in the new classes is therefore estimated by a linear interpolation on a uniform distribution. The table presents the interpolated figures in bold. Users should note that these interpolated figures are not official figures (they are not available in any official national reports that might be published), and that they probably encompass a certain margin of error due to interpolation, which makes any comparison additionally fragile. Users are advised to refer to FAO (2019) for the official data used to compile the interpolation. The interpolation procedure for presenting data in FAO classes was not used in the case of extremum (openended intervals), such as “Less than 1 ha” or “More than 50”, because the reliability of these estimates would be difficult to check. This affects vertical totals, because the figure available for intervals such as “More than 50” is added as if it were intended for the interval “50 and less than 100”.

Tables A2.5 & A2.6

1. The pooled average is calculated as the average of countries’ individual average size of holdings weighted by number of holdings, while the median average is calculated as the median of countries’ individual average size of holdings.
2. The pooled and medians averages reported for regions are not precisely representative of the regions, due to the absence of data for many countries in different rounds. However, these were calculated to capture broad regional tendencies on the basis of the data available. The reader should also be aware that the pooled averages may be affected by the dominant influence of data from certain countries. For example, South Africa dominate the pooled average(s) for Africa. The pooled averages for the Americas are dominated by Canada, Mexico and the United States of America. In Oceania, the pooled averages are dominated by the figures of Australia and New Zealand. In addition, when observing the trends in averages over different rounds, attention should be paid to the countries included in the calculation of the averages, which may differ for various rounds.
3. The figures for Europe as a region provided here cannot be compared to the figures in the previous publication (FAO, 2013). The figures for this publication used all countries’ data without excluding the data from some countries that were considered outliers except Namibia in the 1960 census round.

Table A2.7

1. The columns shows the gender of agricultural holders operated by individuals. The gender of agricultural holders in the juridical sector is not reported.
2. The world and regional totals in the first column include the countries that reported data on gender of agricultural holders (individuals).

Table A2.8

1. The total number of holdings refers to the number of holdings reporting land tenure types. The figures broken down may not add up because the same holding can be reported more than once in different land tenure types.
2. For European countries except Albania, the category of land used is referred to as “utilized agricultural area (UAA)”, while for most countries, “total area” is used. In Canada, total area includes also “total area of land used by others”.

Table A2.10

1. For most European countries, the percentage of household members engaged in agriculture by gender was not provided because the total number of members of the holder’s household was not available on the Eurostat database.
2. The world and regional average percentages per holding were calculated only for countries that provided relevant data.

Tables A2.11 & A2.12

1. Columns 7 to 12 shows the land use classifications recommended by FAO in the WCA 2010, although most countries adopted land use classifications that were not in line with FAO’s recommendations.
2. The gap between “Total area” and the sum of breakdown according to land use type is due to the lack of information on the area of certain types of land use (agricultural land, crop land, pasture, forest or other land).
3. For Table A2.11, Total area of holdings (col.6) = arable land (col.8) + permanent crops (col.9) + permanent meadows and pastures (col.10) + forest and other wooded land (col.11) + all other land (col.12), while for Table A2.12, Total area of holdings (col.6) = arable land (col.9) + permanent crops (col.10) + permanent meadows and pastures (col.11) + forest and other wooded land (col.12) + all other land (col.13).

Table A2.13

1. “Tractors of all kinds” are tractors reported by countries without clear disaggregation by kind.

Annex 1

Detailed tables related to the methodology

Table A1.1. Comparison of items between the WCA 2010 and WCA 2000

Items as in the WCA 2010	Item type in the WCA 2010	Item type in the WCA 2000	Remarks
Identification and general characteristics			
0001 Identification and location of agricultural holding	Core	Essential	
0002 Legal status of agricultural holder	Core	Essential	
0003 Sex of agricultural holder	Core	Essential	
0004 Age of agricultural holder	Core	Essential	
0006 Main purpose of production of the holding	Core	Essential	
0016 Other economic production activities of the holding's enterprise	Core	Recommended	
Theme 01 – Land			
0007 Area of holding according to land use types	Core	Essential	In the WCA 2000, this item was referred to as "Land use".
0008 Total area of holding	Core	Essential	
0009 Land tenure types on the holding	Core	Essential	
<i>For each parcel</i>			
0101 Location	Supplementary	Recommended	
0102 Area	Supplementary	Essential	
0103 Land tenure	Supplementary	Essential	
0104 (For rented parcels) Terms of rental	Supplementary	Not in the list of items	
0105 Presence of shifting cultivation	Supplementary	Essential	
0106 Number of years since cleared	Supplementary	Recommended	
<i>For the holding</i>			
0111 Presence of soil degradation: type and degree	Supplementary	Recommended	
Theme 02 – Irrigation and water management			
0010 Presence of irrigation on the holding	Core	Essential	
0201 Area of land irrigated according to land use type (for the holding)	Supplementary	Not in the list of items	
0202 Area irrigated according to method of irrigation (for the holding)	Supplementary	Not in the list of items	
0203 Area irrigated for each crop type (for the holding)	Supplementary	Recommended	In the WCA 2000, this item was referred to as "Area irrigated".
0204 Sources of irrigation water (for the holding)	Supplementary	Not in the list of items	
0205 Payment terms for irrigation water (for the holding)	Supplementary	Not in the list of items	
0206 Other types of water management practices (for the holding)	Supplementary	Not in the list of items	
0207 Presence of drainage equipment (for the holding)	Supplementary	Recommended	
Theme 03 – Crops			
0011 Types of temporary crops on the holding	Core	Essential	
0012 Types of permanent crops on the holding and whether in compact plantations	Core	Recommended	
<i>For each temporary crop type</i>			
0301 Area of temporary crops harvested	Supplementary	Essential	
0302 (For selected crop types) Area of temporary crops harvested according to end-use	Supplementary	Not in the list of items	
0303 (For selected crop types) Production of temporary crops harvested	Supplementary	Not in the list of items	
<i>For each permanent crop type</i>			
0311 Area of productive and non-productive permanent crops in compact plantations	Supplementary	Essential	In the WCA 2000, this item was referred to as "Area under trees of productive age in compact plantations".
0312 (For tree crops) Number of permanent crop trees in compact plantations and scattered plantings	Supplementary	Essential	In the WCA 2000, only the number of trees of productive age in compact plantations was considered essential.
0313 (For selected crop types) Area of productive permanent crops in compact plantations according to end-use	Supplementary	Essential	
0314 (For selected crop types) Production of permanent crops	Supplementary	Not in the list of items	
0321 Area of land used to grow temporary crops as a secondary land use (for the holding)	Supplementary	Not in the list of items	
0322 Use of each type of fertilizer (for the holding)	Supplementary	Essential	In the WCA 2000, the following items relating to fertilizers were recommended: (i) Whether inorganic fertilizers applied; (ii) Whether organic manure or other fertilizers applied; (iii) Amount of inorganic fertilizers applied per crop
0323 Area fertilized for each type of fertilizer and major crop type (for the holding)	Supplementary	Not in the list of items	

 **Table A1.1. Comparison of items between the WCA 2010 and WCA 2000**

Items as in the WCA 2010	Item type in the WCA 2010	Item type in the WCA 2000	Remarks
0324 Source of seed inputs for each major crop type (for the holding)	Supplementary	Not in the list of items	
0325 Type of seed for each major crop type (for the holding)	Supplementary	Essential	
0326 Area of nurseries (for the holding)	Supplementary	Not in the list of items	
0327 Area of cropped land under protective cover (for the holding)	Supplementary	Not in the list of items	
Theme 04 – Livestock			
0013 Number of animals on the holding for each livestock type	Core	Essential	
<i>For the holding</i>			
0401 Type of livestock production system	Supplementary	Essential	In the WCA 2000, this item was referred to as "Animal numbers, by type, sex, age and purpose, including chickens".
0402 Use of veterinary services	Supplementary	Not in the list of items	
<i>For each livestock type</i>			
0411 Number of animals: age and sex	Supplementary	Essential	In the WCA 2000, this item was referred to as "Animal numbers, by type, sex, age and purpose, including chickens".
0412 Number of animals according to purpose	Supplementary	Not in the list of items	
0413 Number of milking animals according to milk status	Supplementary	Not in the list of items	
0414 Number of animals born	Supplementary	Not in the list of items	
0415 Number of animals acquired	Supplementary	Not in the list of items	
0416 Number of animals slaughtered	Supplementary	Not in the list of items	
0417 Number of animals disposed of	Supplementary	Not in the list of items	
0418 Number of animals died from natural causes	Supplementary	Not in the list of items	
0419 Types of feed	Supplementary	Not in the list of items	
Theme 05 – Agricultural practices			
0501 Use of agricultural pesticides	Supplementary	Essential	
0502 Use of good agricultural practices	Supplementary	Not in the list of items	
0503 Use of organic agricultural practices	Supplementary	Not in the list of items	
0504 Use of genetically modified crops according to crop type	Supplementary	Not in the list of items	
0505 Selected machinery and equipment used on the holding according to source	Supplementary	Recommended	
0506 Non-residential buildings according to use	Supplementary	Recommended	
0507 Percentage of each major agricultural product sold	Supplementary	Not in the list of items	
Theme 06 – Agricultural services			
<i>For the holding</i>			
0601 Receipt of credit for agricultural purposes	Supplementary	Not in the list of items	
0602 Source of credit	Supplementary	Not in the list of items	
0603 Type of collateral for credit	Supplementary	Not in the list of items	
0604 Period of loan or credit	Supplementary	Not in the list of items	
0605 Sources of agricultural information	Supplementary	Not in the list of items	
0606 Sources of agricultural extension services	Supplementary	Not in the list of items	
0607 Travelling time to nearest periodic or permanent agricultural produce market	Supplementary	Not in the list of items	
Theme 07 – Demographic and social characteristics			
0005 Household size	Core	Recommended	In the WCA 2000, this item was referred to as "Number of household members".
<i>For the holding</i>			
0701 Whether holding is part of an agricultural household	Supplementary	Not in the list of items	
0702 National/ethnic group of household head or agricultural holder	Supplementary	Not in the list of items	
<i>For each household member</i>			
0711 Sex	Supplementary	Essential	
0712 Age	Supplementary		
0713 Relationship to household head or other reference person	Supplementary	Not in the list of items	

 **Table A1.1. Comparison of items between the WCA 2010 and WCA 2000**

Items as in the WCA 2010	Item type in the WCA 2010	Item type in the WCA 2000	Remarks
0714 Marital status	Supplementary	Recommended	
0715 Educational attainment	Supplementary	Recommended	
Theme 08 – Farm labour			
<i>For each household member of working age</i>			
0801 Activity status	Supplementary	Recommended	In the WCA 2000, this item was referred to as "Whether economically active or not".
<i>For each economically active household member</i>			
0811 Status in employment of main job	Supplementary	Not in the list of items	
0812 Occupation of main job	Supplementary	Essential	
0813 Time worked in main job	Supplementary	Not in the list of items	
0814 Time worked on the holding	Supplementary	Not in the list of items	
<i>For the holding</i>			
0821 Number of employees on the holding: time worked and sex	Supplementary	Recommended	In the WCA 2000, this item was referred to as "Number of permanent agricultural workers, male/female".
0822 Form of payment for employees	Supplementary	Not in the list of items	
0823 Use of contractors for work on the holding according to type	Supplementary	Not in the list of items	
Theme 09 – Household food security			
<i>For the household</i>			
0901 (a) Whether household members could not afford to eat what they normally eat at any time during a twelve-month reference period	Supplementary	Not in the list of items	
(b) Months in which food shortage occurred			
(c) Reasons for food shortage			
(d) How the household's eating patterns were affected by food shortage			
(e) Steps taken to alleviate food shortage			
0902 Whether the household fears a food shortage during a future twelve-month reference period	Supplementary	Not in the list of items	
0903 Frequency of normally eating selected food products	Supplementary	Not in the list of items	
0904 Effects of natural disasters	Supplementary	Not in the list of items	
0905 Extent of loss of agricultural output due to natural disasters	Supplementary	Not in the list of items	
<i>For children aged under 5 years</i>			
0911 Height and weight	Supplementary	Not in the list of items	
Theme 10 – Aquaculture			
0014 Presence of aquaculture on the holding	Core	Essential	
1001 Area of aquaculture according to type of site	Supplementary	Not in the list of items	
1002 Area of aquaculture according to type of production facility	Supplementary	Not in the list of items	
1003 Type of water	Supplementary	Not in the list of items	
1004 Sources of water for aquaculture	Supplementary	Not in the list of items	
1005 Type of aquacultural organism cultivated	Supplementary	Not in the list of items	
Theme 11 – Forestry			
0015 Presence of forest and other wooded land on the holding	Core	Recommended	
1101 Area of forest and other wooded land as primary land use	Supplementary	Recommended	In the WCA 2010, the area under forest trees was divided into two types: "Area of forest and other wooded land as primary land use" and "Area of forest and other wooded land as a secondary land use on agricultural land".
1102 Area of forest and other wooded land as a secondary land use on agricultural land	Supplementary	Recommended	In the WCA 2010, area under forest trees was divided into two types: "Area of forest and other wooded land as primary land use" and "Area of forest and other wooded land as a secondary land use on agricultural land".
1103 Main purpose of forest and other wooded land	Supplementary	Not in the list of items	
1104 Whether agro-forestry is practised	Supplementary	Not in the list of items	

 **Table A1.1. Comparison of items between the WCA 2010 and WCA 2000**

Items as in the WCA 2010	Item type in the WCA 2010	Item type in the WCA 2000	Remarks
Theme 12 – Management of the holding			
<i>For each holding</i>			
1201 Identification of sub-holdings	Supplementary	Not in the list of items	
1202 Identification of sub-holders	Supplementary	Not in the list of items	
<i>For each sub-holding</i>			
1211 Sex of sub-holder	Supplementary	Not in the list of items	
1212 Age of sub-holder	Supplementary	Not in the list of items	
1213 Area of crops managed for each crop group	Supplementary	Not in the list of items	
1214 Number of livestock managed for each livestock group	Supplementary	Not in the list of items	

Table A1.2. Agricultural censuses conducted in the WCA 2010 and previous WCA rounds

Countries by region	Year(s) of participation in the WCA round of:							
	2010	2000	1990	1980	1970	1960	1950	1930
AFRICA								
Algeria		2001			1973		1950–51	1930
Angola						1961		
Benin			1992–93					
Botswana	2015	2004	1993–94	1982	1969	1962 ¹	1950 ¹	
Burkina Faso	2006–10		1993			1961 ²		
Burundi								
Cameroon				1985	1972			
Cabo Verde	2015	2004	1988	1981				
Central African Republic				1985	1973	1960		
Chad					1972			
Comoros		2004						
Democratic Republic of the Congo			1988–89		1971 ³		1950 ⁴	
Congo	2014–15		1986 ⁵	1977 ⁵	1972 ⁵	1960 ⁶		
Côte d'Ivoire	2015–16	2002			1973–74			
Djibouti			1995					
Egypt	2009–10	1999–2000	1990	1982		1960–61 ⁷	1950	1929
Equatorial Guinea	2015							
Eritrea ⁸								
Eswatini ⁹	2012–13		1992–93	1984	1972		1950	1930
Ethiopia		2001–02	1988–89	1977				
French West Africa ¹⁰								1929–30*
Gabon					1973–74	1960		
Gambia	2011–12	2002					1950*	
Ghana				1984	1970	1964	1950 ^{11*}	
Guinea		2001	1989 & 1995		1974–75	1964		
Guinea-Bissau			1988–89			1960–61 ¹²	1953 ¹²	
Kenya				1979	1969–70	1961	1954	1930
Lesotho	2009–10	1999–2000	1989–90	1980	1970	1960 ¹³		
Liberia					1971			
Libya		1999–2000	1987		1974	1960 ¹⁴		
Madagascar		2004–05		1985		1961–62		
Malawi	2006–07		1993	1981	1969	1960–61 ¹⁵	1950 ¹⁶	1929–30 ^{16*}
Mali		2004–05		1984		1961		
Mauritania				1985				
Mauritius	2014						1950	1930
Morocco		1996			1974	1962		
Mozambique	2009–10	2000–01					1951	1930
Namibia	2013–14	1996–97	1995			1959–60 ¹⁷		

* Special estimates. The censuses of those countries and territories that during the 1930 and 1950 rounds (and Fiji in the 1960 round) could not take a proper census, but made other efforts to obtain the required minimum information, were also considered as participants. These censuses are not taken into account when counting the totals.

¹ Then called Bechuanaland.

² Then called Upper Volta.

³ Then called Zaire.

⁴ Then called Belgian Congo.

⁵ Then called Congo.

⁶ Then called Congo Brazzaville.

⁷ Then called United Arab Republic.

⁸ Independent state since 1993; before then, formed part of Ethiopia.

⁹ Former Swaziland.

¹⁰ Then counted as one country, consisting of Benin, Burkina Faso, Côte d'Ivoire, Guinea, Mali, Mauritania, Niger and Senegal.

¹¹ Then part of the Gold Coast and British Togoland.

¹² Then called Portuguese Guinea.

¹³ Then called Basutoland.

¹⁴ Then called the Kingdom of Libya.

¹⁵ Then part of the Federation of Rhodesia and Nyasaland.

¹⁶ Then called Nyasaland and forming part of the Federation of Rhodesia and Nyasaland.

¹⁷ Then called South West Africa.

 **Table A1.2. Agricultural censuses conducted in the WCA 2010 and previous WCA rounds**

Countries by region	Year(s) of participation in the WCA round of:							
	2010	2000	1990	1980	1970	1960	1950	1930
Niger	2004–08			1980		1960		
Nigeria					1974–75		1950 ¹⁸	1929–30*
Réunion	2010	2000	1988–89	1981	1973			
Rwanda				1984				
Saint Helena							1950*	
Sao Tome and Principe			1990					
Senegal	2013	1998–99				1960		
Seychelles	2011	1998				1960	1950	1929–30
Sierra Leone				1985	1971		1950*	
Somalia							1950 ^{19*}	
South Africa	2007	2000	1993		1970–71	1960	1950	1930 ²⁰
Sudan						1963		
Togo	2012–14	1996–97		1983	1972	1961	1950 ^{11*}	
Tunisia		2003–04	1994–95			1961–62	1949–50	
Uganda	2008–09	2002	1990–91			1963–64	1950	
United Republic of Tanzania	2007–08	2002/2003	1993–95		1972	1960 ²¹	1950 ²¹	
Zambia		2000	1990	1982	1971	1960–61 ¹⁵	1950 ²²	1929–30 ^{22*}
Zanzibar/Pemba							1950*	
Zimbabwe						1960–61 ¹⁵	1950 ²⁴	1929–30 ^{24*}
Subtotal for Africa	22	25	23	21	25	29	18	8
AMERICAS								
Alaska ²⁵						1960	1950	1929
Antigua and Barbuda	2007			1984	1973–74	1961	1950 ^{26*}	1929–30 ^{26*}
Argentina	2008	2002	1988		1969	1960	1952	1930
Bahamas			1994	1978			1950	1929–30*
Barbados			1989	1984	1971	1961	1950	1929–30
Belize	2011			1985	1973–74		1950 ^{27*}	
Bermuda							1950*	
Bolivia (Plurinational State of)	2013					1964	1950	
Brazil	2006	1996	1986	1980	1970	1960	1950	
Canada	2006 & 2011	1996 & 2001	1986 & 1991	1976 & 1981	1966 & 1971	1956 & 1961	1951	1931
Chile	2006/2007	1996–97		1976		1965	1955	1930
Colombia	2014	2001–02	1988		1970–71	1960	1951	
Costa Rica	2014			1985	1973	1963	1950	
Cuba							1952	
Dominica			1995		1974		1950 ^{28*}	1929–30 ^{28*}
Dominican Republic				1982	1971	1960	1950	
Ecuador		1999–2000		1984	1974	1962	1954	
El Salvador	2007–08				1971	1961	1950	1929
French Guyana	2010	2000–01	1988–89	1980	1972			
Grenada	2012		1995	1981	1975	1961	1950	1929–30

¹⁸ Then included British Cameroon, which is now part of Cameroon.

¹⁹ Relates only to British Somaliland, which now is part of Somalia.

²⁰ Then called the Union of South Africa.

²¹ Related to Tanganyika, which now is part of the United Republic of Tanzania.

²² Then called Northern Rhodesia and forming part of the Federation of Rhodesia and Nyasaland.

²³ Since 1963, forming part of the United Republic of Tanzania.

²⁴ Then called Southern Rhodesia and forming part of the Federation of Rhodesia and Nyasaland.

²⁵ Since 1959, forming part of the United States of America. It is included separately in the 1960 round because the United States of America decided, for publication purposes, to show Alaska and Hawaii separately from the 'conterminous United States' as it existed before they became states.

²⁶ Then part of the Leeward Islands.

²⁷ Then called British Honduras.

²⁸ Then part of the Windward Islands.

 **Table A1.2. Agricultural censuses conducted in the WCA 2010 and previous WCA rounds**

Countries by region	Year(s) of participation in the WCA round of:							
	2010	2000	1990	1980	1970	1960	1950	1930
Guadeloupe	2010	2000–01	1989	1980	1972 ²⁹			
Guatemala		2003		1979		1964	1950	1930
Guyana					1968–69		1950 ^{30*}	
Haiti	2008–09				1971		1950	
Hawaii						1959	1950	1930
Honduras			1993		1974		1952	
Jamaica	2007	1996		1978	1968–69	1961	1950	
Martinique	2010	2000–01	1989	1980	1972 ²⁹			
Mexico	2007		1991	1981	1970	1960	1950	1930
Montserrat					1972		1950 ^{30*}	1929–30 ^{30**}
Nicaragua	2011	2001			1971	1963		
Panama	2011	2001	1990	1981	1971	1961	1950	
Paraguay	2008		1991	1981		1961		
Peru	2012		1994	1983	1972	1961		1929
Puerto Rico	2007 & 2012	1997 & 2002	1987 & 1992	1978	1970	1959	1950	1930
Saint Kitts and Nevis		2000	1987				1950 ^{30*}	1929–30 ^{30**}
Saint Lucia	2007	1996	1986	1984	1973–74		1950 ^{30*}	1929–30 ^{30**}
Saint Vincent and the Grenadines		2000	1986		1972–73		1950 ^{30*}	1929–30 ^{30**}
Suriname	2008			1981	1969	1959		
Trinidad and Tobago		2004		1982		1964	1951*	
United States of America	2007 & 2012	1997 & 2002	1987 & 1992	1978	1969	1959	1950	1930
United States Virgin Islands	2007 & 2012	1998 & 2003	1988 & 1993	1978	1970	1959	1950	1930
Uruguay	2011	2000	1990	1980	1970	1961	1951	1930
Venezuela (Bolivarian Republic of)	2008	1997–98		1985	1971	1961	1949	
Subtotal for Americas	28	22	23	28	33	39	26	14
ASIA								
Afghanistan		2003			1967			
Armenia ³¹	2014							
Azerbaijan ³¹	2015	2005						
Bahrain				1980	1973–74			
Bangladesh	2008		1996–97	1977				
Bhutan	2009	2002						
Brunei Darussalam						1964	1950*	
Cambodia	2013							
China	2006	1997				1961 ³²	1950 ^{32*}	
Cyprus	2010	2003–04	1994–95	1977				
Georgia ³¹	2014	2004–05						
India	2005/2006 & 2010/2011	1995–96 & 2000–01	1985–86 & 1990–91	1976–77 & 1980–81	1971	1960–61	1954	1929–30 ³³
Indonesia	2013	2003	1992–94	1983	1973	1963		
Iran (Islamic Republic of)	2014	2003	1988 & 1993		1974	1960		
Iraq					1971	1958	1952	
Israel				1981	1971		1950–51	
Japan	2010 & 2015	2000 & 2005	1990 & 1995	1980	1970	1960	1950	1929
Jordan	2007	1997		1983	1972		1953	

²⁹ As part of the French Antilles.

³⁰ Then called British Guiana.

³¹ Since 1922 up to 1991, this was part of the Union of Soviet Socialist Republics (USSR).

³² Refers to Taiwan only.

³³ Including areas which later formed Pakistan and, subsequently, Bangladesh.

 **Table A1.2. Agricultural censuses conducted in the WCA 2010 and previous WCA rounds**

Countries by region	Year(s) of participation in the WCA round of:							
	2010	2000	1990	1980	1970	1960	1950	1930
Kazakhstan ³¹	2006–2007							
Korea (Democratic People's Republic of)								
Kuwait					1970			
Kyrgyzstan ³¹		2002–03						
Lao People's Democratic Republic	2010–2011	1999			1973 ³⁴			
Lebanon	2010	1998–99			1970	1960–62		1929–30 ^{35*}
Malaysia		2005		1977		1960 ³⁶	1950 ^{36*}	1929 ³⁷
Maldives								
Mongolia	2011	2000						
Myanmar	2010	2003	1993				1953–54 ³⁸	
Nepal	2011–2012	2002	1992	1981	1972	1962		
North Borneo ³⁹						1961	1950*	
Oman	2012–2013			1978				
Pakistan	2010	2000	1990	1980	1972–73	1960 ⁴⁰		
Palestine	2010							
Philippines	2012	2003	1992	1981	1971	1960	1948	
Qatar		2000–01						
Republic of Korea	2010 & 2015	1996 & 2001	1990	1980	1970	1961		
Ryukyu Islands ⁴¹							1951	
Sarawak ⁴²						1961	1950*	1929–30*
Saudi Arabia	2015	1998–99		1982	1972			
Singapore					1973		1950*	
Sri Lanka	2013–2014	2002		1982	1973	1962 ⁴³	1952 ⁴³	1929 ⁴³
Syrian Arab Republic		2004		1981	1970–71	1961		
Tajikistan ³¹	2013							
Thailand	2013	2003	1993	1978		1963	1951	
Timor–Leste								
Turkey		2001	1991	1980	1970	1963–64	1950	1927
Turkmenistan ³¹								
United Arab Emirates		2004						
Uzbekistan								
Viet Nam	2006 & 2011	2000–01	1994			1960–61		
Yemen		2003						
Yemen, Arab Republic ⁴⁴				1983				
Yemen, People's Dem. Republic ⁴⁴				1984			1950 ^{45*}	
Subtotal for Asia	29	31	14	21	20	20	11	4
EUROPE								
Albania	2012	1998	1995					1929
Andorra								
Austria	2010	1999–2000	1990	1980	1970	1960	1950	1930
Belarus ³¹								
Belgium	2010	2000 (annual)	1990 (annual)	1979	1970	1959–60	1950	1929–30

³⁴ Then called Kingdom of Laos.

³⁵ Then called Lebanese Republic.

³⁶ Then called the Federation of Malaya, now part of Malaysia.

³⁷ Then called Malaya, now part of Malaysia.

³⁸ Then called Burma.

³⁹ Now forms part of Malaysia.

⁴⁰ Then including present-day Bangladesh.

⁴¹ Now forms part of Japan.

⁴² Now forms part of Malaysia.

⁴³ Then called Ceylon.

⁴⁴ Now forms part of Yemen.

⁴⁵ Then called the Aden Protectorate.

 **Table A1.2. Agricultural censuses conducted in the WCA 2010 and previous WCA rounds**

Countries by region	Year(s) of participation in the WCA round of:							
	2010	2000	1990	1980	1970	1960	1950	1930
Bosnia and Herzegovina⁴⁶								
Bulgaria	2010	2003			1970			
Croatia ⁴⁶	2010	2003						
Czechia ⁴⁷	2010	2000						
Czechoslovakia			1990	1980	1971		1950	1930
Denmark	2010	2000	1989	1979	1970	1959	1949	1929
Estonia ⁴⁸	2010	2001						1929
Finland	2010	2000	1990	1980	1969	1959	1950	1929–30
France	2010	2000–2001	1988	1979	1970			1929–30
Germany	2010	1999	1991 & 1995	1979	1971	1960	1949	1933
Greece	2009–10	1999–2000	1991 & 1995–96	1981	1971	1961	1950	1929–30
Hungary	2010	2000		1981	1972		1948	
Iceland	2010	2000						1930
Ireland	2010	2000	1991	1980	1970	1960	1949	1929
Italy	2010	2000	1990–91	1982	1970	1961		1930
Latvia ⁴⁸	2010	2001						1929
Lithuania ⁴⁸	2010	2003						1930
Luxembourg	2010	2000 (annual)	1990 (annual)	1980	1970	1960	1950	
Malta	2010	2001		1979	1969	1960 ⁴⁹	1950	
Monaco								
Montenegro ⁵⁰	2010	2003						
Netherlands	2010	2000 (annual)	1990 (annual)	1979	1970	1960	1950	1930
North Macedonia ⁵¹	2007							
Norway	2010	1999	1989	1979	1969	1959	1949	1929
Poland	2010	2002	1990	1980	1970	1960		
Portugal	2009	1999–2000	1989–90	1979	1968		1952–54	
Republic of Moldova ⁵²	2011							
Romania	2010	2001–2002			1970		1948	1930
Russian Federation ⁵¹	2006							
Saar ⁵³							1948	
San Marino								
Serbia ⁴⁶	2012	2002						
Slovakia ⁴⁷	2010	2001						
Slovenia ⁴⁶	2010	2000	1991					
Spain	2009	1999	1989	1982	1972	1962		1929
Sweden	2010	1999 (annual)	1990	1981	1971	1961	1951	1932
Switzerland	2010	2000	1990	1980	1969		1950	1929
Ukraine								
United Kingdom of Great Britain and Northern Ireland	2010	2000 (annual)	1990 (annual)	1979	1970	1960	1950	1930
Yugoslavia (Former)				1981	1969	1960	1951	1931
Subtotal for Europe	36	33	21	22	24	17	20	23

⁴⁶ Since 1946 up to 1991, forming part of the Socialist Federation of Yugoslavia.

⁴⁷ Up to 1993, forming part of Czechoslovakia.

⁴⁸ Since 1940 up to 1991, formed part of the USSR.

⁴⁹ Then called Malta and Gozo.

⁵⁰ Independent State since 2006.

⁵¹ The former Yugoslav Republic of Macedonia.

⁵² Since 1945 up to 1991, part of the USSR.

⁵³ Now forms part of Germany.

 **Table A1.2. Agricultural censuses conducted in the WCA 2010 and previous WCA rounds**

Countries by region	Year(s) of participation in the WCA round of:							
	2010	2000	1990	1980	1970	1960	1950	1930
OCEANIA								
American Samoa	2008 & 2012	1998 & 2003	1990	1980	1970	1960	1950	1930
Australia	2010–2011	2001	1990	1980	1971	1960	1950	1929–30
Cook Islands	2011	2001	1988				1950*	
Fiji	2009		1991	1978	1968	1960*	1950*	
French Polynesia			1995–96					
Guam	2007 & 2012	1998 & 2003	1988 & 1993	1978	1970	1960	1950	1930
Kiribati		2005					1950 ^{54*}	1929–30 ^{54**}
Marshall Islands				1980 ⁵⁵	1970 ⁵⁵			
Micronesia, Federated States of				1980 ⁵⁵	1970 ⁵⁵			
Nauru								
New Caledonia		2002	1991–92					
New Zealand	2012	2002	1990 & 1994	1980	1972	1960	1950	1930
Niue	2009		1989					
Northern Mariana Islands	2007 & 2012	1998 & 2003	1990	1980 ⁵⁵	1970 ⁵⁵			
Palau	2015		1989	1980 ⁵⁵	1970 ⁵⁵			
Papua New Guinea						1961–62	1951	
Samoa	2009	1999	1989				1950 ⁵⁶	
Solomon Islands							1950*	
Tonga	2015	2001		1985			1950 ^{57*}	1929–30*
Tuvalu		2002					1950 ^{58*}	1929–30 ^{58**}
Vanuatu	2007		1994	1983			1950 ^{59*}	1929–30 ^{59**}
Subtotal for Oceania	12	11	13	11	9	5	6	4
TOTAL	127	122	94	103	111	100	81	53

⁵⁴ Refers to the Gilbert Islands, which are now part of Kiribati.

⁵⁵ Then part of the Trust Territory of the Pacific Islands.

⁵⁶ Then called Western Samoa.

⁵⁷ Then called the British Solomon Islands Protectorate.

⁵⁸ Refers to Ellice Islands, which are now part of Tuvalu.

⁵⁹ Then called the New Hebrides.

Table A1.3. Time-related characteristics of reported censuses of the WCA 2010 round

Countries by region	Census year	Time lag from the previous census (years)	Reference period	Reference day	Enumeration period	Publication year
AFRICA (22)						
Botswana	2015	11	2014/2015	Enumeration day	January – December 2015	2018
Burkina Faso	2006–2010	13	– twelve (12) months preceding the census date – three (3) months preceding the census date – the preceding month – the agricultural year (from January to December 2008)	Enumeration day	December – December 2008	2013
Cabo Verde	2015	11	2014/2015	Enumeration day	9 November 2015 – 25 March 2016	Not available ¹
Congo	2014/2015	28	2013/2014	Enumeration day	November 2014 – March 2015	2017
Côte d'Ivoire	2015/2016	13	2014/2015	Enumeration day	1 November 2015 – 31 December 2016	2017
Egypt	2009/2010	10	2009/2010	6 October 2010	November 2009 – November 2010	2013
Equatorial Guinea	2015		2014/2015	Enumeration day	20 June – 19 July 2015	Not available ¹
Eswatini	2012/2013	19	– agricultural season 2011/2012 (from October 2011 to April 2012) – crop season 2012/2013 – the last 12 months	Enumeration day	October 2012 – June 2013	Not available ¹
Gambia	2011/2012	9	1 June 2010 – 30 May 2011	Enumeration day	July 2011 – March 2012	2012
Lesotho	2009/2010	9	– the past six months (preceding the day of interview) – the past twelve months (preceding the day of interview)	Enumeration day	15 April – 28 June 2009	2012
Malawi	2006/2007	13	– the 2007 crop year (from January to October 2007) – the 12 preceding months (in relation to the date of data collection) – the seven preceding days (in relation to the date of data collection)	Enumeration day	January 2007 – October 2007	2010
Mauritius	2014	64	2013/2014	– the end of March 2014 ² – 30 June 2014, for livestock numbers	July 2014 – December 2014	2018
Mozambique	2009/2010	8	– the 2009/2010 crop year (September 2009 to August 2010) – the 12 months preceding the day of the interview	Enumeration day	1 August 2007 – 15 August 2007 and January 2010 – August 2011	2011
Namibia	2013/2014	16	– October 2013 to September 2014 for crops except wheat and July 2013 to February 2014 for wheat – the 12 preceding months (in relation to the date of data collection)	Enumeration day	February 2014 – July 2014	2015
Niger	2004–2008	24	May 2005 to September 2006 and May 2006 to September 2007	Enumeration day	September 2004 – March 2005 and 2005 – 2007	2007–2008 ³
Réunion	2010	10	2012/2013	Enumeration day	September 2010 and June 2011	2011
Senegal	2013	14	2012/2013	Enumeration day	19 November – 9 December 2013	2014
Seychelles	2011	13	– the preceding 12 months (from 1 September 2009 to 31 August 2010) – the previous month	Enumeration day	16 August – 31 August 2011	2013
South Africa	2007	7	Ending on any date between 1 March 2006 and 28 February 2007	– the day of the interview ⁴ – 28 February 2007 ⁵	1 July – 30 September 2007	2010
Togo	2012–2014	15	– January – December 2012 – the agricultural year (1 April 2012 – 30 March 2013)	Enumeration day	January – December 2012 and 1 April 2012 – 30 March 2013	2014
Uganda	2008/2009	6	– the agricultural year 2008/2009 (July 2008 – June 2009) – the preceding 12 months – the preceding five years	Enumeration day	18 February – 25 February 2008 and July 2008 – September 2009	2010
United Republic of Tanzania	2007/2008	4	2007/2008	1 October 2008	June – August 2009	2010
AMERICAS (28)						
Argentina	2008	6	The agricultural year (1 July 2007 – 30 June 2008)	– 31 December 2007 – 30 June 2008	June 2008 – October 2009	Not available ¹
Antigua and Barbuda	2007	23	Calendar year 2007	Enumeration day	1 November 2007	Not available ¹
Belize	2011	26	1 January – 31 December 2010	1 February 2011	1 February – 31 August 2011	Not available ¹

¹ Not available: Country's final report not available at the time this publication was prepared.

² In Mauritius, the reference day for inventory items such as the number of persons engaged in the farms' work (for the business questionnaire) was the end of March 2014.

³ Several publications were published within this period for the Niger AC 2004–2008.

⁴ In South Africa, the reference day for inventory items such as legal status, management system of the holding, and livestock numbers, was the day of interview.

⁵ In South Africa, the reference day for items such as the number of family members and employees involved in farming activities was 28 February 2007.

 **Table A1.3. Time-related characteristics of reported censuses of the WCA 2010 round**

Countries by region	Census year	Time lag from the previous census (years)	Reference period	Reference day	Enumeration period	Publication year
Bolivia (Plurinational State of)	2013	49	The agricultural year (July 2012 – June 2013)	Enumeration day	15 September – 15 November 2013	2015
Brazil	2006	10	Calendar year 2006	31 December 2006	16 April – 31 August 2007	2009
Canada	2011	10	– the reference year 2011 – the calendar year 2010	10 May 2011	2 May – 25 November 2011	2012
Chile	2006/2007	9	– agricultural year 2006/2007 (1 May 2006 – 30 April 2007) – years 2005/2006 and 2006/2007	31 March 2007	12 March – 31 May 2007	2007
Colombia	2014	12	– last 30 days: refers to the 30 days immediately preceding the date on which the census interview took place – last 12 months: refers to the 12 months immediately prior to the month of the interview	Enumeration day	December 2013 – December 2014	2015
Costa Rica	2014	29	The agricultural year (1 May 2013 and 30 April 2014)	Enumeration day	2 June – 30 June 2014	2015
El Salvador	2007/2008	36	– Agricultural year (May 2006 – April 2007) – October 2006 – September 2007, for data on coffee – Calendar year 2006 (January – December 2006)	1 October 2007	October 2007 – March 2008	2009
French Guyana	2010	9	– 2009–2010 farming season (1 November 2009 – 31 October 2010) – calendar years 2008, 2009 and 2010	1 November 2010	September 2010 – June 2011	2011
Grenada	2012	17	– the census reference year (October 2011 – September 2012), or the last 12 months prior to the visit of the enumerator – the last week before the enumeration day	Enumeration day	24 September 2012 – 15 January 2013	2015
Guadeloupe	2010	9	– 2009–2010 farming season (1 November 2009 – 31 October 2010) – calendar years 2008, 2009 and 2010	1 November 2010	September 2010 – June 2011	2011
Haiti	2008/2009	37	1 March 2008 – 28 February 2009	Enumeration day	11 March – November 2009	2012
Jamaica	2007	11	Calendar year 2006	– 16 February 2007 – the day of enumeration	20 February – mid–August 2007	2008
Martinique	2010	9	– 2009–2010 farming season (1 November 2009 – 31 October 2010) – calendar years 2008, 2009 and 2010	1 November 2010	September 2010 and June 2011	2011
Mexico	2007	16	– March – September 2007 – October 2006 – February 2007 – October 2006 – September 2007 – last five years	– day of the interview – 30 September 2007	11 June – 30 November 2007	2009
Nicaragua	2011	10	– agricultural year (1 May 2010 – 30 April 2011) – last 12 months (1 May 2010 – 31 May 2011)	Enumeration day	15 May – 16 June 2011	2012
Panama	2011	10	– agricultural year, 1 May 2010 – 30 April 2011 – the calendar year 2010 – the week before the enumeration day – the previous month – the period from 1 January 2011 to the day of interview	Enumeration day	24 April – 1 May 2011	2013
Paraguay	2008	17	Agricultural year (1 July 2007 – 30 June 2008)	Day of the interview – 1 May 2008	14 April 2008 – January 2009	2009
Peru	2012	18	– agricultural year 2011/2012 (1 August 2011 – 31 July 2012) – last 12 months	Enumeration day	15 October – 15 November 2012	2012
Puerto Rico	2012	10	1 January – 31 December 2012	31 December 2012	1 January – 31 December 2012	2014
Saint Lucia	2007	11	Calendar year 2006	Enumeration day	22 January – 15 March 2007	2007
Suriname	2008	27	Calendar year 2008 (1 January 2006 – 31 December 2008)	1 November 2008	1 November 2008 – 9 March 2009	2014
United States of America	2012	10	Calendar year 2012 (1 January – 31 December 2012)	31 December 2012	December 2012 – July 2013	2014
United States Virgin Islands	2007	4	1 January – 31 December 2007	31 December 2007	January – July 2008	2009
Uruguay	2011	11	The census year (1 July 2010 – 30 June 2011)	30 June 2011	15 August 2011 – 15 January 2012	2014
Venezuela (Bolivarian Republic of)	2008	10	1 May 2007 – 30 April 2008	Enumeration day	14 April – 31 July 2008	2011
ASIA (29)						
Armenia	2014		– 1 August 2013 – 31 July 2014 – 11 October 2013 – 10 October 2014	10 October 2014	11 October – 31 October 2014	2016
Azerbaijan	2015	10	– agriculture year 2014/2015 – the 12 preceding months	1 June 2015	1 June – 30 June 2015	2016

 **Table A1.3. Time-related characteristics of reported censuses of the WCA 2010 round**

Countries by region	Census year	Time lag from the previous census (years)	Reference period	Reference day	Enumeration period	Publication year
Bangladesh	2008	11	Twelve-month period (14 April 2007 – 13 April 2008)	Enumeration day	11 May – 4 December 2008	2010
Bhutan	2009	7	January 2008 – December 2008	Enumeration day	January – August 2009	2010
Cambodia	2013		– the 12-month period prior to 1 April 2013 (1 April 2012 – 31 March 2013) – the 12 months prior to 1 November 2013 (November 2012 – October 2013)	Enumeration day	17 April – 22 November 2013	2015
China	2006	9	Calendar year 2006 (1 January – 31 December)	31 December 2006	1 January and 31 March 2007	2008
Cyprus	2010	6	– crop year (1 October 2009 – 30 September 2010) – last three years (2007, 2008 and 2009)	1 November 2010	September 2010 – April 2011	2014
Georgia	2014	9	The 12 months preceding the reference day of the agricultural census (1 October 2013 – 1 October 2014)	1 October 2014	5 November 2014 – 20 March 2015	2015
India	2010/2011	14	– Phase I and Phase II: agricultural year 2010 – 2011 (July 2010 – June 2011); – Phase III – agricultural year 2011 – 2012 (July 2011 – June 2012)	15 October 2011	July 2011 – September 2012	2015
Indonesia	2013	10	– the year preceding the census date – five years prior to the census date	– 1 May 2013 – enumeration day	1 May 2013 – July 2014	2016
Iran (Islamic Republic of)	2014	11	Crop year (September 2013 – September 2014)	Enumeration day	27 September – 9 November 2014	2015
Japan	2015	5	Past year (1 February 2014 – 31 January 2015)	01–Feb–15	15 December 2014 – June 2015	2016
Jordan	2007	10	Agricultural year (1 August 2006 – 31 July 2007)	1 August 2006	1 June – 30 September 2007	2008
Kazakhstan	2006/2007		2006 agricultural year	– 1 August 2006 – 1 January 2007	10 August 2006 – 8 February 2007	2008
Lao People's Democratic Republic	2010/2011	11	The previous 12 months (2010 wet season and 2010/2011 dry season)	Enumeration day	28 February – 8 April 2011	2012
Lebanon	2010	11	1 October 2009 – 30 September 2010	Enumeration day	August 2010 and August 2011	2012
Mongolia	2011	11	– calendar year 2011 – the last five years	End of the year, December 2011	25 May and 15 June 2012	2012
Myanmar	2010	7	– the past 12 months – the agricultural year (February 2010 – January 2011)	Enumeration day	15 February – 31 March 2009 and 15 February – 31 March 2011	2013
Nepal	2011/2012	9	Calendar year 2011	Enumeration day	January – June 2012	2013
Oman	2012/2013	34	September 2012 to August 2013	6 October 2012	1 December 2012 and 30 April 2013	2014
Pakistan	2010	10	The agricultural year 2009/2010	Enumeration day	14 December 2009 – 30 June 2010	2012
Palestine	2010		The agricultural year (1 October 2009 – 30 September 2010)	Midnight of 30 September – 1 October 2010	2 October 2010 – 20 February 2011	2011
Philippines	2012	9	25 February 2013 – 30 April 2013	– 31 March 2013 – the day of the enumerator visit (interview day)	25 February – June 2013	2017
Republic of Korea	2015	5	– the year preceding the census (1 December 2014 – 30 November 2015) – the past five years (1 December 2010 – 30 November 2015)	1 December 2015	1 December – 15 December 2015	2016
Saudi Arabia	2015	16	The agricultural year (1 March 2014 – 28 February 2015)	1 February 2015	12 February – 15 April 2015	2015
Sri Lanka	2013/2014	11	October 2013 – September 2014	30 June 2014	October – November 2014	2016–2017
Tajikistan	2013		– the agricultural year 2013 (1 November 2012 – 31 October 2013) – calendar year 2012)	1 November 2013	15 September – December 2013	2018
Thailand	2013	10	The 12 months preceding the date of the census	1 May 2013	1 May – 31 May 2013	2014
Viet Nam	2011	10	The 12 months preceding the date of the census	1 July 2011	1 July – 30 July 2011	2012
EUROPE (36)						
Albania	2012	14	– 1 October 2011 – 30 September 2012 – the 12 months preceding the interview	1 October 2012	1 – 31 October 2012	2017
Austria	2010	10	– 1 November 2009 – 31 October 2010 – 1 January 2008 – 31 December 2010 – Calendar year 2009 – Calendar year 2010	– 1 April 2010 – 15 May 2010 – 31 October 2010	October 2010 – 31 March 2011	2012

 **Table A1.3. Time-related characteristics of reported censuses of the WCA 2010 round**

Countries by region	Census year	Time lag from the previous census (years)	Reference period	Reference day	Enumeration period	Publication year
Belgium	2010	10	– the 12 months preceding 1 May – the three years preceding the survey year – the year 2010 or the preceding 12 months	1 May 2010	1 May – 31 May 2010	2010
Bulgaria	2010	7	– crop year 2009/2010 (1 October 2009 – 30 September 2010) – the 12 months preceding the reference day (31 August 2010) – the last three years (2008 – 2010)	31 August 2010	1 September – 30 November 2010	2011
Croatia	2010	7	1 June 2009 – 31 May 2010	1 June 2010	1 June – 20 June 2010	2010
Czechia	2010	10	– 1 October 2009 – 30 September 2010 – the preceding three years (2008 – 2010)	30 September 2010	September 2010 – 22 February 2011	2011
Denmark	2010	10	– the year preceding the survey day – the previous three years (2008–2010)	– 1 June 2010 – 14 May 2010 – the date of enumeration	7 July 2010 – March 2011	2011
Estonia	2010	9	– 1 September 2009 – 31 August 2010 – the previous 12 months – the preceding three years (2008, 2009 and 2010)	1 September 2010	1 September – 15 November 2010	2011
Finland	2010	10	– harvest year 2010, for crops; – calendar year 2010 – 1 September 2009 and 31 August 2010 – the preceding three years: 2008, 2009 and 2010	– 1 April 2010 – 1 May 2010	September 2010 – 1 March 2011	2011
France	2010	9	– harvest year 2010, for crops – calendar year 2010 – 1 September 2009 – 31 August 2010 – the preceding three years: 2008, 2009 and 2010	– 1 April 2010 – 1 May 2010	September 2010 and June 2011	2011
Germany	2010	11	– last 12 months, for manure, renewable energy – March 2009 – February 2010 – calendar year 2009 – calendar year 2010 – the three preceding years (2008 – 2010) – June 2009 – May 2010	1 March 2010	January 2010 – January 2011	2011
Greece	2009/2010	9	– agricultural year (1 October 2008 – 30 September 2009) – the preceding three years (2007, 2008 and 2009)	1 November 2009	July – October 2010	2012
Hungary	2010	10	– 1 June 2009 – 31 May 2010 – the preceding three years (2008 – 2010)	1 June 2010	1 June and 21 June 2010	2011
Iceland	2010	10	Calendar year 2010	31 October 2010	January 2011 – June 2011	2012
Ireland	2010	10	– the agricultural marketing year 2009/2010 (1 November 2009 – 31 October 2010) – the 12 months preceding 1 June 2010 – the three-year period between 1 January 2008 and 31 December 2010	1 June 2010	June 2010 and September 2010	2012
Italy	2010	10	– the agricultural marketing year (1 November 2009 – 31 October 2010) – the 12 months preceding 24 October 2010 – the preceding three years (2008–2010)	24 October 2010	25 October 2010 – 31 January 2011	2012
Latvia	2010	9	– crop year 2010 – 1 July 2009 – 30 June 2010 – the three preceding years (2008, 2009, 2010)	1 July 2010	16 April – 30 October 2010	2012
Lithuania	2010	7	– the 12 preceding months (1 June 2009 – 31 May 2010) – calendar year 2010 – the preceding three years (2008–2010)	1 June 2010	May – August 2010	2010
Luxembourg	2010	10	– the 12-month period ending on 15 May 2010 – the preceding three years (2007, 2008 and 2009)	– 1 April 2010 – 15 May 2010	April – June 2010	2012
Malta	2010	9	– crop year (1 September 2009 – 31 August 2010) – the preceding three years	31 August 2010	September 2010 – January 2011	2012
Montenegro	2010	7	– crop year (1 June 2009 – 31 May 2010) – the preceding three years (2008–2010)	31 May 2010	7 June – 21 June 2010	2011
Netherlands	2010	10	– April 2009 – March 2010 – the preceding three years (2008–2010)	– 1 April 2010 – 15 May 2010	1 April – 15 June 2010	2012
North Macedonia	2007		1 June 2006 – 31 May 2007	31 May 2007	1 June – 15 June 2007	2007
Norway	2010	11	– the 12 months preceding the day of the survey (31 July 2010) – calendar year 2010 – autumn 2009/spring 2010 – winter 2009–2010 – the preceding three years – the preceding five years	– 31 July 2010 – 1 June 2010	August – December 2010	2012

 **Table A1.3. Time-related characteristics of reported censuses of the WCA 2010 round**

Countries by region	Census year	Time lag from the previous census (years)	Reference period	Reference day	Enumeration period	Publication year
Poland	2010	8	– 1 July 2009 – 30 June 2010 – the preceding three years (2008–2010)	30 June 2010	1 September and 31 October 2010	2011
Portugal	2009	9	– Crop year 2008/2009 (1 November 2008 – 31 October 2009) – the preceding 12 months – the preceding three years	Enumeration day	November 2009 – October 2010	2011
Republic of Moldova	2011		– agricultural year 2010 (1 November 2009 – 31 October 2010) – the preceding three years	1 March 2011	15 March – 15 April 2011	2013
Romania	2010	8	– agricultural year (1 October 2009 – 30 September 2010) – the preceding three years	1 December 2010	2 December 2010 – 31 January 2011	2012
Russian Federation	2006		– agricultural year 2006 – 1 January – 31 December 2005	– 1 July 2006 – 1 September 2006	1 July 2006 – 15 November 2006	2008
Serbia	2012	10	– 1 October 2011 – 30 September 2012 (crop year 2011/12) – the preceding three years	30 September 2012	1 October – 15 December 2012	2013
Slovakia	2010	9	– the 12 preceding months (1 November 2009 – 31 October 2010) – the preceding three years (2008–2010)	31 October 2010	November 2010 – February 2011	2012
Slovenia	2010	10	– the 12-month period ending on the reference day (1 June 2009 – 31 May 2010) – the three-year period ending on the reference day	1 June 2010	1 June – 15 July 2010	2011
Spain	2009	10	– agricultural year 2009 (1 October 2008 – 30 September 2009) – the preceding three years (1 January 2007 – 31 December 2009)	30 September 2009	October 2009 – April 2010	2012
Sweden	2010	11	– the preceding 12 months (1 June 2009 to 31 May 2010) – the preceding three years (2008 – 2010)	10 June 2010	June – October 2010	2011
Switzerland	2010	10	– calendar year 2010 – winter 2009/2010	4 May 2010	April – May 2010	2012
United Kingdom of Great Britain and Northern Ireland	2010	10	– the preceding 12 months (July 2009 to June 2010) – the preceding three years (2008 – 2010)	1 June 2010	May – December 2010	2010
OCEANIA (12)						
American Samoa	2008	5	1 January – 31 December 2008	Enumeration day	January – July 2009	2011
Australia	2010/2011	9	Agricultural year (1 July 2010 – 30 June 2011)	30 June 2011	July – November 2011	2012
Cook Islands	2011	10	– the preceding 12 months – the preceding month (the month prior to enumeration)	Enumeration day	1 December 2011 – January 2012	2014
Fiji	2009	18	– last cropping and harvesting season – October 2008 – September 2009 – the week before the census enumeration – the preceding ten years	Enumeration day	6 October 2009 – December 2009	2014
Guam	2007	4	1 January – 31 December 2007	Enumeration day	January – July 2008	2009
New Zealand	2012	10	– 1 July 2011 – 30 June 2012 – 1 April 2011 – 31 March 2012	30 June 2012	July 2012	2013
Niue	2009	20	– 1 January 2009 to the day of the interview – the month prior to interview – the preceding five years	21 November 2009	9 – 22 November 2009	2012
Northern Mariana Islands	2007	4	1 January – 31 December 2007	Enumeration day	January – July 2008	2009
Palau	2015	26	The preceding 12 months	– enumeration day – 6 April 2015	1 April 2015	2016
Samoa	2009	10	– the period from 1 January 2009 to the day of the interview – the week prior to the day of enumeration	enumeration day	31 October – 30 November 2009	2011
Tonga	2015	14	The preceding 12 months	enumeration day	7 April – 30 June 2015	2015
Vanuatu	2007	13	– 1 June 2006 – 31 May 2007 – the crop year (1 August 2006 – 31 July 2007)	– interview day – day of last sale	May 2006 – 21 October 2007	2008

Table A1.4. Census modalities, enumeration methods and sample designs used in the WCA 2010 round

Countries by region	Census Modalities C=Classical M=Modular O=Other ¹ A=Use of administrative registers ²	Enumeration method		List frame sample design ³			Multiple frame sample design	
		Complete enumeration	Sample enumeration	One-stage	Multiple stages (in brackets – selection method)			
					PSU	SSU		TSU
AFRICA (22)								
Botswana	C	✓	✓		EA	AH		
Burkina Faso	M	✓	✓		EA	AH		
Cabo Verde	M	✓	✓		EA	AH		
Congo ⁴	M	✓	✓		EA	AH		
Côte d'Ivoire ⁵	O	✓						
Egypt	C	✓						
Equatorial Guinea	C	✓						
Eswatini ⁶	O	✓	✓	✓				
Gambia	C		✓		EA (pps)	AH (ss)		
Lesotho ⁷	O		✓		EA (pps)	AH		
Malawi ⁷	O		✓		EA (n.a.)	AH (n.a.)		
Mauritius	C	✓	✓	✓				
Mozambique	M	✓	✓		EA (pps)	AH (ss)		
Namibia	C	✓	✓		EA (pps)	AH (n.a.)	Plot (n.a.)	
Niger	M	✓	✓		EA (n.a.)	AH (n.a.)		
Réunion	C	✓						
Senegal ^F	O	✓						
Seychelles	C	✓						
South Africa	C	✓						
Togo	M	✓	✓		EA (pps)	AH (ss)		
Uganda	M	✓	✓		EA (pps)	AH (ss)		
United Republic of Tanzania	C	✓	✓		EA (n.a.)	AH (n.a.)		
Subtotal for Africa		19	15	2			0	
AMERICAS (28)								
Antigua and Barbuda	C	✓						
Argentina	C	✓						
Belize	C	✓						
Bolivia (Plurinational State of)	C	✓						
Brazil	C	✓						
Canada	C	✓						
Chile	C	✓						
Colombia	C	✓						
Costa Rica	C	✓						
El Salvador	C	✓	✓		AH (ss)			
French Guyana	C	✓						

¹ Other⁷ modalities refer to censuses conducted using elements from different census approaches (field operations only).

² Use of administrative registers in combination with field operations.

³ The information provided refers to the type of statistical unit and sampling method used by countries (the latter is presented in brackets). For further details regarding sample designs used by countries, readers may refer to FAO (2019).

⁴ The Congo conducted the core module in 2014–2015. As of mid-2020, the country was implementing the following supplementary modules: crops and livestock (household sector), commercial farms, fisheries and aquaculture. The information regarding the sample design is provided

according to the sampling method planned to be used by the country for supplementary modules.

⁵ The country planned to use the modular approach but only implemented the core module. The supplementary module(s) were not conducted, mainly because of budget constraints.

⁶ Eswatini conducted the AC using a combination of complete and sample enumeration, in several phases, as in a modular census, but without clearly distinguishable core and supplementary modules.

⁷ The country conducted the AC on a sample enumeration basis, in several phases, as in a modular census, but without clearly distinguishable core and supplementary modules.

Countries by region	Census Modalities C=Classical M=Modular O=Other ¹ A=Use of administrative registers ²	Enumeration method		List frame sample design ³			Multiple frame sample design	
		Complete enumeration	Sample enumeration	One-stage	Multiple stages (in brackets – selection method)			
					PSU	SSU		TSU
Grenada	C	✓						
Guadeloupe	C	✓						
Haiti	C	✓						
Jamaica ⁴	O	✓						
Martinique	C	✓						
Mexico	C	✓						
Nicaragua	C	✓						
Panama	C	✓						
Paraguay	C	✓						
Peru	C	✓						
Puerto Rico	C	✓	✓		AH (n.a.) AS (n.a.)	Plot	✓	
Saint Lucia	C	✓						
Suriname	C	✓	✓		EA (str, srs)			
United States of America	C	✓						
United States Virgin Islands	C	✓						
Uruguay	C	✓						
Venezuela (Bolivarian Republic of)	C	✓						
Subtotal for Americas		28	3	0			1	
ASIA (29)								
Armenia	C	✓						
Azerbaijan	C	✓						
Bangladesh	C	✓	✓		EA (n.a.)	AH (n.a.)		
Bhutan	C	✓						
Cambodia	M	✓	✓		V (pps)	AH (ss)		
China	C	✓						
Cyprus	C	✓						
Georgia	C	✓						
India	M	✓	✓		V (n.a.)	AH (n.a.)		
Indonesia ⁸	C	✓	✓	✓				
Iran	C	✓						
Japan	C	✓						
Jordan	C	✓						
Kazakhstan ⁹	O	✓						
Lao People's Democratic Republic	M	✓	✓		V (pps)	AH (str)		
Lebanon ⁵	O	✓						
Mongolia	C	✓	✓	✓				
Myanmar	M	✓	✓		V (pps)	AH (ss)		
Nepal	C		✓		W, EAs (pps)	AH (n.a.)		
Oman	C	✓						
Pakistan	C		✓		n.a.	n.a.	n.a.	

⁸ Indonesia used the snowball method for sampling in urban areas

⁹ In Kazakhstan, the AC was conducted using complete enumeration as in the classical approach. However, instead of one-off data collection, the

census was carried out in two phases: in phase I, items on crops were collected, while in phase II, items on livestock, machinery and equipment were collected.

 **Table A1.4. Census modalities, enumeration methods and sample designs used in the WCA 2010 round**

Countries by region	Census Modalities C=Classical M=Modular O=Other ¹ A=Use of administrative registers ²	Enumeration method		List frame sample design ³			Multiple frame sample design	
		Complete enumeration	Sample enumeration	One-stage	Multiple stages (in brackets – selection method)			
					PSU	SSU		TSU
Palestine	C	✓						
Philippines ⁵	O	✓						
Republic of Korea	C	✓						
Saudi Arabia	C	✓						
Sri Lanka ¹⁰	O	✓	✓		n.a.	HH (n.a.)		
Tajikistan	C	✓						
Thailand	C	✓	✓		EA (n.a.)	AH (ss)		
Viet Nam	C	✓	✓		EA (pps)	HH (n.a.)		
Subtotal for Asia		27	12	2			0	
EUROPE (36)								
Albania	C	✓						
Austria	C+A	✓						
Belgium	C+A	✓						
Bulgaria	C	✓						
Croatia	C	✓	✓	✓				
Czechia	C+A	✓						
Denmark	C+A	✓						
Estonia	C+A	✓						
Finland	C+A	✓						
France	C+A	✓						
Germany	C+A	✓						
Greece	C	✓						
Hungary	C+A	✓						
Iceland	C+A	✓						
Ireland	C+A	✓						
Italy	C	✓						
Latvia	C+A	✓						
Lithuania	C+A	✓						
Luxembourg	C+A	✓						
Malta	C	✓						
Montenegro	C	✓						
Netherlands	C+A	✓						
North Macedonia	C	✓						
Norway	C+A	✓						
Poland	C+A	✓						
Portugal	C	✓						
Republic of Moldova	C	✓	✓		EA (pps)	AH (n.a.)		
Romania	C	✓						
Russian Federation	C	✓	✓		AH (n.a.)	Plots (ss)		
Serbia	C	✓						
Slovakia	C	✓						
Slovenia	C+A	✓						
Spain	C+A	✓						

¹⁰ Sri Lanka used the Economic Census - Agricultural Activities 2013/2014 to collect some core census items.

 **Table A1.4. Census modalities, enumeration methods and sample designs used in the WCA 2010 round**

Countries by region	Census Modalities C=Classical M=Modular O=Other ¹ A=Use of administrative registers ²	Enumeration method		List frame sample design ³			Multiple frame sample design	
		Complete enumeration	Sample enumeration	One-stage	Multiple stages (in brackets – selection method)			
					PSU	SSU		TSU
Sweden	C+A	✓						
Switzerland	C+A	✓						
United Kingdom of Great Britain and Northern Ireland	C+A	✓						
Subtotal for Europe		36	3	1			0	
OCEANIA (12)								
American Samoa	C	✓	✓		AH (ss)	n.a.	✓	
Australia	C	✓						
Cook Islands	C	✓						
Fiji	C	✓	✓		AS	Plot	✓	
Guam	C	✓						
New Zealand	C	✓						
Niue	C	✓						
Northern Mariana Islands	C	✓						
Palau ¹¹	O	✓						
Samoa	C	✓	✓	✓				
Tonga	C	✓						
Vanuatu	C	✓	✓		EA	AH		
Subtotal for Oceania		12	4	1			2	
Total		122	37	6			3	

Notes:

For statistical units:

AS: Area Segment.

EA: Enumeration Areas, also called “Enumeration Blocks”, “Census Blocs” (in countries such as Suriname and Sri Lanka), or Enumeration Massifs (in the Republic of Moldova).

V: Village.

W: Ward (an administrative division in some countries such as Nepal).

AH: Agricultural holdings, also called “farms” or “operations”, “agricultural production units”, “agricultural households”, “household farms”, or “family farms”.

HH: Households.

For sampling methods:

pps: probability proportional to size.

ss: systematic sampling.

str: stratified sampling.

sm: snowball method.

srs: simple random sampling.

n.a.: the information is not provided/specified or available in the census materials available.

¹¹ In Palau, key agriculture-related items were collected through a “Core agriculture and fishing” module in the Census of Population, Housing and Agriculture 2015.

Table A1.5. Data collection methods used during the WCA 2010 round¹

Countries by region	Face-to-face interviewing methods		Remote data collection methods			Objective measurement used (A=Area; Y=Yield; L=Livestock Counting)
	PAPI	CAPI	CAWI/CASI	CATI/PATI	MO-MB/DO-PKE	
AFRICA (22)						
Botswana	✓					A
Burkina Faso	✓					
Cabo Verde		✓				A
Congo	✓					
Côte D'Ivoire		✓				
Egypt	✓					
Equatorial Guinea		✓				
Eswatini	✓					A & Y
The Gambia	✓					A & Y
Lesotho	✓					A & Y
Malawi	✓					A & Y
Mauritius	✓				✓	
Mozambique		✓				A
Namibia		✓			✓	A & Y
Niger	✓					
Réunion		✓				
Senegal		✓				
Seychelles	✓					
South Africa ²					✓	
United Republic Of Tanzania	✓				✓	
Togo	✓					A
Uganda	✓					A
Subtotal for Africa	14	7	0	0	4	10
AMERICAS (28)						
Argentina	✓					
Antigua and Barbuda	✓					
Belize	✓					
Bolivia	✓					
Brazil		✓				
Canada	✓		✓	✓		
Chile	✓					
Colombia	✓	✓				
Costa Rica	✓					
El Salvador	✓					
French Guiana		✓				
Grenada	✓					
Guadeloupe		✓				
Haiti	✓					
Jamaica	✓					
Martinique		✓				
Mexico	✓	✓				
Nicaragua	✓					

¹ For further details, readers may refer to FAO (2019).

² South Africa: In addition, personal visits were conducted upon request (to micro-, small- and medium-sized enterprises) to assist respondents.

 **Table A1.5. Data collection methods used during the WCA 2010 round¹**

Countries by region	Face-to-face interviewing methods		Remote data collection methods			Objective measurement used (A=Area; Y=Yield; L=Livestock Counting)
	PAPI	CAPI	CAW/CASI	CATI/PATI	MO-MB/DO-PKE	
Panama	✓					
Paraguay	✓					
Peru	✓					
Puerto Rico ³					✓	
Saint Lucia	✓					
Suriname	✓					
United States of America		✓		✓	✓	
United States Virgin Islands	✓					
Uruguay	✓					
Venezuela (Bolivarian Republic of)		✓				
Subtotal for Americas	21	8	1	2	2	0
ASIA (29)						
Armenia	✓					
Azerbaijan	✓					
Bangladesh	✓					
Bhutan	✓					
Cambodia	✓					
China	✓					
Cyprus	✓					
Georgia	✓		✓			
India	✓					
Indonesia	✓					
Iran (Islamic Republic of)		✓				
Japan	✓				✓	
Jordan		✓				
Kazakhstan	✓					
Lao People's Democratic Republic	✓					
Lebanon	✓					
Mongolia	✓					
Myanmar	✓					
Nepal	✓					
Oman		✓				
Pakistan	✓					
Palestine	✓					
Philippines	✓					
Republic of Korea	✓		✓			
Saudi Arabia		✓				A & L
Sri Lanka	✓					
Tajikistan	✓					
Thailand		✓				
Viet Nam	✓					
Subtotal for Asia	24	5	2	0	1	1

³ Puerto Rico: Enumerators from the Puerto Rico Department of Agriculture and the Extension Service conducted a field follow-up, to visit and enumerate operators that did not respond by post.

 **Table A1.5. Data collection methods used during the WCA 2010 round¹**

Countries by region	Face-to-face interviewing methods		Remote data collection methods			Objective measurement used (A=Area; Y=Yield; L=Livestock Counting)
	PAPI	CAPI	CAWI/CASI	CATI/PATI	MO-MB/DO-PKE	
EUROPE (36)						
Albania	✓					
Austria			✓			
Belgium	✓		✓			
Bulgaria	✓					
Croatia	✓					✓
Czechia	✓					✓
Denmark			✓	✓	✓	
Estonia		✓	✓			
Finland			✓	✓		
France		✓				
Germany			✓	✓	✓	
Greece	✓					
Hungary	✓		✓			
Iceland			✓	✓	✓	
Ireland						✓
Italy	✓		✓			
Latvia		✓	✓	✓	✓	
Lithuania	✓	✓	✓			
Luxembourg	✓					
Malta	✓					
Montenegro	✓					✓
Netherlands			✓			✓
North Macedonia	✓					✓
Norway			✓			✓
Poland		✓	✓			
Portugal	✓					
Republic of Moldova	✓					
Romania	✓					
Russian Federation	✓					
Serbia	✓					
Slovakia	✓			✓	✓	
Slovenia		✓		✓		
Spain	✓			✓	✓	
Sweden			✓	✓	✓	
Switzerland	✓		✓		✓	
United Kingdom of Great Britain and Northern Ireland			✓	✓	✓	
Subtotal for Europe	21	6	17	10	16	0
OCEANIA (12)						
American Samoa	✓					
Australia			✓		✓	
Cook Islands	✓					
Fiji	✓					
Guam	✓					
New Zealand					✓	
Niue	✓					
Northern Mariana Islands	✓					

 **Table A1.5. Data collection methods used during the WCA 2010 round¹**

Countries by region	Face-to-face interviewing methods		Remote data collection methods			Objective measurement used (A=Area; Y=Yield; L=Livestock Counting)
	PAPI	CAPI	CAWI/CASI	CATI/PATI	MO-MB/DO-PKE	
Palau	✓					
Samoa	✓					
Tonga	✓					
Vanuatu	✓					
Subtotal for Oceania	10	0	1	0	2	0
Total	90	26	21	12	25	11

Table A1.6. Census frames used in the WCA 2010 round

Countries by region	Frame type for complete enumeration (the whole census or a component)	Frame type for sample enumeration (the whole census or a component)
AFRICA (22)		
Botswana	Adm. & non-adm. sources (NHS)	List of EAs from a PHC
Burkina Faso	PHC module	List of AHs from a PHC
Cabo Verde	Listing operations	List of AHs from the listing operations
Congo	List of EAs from a PHC	
Côte d'Ivoire	List of EAs from a PHC & administrative sources	
Egypt	Administrative sources (NHS), screening a list of AH	
Equatorial Guinea	List of HHs from a PHC, screening of HH	
Eswatini	List of EAs from a PHC	Screening a list of HHs
Gambia		List of EAs from a PHC
Lesotho		List of EAs from a PHC
Malawi		List of EAs from a PHC
Mauritius	Administrative sources	List of AHs from a PHC, administrative sources
Mozambique	List of AHs from a PHC	List of HHs from a PHC
Namibia	Administrative sources	List of EAs from a PHC List of AHs from a PHC
Niger	List of AHs from a PHC	List of EAs from a PHC, list of AHs from a PHC
Réunion	Adm. & non-adm. sources	
Senegal	List of EAs from a PHC	
Seychelles	Administrative sources	PHC module
South Africa	Administrative sources	
Togo	List of EAs from a PHC, listing operations	Screening EAs
Uganda	PHC module	Screening of HHs
United Republic of Tanzania	Listing operations	Screening a list of Ahs
AMERICAS (28)		
Antigua and Barbuda	Administrative sources	
Argentina	Screening EAs	
Belize	List of AHs from a PHC, maintained farm register	
Bolivia (Plurinational State of)	Non-administrative sources	
Brazil	List of EAs from a PHC	
Canada	List of AHs from PHC	
Chile	Administrative sources, list of AHs from PHC	
Colombia	Administrative sources	
Costa Rica	Administrative sources	
El Salvador	Administrative sources, list of AHs from PHC	Screening EAs
French Guyana	Adm. & non-adm. sources	
Grenada	Non-administrative sources	
Guadeloupe	Adm. & non-adm. sources	
Haiti	Screening EAs	
Jamaica	Listing operations	
Martinique	Adm. & non-adm. sources	
Mexico	Listing operations	
Nicaragua	List of HHs from PHC 2005	
Panama	List of HHs from a PHC	
Paraguay	Screening EAs	
Peru	Listing operations	
Puerto Rico	List of AHs from PHC	List of AHs from PHC
Saint Lucia	Non-administrative sources, list of AHs from PHC	
Suriname	List of AHs from a PHC	List of AHs from a PHC

 **Table A1.6. Census frames used in the WCA 2010 round**

Countries by region	Frame type for complete enumeration (the whole census or a component)	Frame type for sample enumeration (the whole census or a component)
United States of America	Adm. & non-adm. sources	
United States Virgin Islands	Administrative sources	
Uruguay	Administrative sources, list of AHs from PHC	
Venezuela (Bolivarian Republic of)	Non-administrative sources	
ASIA (29)		
Armenia	Listing activities, administrative sources	
Azerbaijan	Administrative sources	
Bangladesh		Listing operation
Bhutan	Administrative sources	
Cambodia	Screening of villages	Listing operation
China	Adm. & non-adm. sources	
Cyprus	Adm. & non-adm. sources	
Georgia	Adm. & non-adm. sources	
India	Listing operations	Selected screening villages
Indonesia	List of HHs from a PHC	Screening EAs
Iran (Islamic Republic of)	Listing operations	
Japan	Administrative sources	
Jordan	List of AHs from PHC 2004	
Kazakhstan	Adm. & non-adm. sources	
Lao People's Democratic Republic	Listing operations	List of AHs from selected villages
Lebanon	Screening EAs	
Mongolia	List of AHs from PHC	List of HHs from PHC
Myanmar	List of HHs from a PHC	List of HHs from a PHC
Nepal		List of HHs from a PHC
Oman	Non-adm. sources	
Pakistan		Adm. & non-adm. sources
Palestine	Administrative sources, listing activities	
Philippines	Listing operations	
Republic of Korea	List of EDs from the PHC 2015	
Saudi Arabia	Listing operations	
Sri Lanka	List of AHs from a PHC	Screening EAs
Tajikistan	Administrative sources	
Thailand	Screening EAs	Screening EAs
Viet Nam	List of HHs from a PHC	List of HHs from a PHC
EUROPE (36)		
Albania	List of AHs from the PHC, adm. & non-adm. sources	
Austria	Administrative sources	
Belgium	Maintained farm register	
Bulgaria	Adm. & non-adm. sources	
Croatia	Maintained farm register	Screening of HHs
Czechia	Maintained farm register	
Denmark	Administrative sources	
Estonia	Adm. & non-adm. sources	
Finland	Administrative sources	
France	Adm. & non-adm. sources	
Germany	Adm. & non-adm. sources	
Greece	Adm. & non-adm. sources	
Hungary	Adm. & non-adm. sources	
Iceland	Administrative sources	

 **Table A1.6. Census frames used in the WCA 2010 round**

Countries by region	Frame type for complete enumeration (the whole census or a component)	Frame type for sample enumeration (the whole census or a component)
Ireland	Maintained farm register	
Italy	Adm. & non-adm. sources	
Latvia	Administrative sources	
Lithuania	Administrative sources	
Luxembourg	Administrative sources	
Malta	Maintained farm register	
Montenegro	List of HHs from a PHC	
Netherlands	Maintained farm register	
North Macedonia	Listing operations	
Norway	Adm. & non-adm. sources	
Poland	Adm. & non-adm. sources	
Portugal	Administrative sources	
Republic of Moldova	Administrative sources	Listing operation
Romania	Administrative sources	
Russian Federation	Administrative sources	Selected screening EAs
Serbia	Lists of HHs from PHC 2011, administrative sources	
Slovakia	Adm. & non-adm. sources	
Slovenia	Administrative sources	
Spain	Administrative sources	
Sweden	Adm. & non-adm. sources	
Switzerland	Screening of AHs	
United Kingdom of Great Britain and Northern Ireland	Screening of AHs	
OCEANIA (12)		
American Samoa	Administrative sources	Multiple frame (list frame, area frame)
Australia	Administrative sources	
Cook Islands	List of HHs from PHC	
Fiji	List of EAs from a PHC	Multiple frame (list frame, area frame)
Guam	Administrative sources	
New Zealand	Administrative sources	
Niue	PHC module	
Northern Mariana Islands	Administrative sources	
Palau	Screening list of HHs from a PHC	
Samoa	List of HHs from a PHC	List of HHs from a PHC
Tonga	List of HHs from a PHC	
Vanuatu	List of HHs from a PHC	Listing operation

Notes:

Adm: Administrative

AH: Agricultural Household

NHS: Non-Household Sector

EA: Enumeration Area

ED: Enumeration District

HH: Household

PHC: Population and Household Census

Table A1.7. Geographic and holdings coverage of reported censuses of the WCA 2010 round

Countries by region	Census year	Geographical coverage	Holdings coverage	Scope
WORLD TOTAL (127)	2006–2015			
AFRICA (22)				
Botswana	2015	Except urban areas	Holdings below a threshold were excluded	Crop and livestock production
Burkina Faso	2006–2010	Entire country	A threshold was defined only for the module on arboriculture	Crop and livestock production, aquaculture and capture fisheries
Cabo Verde	2015	Entire country	All holdings	Crop and livestock production, aquaculture and forestry activities
Congo	2014/2015	Some areas were excluded	All holdings	Crop and livestock production, aquaculture, capture fisheries and forestry activities. A community survey was conducted together with the census.
Côte d'Ivoire	2015/2016	Entire country	Holdings in the non-household sector were excluded	Crop and livestock production, aquaculture, capture fisheries and forestry activities. A community survey was conducted together with the REEA.
Egypt	2009/2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production and aquaculture activities
Equatorial Guinea	2015	Entire country	Holdings in the non-household sector were excluded	Crop and livestock production
Eswatini	2012/2013	Some areas were excluded	All holdings	Crop and livestock production, forestry and fisheries activities. Nevertheless, units engaged in forestry or fisheries were not covered unless they also performed some crop or livestock production activities. A community survey was conducted along with the census.
Gambia	2011/2012	Some areas were excluded	Holdings in the non-household sector were excluded	Crop and livestock production. Along with holding-level data collection, a community survey was conducted to collect community-level data.
Lesotho	2009/2010	Entire country	Holdings in the non-household sector were excluded	Crop and livestock production. A community survey was conducted in conjunction with the AC 2009/2010.
Malawi	2006/2007	rural and peri-urban areas	Holdings in the non-household sector were excluded	Crop and livestock production
Mauritius	2014	Entire country	Holdings below a threshold were excluded	Crop and livestock production. Information on the existence of forestry, aquaculture, subsistence fishing and other gainful activities on the holding were also collected.
Mozambique	2009/2010	Entire country	All holdings	Crop and livestock production. Detailed information on the aquaculture activities associated with an agricultural holding were also collected.
Namibia	2013/2014	Entire country	All holdings	Crop and livestock production, forestry activities, aquaculture and capture fisheries activities
Niger	2004–2008	Some areas were excluded	Holdings in the non-household sector were excluded	Crop and livestock production. The CA covered different types of livestock systems, including sedentary pastoral, nomadic and transhumant grazing systems.
Réunion	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Senegal	2013	Entire country	Holdings in the non-household sector were excluded	The RGPFAE 2013 covered all households in the country. A specific module was devoted to agriculture, to identify households with at least one member engaged in own-account agricultural activities. Agricultural activities (in a broad sense) were defined as activities regarding the production of crops, livestock raising, aquaculture, capture fisheries and forestry.
Seychelles	2011	Some areas were excluded	Holdings in the household sector producing mainly for own consumption were excluded	The census scope covered mainly the commercial sector of the agricultural industry.
South Africa	2007	Entire country	Holdings in the household sector were excluded	The census scope covered the agricultural activities of tax-registered enterprises involved in: (i) the growing of crops, market gardening and horticulture; (ii) the farming of animals; (iii) the growing of crops combined with the farming of animals (mixed farming); and (iv) agricultural and animal husbandry services, including forestry and aquaculture (except veterinary activities).
Togo	2012–2014.	Some areas were excluded	Holdings in the non-household sector were excluded	Crop and livestock production. A community survey was conducted together with the CA.
Uganda	2008/2009	Entire country	All holdings	Crop and livestock production, and aquaculture activities
United Republic of Tanzania	2007/2008	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production. Detailed information on aquaculture was collected from small-scale farms, only from the units associated with an agricultural holding. Community-level data were also collected in the NSCA.
AMERICAS (28)				
Antigua and Barbuda	2008	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production
Argentina	2007	Entire country	Holdings below a threshold were excluded	Crop and animal production, and forestry activities
Belize	2011	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production, aquaculture and agroforestry activities
Bolivia (Plurinational State of)	2013	Some areas were excluded	All holdings	Crop and livestock production activities, forestry activities, collection or extraction of non-timber species (chestnut, rubber, cocoa, etc.), hunting and fishing. A community survey was carried out together with the AC 2013.
Brazil	2006	Entire country	All holdings	Crop and livestock production, forestry and aquaculture activities
Canada	2011	Entire country	Some holdings were excluded	Crop and livestock production
Chile	2006/2007	Entire country	Holdings below a threshold were excluded	Crop and livestock production, and forestry

 **Table A1.7. Geographic and holdings coverage of reported censuses of the WCA 2010 round**

Countries by region	Census year	Geographical coverage	Holdings coverage	Scope
Colombia	2014	Some areas were excluded	All holdings	Crop and livestock production, forestry, aquaculture and capture fishing activities
Costa Rica	2014	Entire country	Holdings below a threshold were excluded	Crop and livestock production, aquaculture and forestry activities
El Salvador	2007/2008	Entire country	All holdings	Crop and animal production. Detailed information on aquaculture was collected.
French Guyana	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Grenada	2012	Entire country	Holdings below a threshold were excluded	Crop and livestock production. The fishing activities of households were included in the listing form.
Guadeloupe	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Haiti	2008/2009	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Jamaica	2007	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production. Items related to oyster, shrimp and lobster farming (aquaculture from marine environment) were also collected.
Martinique	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Mexico	2007	Entire country	All holdings	Crop and livestock production, and forestry activities
Nicaragua	2011	Entire country	All holdings	Crop and livestock production. Some information on forestry and aquaculture was also collected. A community survey was carried out together with the census.
Panama	2011	Entire country	Holdings below a threshold were excluded	Crop and livestock production. The census questionnaire also included some information on aquaculture.
Paraguay	2008	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Peru	2012	Entire country	All holdings	Crop and livestock production
Puerto Rico	2012	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Saint Lucia	2007	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Suriname	2008	Entire country	Holdings below a threshold were excluded	Crop and livestock production, and aquaculture activities
United States of America	2012	Entire country	Holdings below a threshold were excluded	Crop and livestock production
United States Virgin Islands	2007	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Uruguay	2011	Entire country	Holdings below a threshold were excluded	Crop and livestock production, and forestry activities
Venezuela (Bolivarian Republic of)	2008	Entire country	Holdings below a threshold were excluded	Crops and livestock production. A community survey of Communal Micro Areas (MACs) was conducted together with the census fieldwork.
ASIA (29)				
Armenia	2014	Entire country	All holdings	The AC covered the units engaged in crop and livestock production. Some data on aquaculture activities carried out in association with the agricultural holdings' agricultural production activities were also collected in the census. A community survey was conducted together with the AC.
Azerbaijan	2015	Some areas were excluded	All holdings	Agricultural and livestock production, and aquaculture activities
Bangladesh	2008	Entire country	Holdings below a threshold were excluded	Crop and livestock production. Detailed information on the aquaculture and capture fisheries activities of household members was also collected.
Bhutan	2009	Some areas were excluded	Some holdings were excluded	Crop and livestock production, and forestry activities
Cambodia	2013	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production, and aquaculture activities. A community (village) survey was conducted jointly with the 2013 NCAC.
China	2006	Entire country	Holdings below a threshold were excluded	Crop and animal production, agricultural services, forestry and fishery activities. In addition, the AC collected information on rural infrastructure and basic social services, living conditions of rural residents, town and township government and villagers' committees.
Cyprus	2010	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production
Georgia	2014	Some areas were excluded	All holdings	Crop and livestock production. Data on communal grazing land for all municipalities were also collected in the AC 2014.
India	2010/2011	Entire country	All holdings	Crop and livestock production
Indonesia	2013	Entire country	All holdings	Crop and livestock production, aquaculture, capture fisheries and forestry activities
Iran (Islamic Republic of)	2014	Entire country	Holdings below a threshold were excluded	Crop and livestock production. A community survey (using a village questionnaire) was conducted jointly with the CA 2014.
Japan	2015	Entire country	Holdings below a threshold were excluded	Crop and animal production
Jordan	2007	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Kazakhstan	2006/2007	Entire country	All holdings	The agricultural census covered the units engaged in crop and animal production, as well as in support activities (provision of services) to agriculture.
Lao People's Democratic Republic	2010/2011	Entire country	Holdings below a threshold were excluded	Crop and livestock production, and aquaculture production activities. A community survey was carried out together with the CA.

 **Table A1.7. Geographic and holdings coverage of reported censuses of the WCA 2010 round**

Countries by region	Census year	Geographical coverage	Holdings coverage	Scope
Lebanon	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production. The units engaged in forestry and fishing activities were not covered, unless they were associated with an agricultural holding.
Mongolia	2011	Entire country	All holdings	Crop and livestock production, forestry, fishery and hunting sectors. A community survey was carried out jointly with the census.
Myanmar	2010	Some areas were excluded	Holdings below a threshold were excluded	Crop and animal production, and aquaculture activities. In addition, a community survey was conducted at village–tract level.
Nepal	2011/2012	Entire country	Holdings below a threshold were excluded	Crop and animal production activities. A community survey was also conducted.
Oman	2012/2013	Entire country	Holdings below a threshold were excluded	Crop and animal production
Pakistan	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Palestine	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Philippines	2012	Some areas were excluded	All holdings	Crop and animal production, aquaculture and fishing activities. A community survey was also conducted in all barangays.
Republic of Korea	2015.00	Entire country	Holdings below a threshold were excluded	Crop and livestock production, forestry and fishery (aquaculture and capture fisheries activities). A community survey was carried out together with the Census of Agriculture, Forestry and Fisheries (CAFF 2015).
Saudi Arabia	2015	Entire country	Holdings below a threshold were excluded	Crop and animal production, and aquaculture activities
Sri Lanka	2013/2014	Entire country	Some holdings were excluded	Crop and animal production, and aquaculture activities
Tajikistan	2013	Entire country	All holdings	Crop and animal production. Some data on aquaculture activities carried out in association with the agricultural production activities of agricultural producers were also collected.
Thailand	2013	Entire country	All holdings	Crop and livestock production, and aquaculture activities. The census also included sea salt farms.
Viet Nam	2011	Entire country	Holdings below a threshold were excluded	Crop and livestock production, forestry and fisheries activities. A community survey was conducted jointly with the AC.
EUROPE (36)				
Albania	2012	Entire country	Some holdings were excluded	Crop and livestock production activities
Austria	2010	Entire country	Holdings below a threshold were excluded	The census scope included all agricultural and forestry holdings in the Agriculture and Forestry Register (AFR) that met the cut–off thresholds.
Belgium	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Bulgaria	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Croatia	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Czechia	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Denmark	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Estonia	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Finland	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
France	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Germany	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production. Forestry enterprises above the established threshold were also covered by the census.
Greece	2009/2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Hungary	2010	Entire country	Holdings below a threshold were excluded	Crop production and livestock products, and agricultural services provided by the holdings
Iceland	2010	Entire country	All holdings	Crop and livestock production
Ireland	2010	Entire country	All holdings	Crop and livestock production
Italy	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Latvia	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Lithuania	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Luxembourg	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Malta	2010	Entire country	All holdings	Crop and animal production
Montenegro	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Netherlands	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
North Macedonia	2007	Entire country	Holdings below a threshold were excluded	Crops and livestock production. The census also covered all households that own forests or fish ponds.
Norway	2010	Entire country	Holdings below a threshold were excluded	Crops and livestock production. The census included “agricultural and forestry property”, irrespective of active farming.
Poland	2010	Entire country	Holdings below a threshold were excluded	Crops and livestock production

 **Table A1.7. Geographic and holdings coverage of reported censuses of the WCA 2010 round**

Countries by region	Census year	Geographical coverage	Holdings coverage	Scope
Portugal	2009	Entire country	Holdings below a threshold were excluded	Crop and animal production
Republic of Moldova	2011	Some areas were excluded	Holdings below a threshold were excluded	The census scope covered agricultural activities related to the production of crop and livestock products, as well as to agricultural services provided by the holdings. Some data on aquaculture carried out in association with the agricultural activities of the agricultural holding were also collected in the census.
Romania	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Russian Federation	2006	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Serbia	2012	Some areas were excluded	Holdings below a threshold were excluded	Crop and livestock production
Slovakia	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Slovenia	2010	Entire country	Holdings below a threshold were excluded	Crop and animal production
Spain	2009	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Sweden	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Switzerland	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
United Kingdom of Great Britain and Northern Ireland	2010	Entire country	Holdings below a threshold were excluded	Crop and livestock production
OCEANIA (12)				
American Samoa	2008	Entire country	All holdings	Crop and livestock production, capture fisheries and aquaculture activities
Australia	2010/2011	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Cook Islands	2011	Entire country	All holdings	Crop and livestock production, capture fisheries and pearl farming activities
Fiji	2009	Entire country	Some holdings were excluded	Crop and livestock production
Guam	2007	Entire country	Holdings below a threshold were excluded	Crop and livestock production, capture fisheries and aquaculture activities
New Zealand	2012	Entire country	Holdings below a threshold were excluded	The census scope covered all economically significant businesses engaged in "livestock, cropping, horticulture and forestry" production activities, or that owned land intended for those activities during the year ending 30 June 2012.
Niue	2009	Entire country	Holdings below a threshold were excluded	Crop and livestock production. Detailed information on the capture fisheries activities of household members was also collected.
Northern Mariana Islands	2007	Entire country	Holdings below a threshold were excluded	Crop and livestock production
Palau	2015	Entire country	Holdings in the non-household sector were excluded	Crop and livestock production, and fishery activities
Samoa	2009	Entire country	Holdings below a threshold were excluded	Crop and livestock production, and fisheries activities. Some items related to forestry activity were also collected.
Tonga	2015	Entire country	All holdings	Crop and livestock production. Detailed information on the capture fisheries activities of household members was also collected.
Vanuatu	2007	Some areas were excluded	All holdings	Crop and livestock production, and fishing and forestry activities performed by the households.

Notes:

CAFF: Census of Agriculture, Forestry and Fisheries

NCAC: National Census of Agriculture in Cambodia

NSCA: National Sample Census of Agriculture

RGPHAE: General Census of Population and Housing, Agriculture and Livestock

REEA: Census of Agricultural Holders and Holdings

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other	
AFRICA (6)										
Botswana	operating a piece of land used for crop production purposes, whether planted or lying fallow		1	1	1	1		1 donkey/mule		
Burkina Faso		20 trees ¹								
Egypt	87.5 m ²		1 head	5 head	5 head		100	10 beehives	<ul style="list-style-type: none"> - 1 fishery cage - The ownership of an agricultural machine or sharing it and using it in agriculture 	
Mauritius	<ul style="list-style-type: none"> - a piece of land (5 perches) - a kitchen garden (at least 5 perches) 	<ul style="list-style-type: none"> - breadfruit, lychee, mango (at least 5 trees) - lemon, mandarin, coconut, guava, other citrus, mixed fruit trees (at least 10 trees) - banana, papaw (at least 20 trees) - pineapple, lychee, vegetables, fruits—other, crops—other (at least 5 perches) 						All units raising livestock (including poultry)	<ul style="list-style-type: none"> - Kitchen garden (at least 5 perches) - All honey producers and all deer farms 	
Reunion	<ul style="list-style-type: none"> - 1 ha.. - At least 0.2 ha of any specialized crops - 20 acres of asparagus or cabbage sauerkraut - 15 acres of strawberries - 5 acres in gardening - 10 acres under vine producing original appellation wines (AOC); - 5 acres of vineyards in Champagne or of nursery (wine, ornamental, fruit, forest) 	40 individual fruit trees	1 cow, or 2 cattle older than 2 years, 5 calves	6 sheep mothers, 6 sheeps	6 goats, 10 goats for slaughtering	1 sow mother	<ul style="list-style-type: none"> - 100 head of poultry - 1 000 hatching eggs capacity - 500 head of broiler poultry - 50 head of fat poultry - 10 000 eggs 	<ul style="list-style-type: none"> - 10 beehives in production - 10 breeding rabbits (female) - 2 horses for slaughtering - 200 rabbits for meat 	2 tons of chicory or 1 ton of mushrooms or watercress for sale; for animals such as milk, nutria, chinchillas, goats and angora; rabbits as well as game farms in captivity for slaughter or sale—out hunting	
United Republic of Tanzania	<ul style="list-style-type: none"> - 25 m² of arable land - 20 ha (60 acres) of crops for large-scale farms 		<ul style="list-style-type: none"> - 1 head of cattle - 50 cattle for large-scale farms 	<ul style="list-style-type: none"> - 5 - 100 for large-scale farms 	<ul style="list-style-type: none"> - 5 - 100 for large-scale farms 	<ul style="list-style-type: none"> - 5 - 100 for large-scale farms 	<ul style="list-style-type: none"> - 50 chicken/ducks/turkeys and 1 000 for large-scale farms 	<ul style="list-style-type: none"> - 0.5 ha of intensive greenhouse horticulture - 0.5 ha of fish-farming production units 		
AMERICAS (18)										
Antigua and Barbuda	<ul style="list-style-type: none"> - One eighth of an acre (0.12 acres or 5 445 square feet) of any garden crop and/or annual sales of garden crops of this land of at least ECS\$ 1 000 (garden crops include vegetables, ground provisions, food crops, pineapple, papaya, herbs or any other crop not elsewhere included) 	<ul style="list-style-type: none"> - 20 bearing fruit trees and/or annual sales of fruit from these trees of at least ECS\$ 1 000 - 10 banana/finger rose mats and/or annual sales of fruit from these plants of at least ECS\$ 1 000 - 10 plantain mats and/or annual sales of plantains from these plants of at least ECS\$ 1 000 	2 head of cattle and/or breeding cattle	<ul style="list-style-type: none"> - 5 sheep - Combination of 5 sheep, goats and pigs 	5	5 pigs and/or breeding animals	25 head of poultry and/or annual sales of eggs from these poultry of at least ECS\$ 1 000 and/or annual sales of poultry meat from these poultry of at least ECS\$ 1 000			

¹ For Burkina Faso, a threshold was applied for the module on arboriculture.

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Argentina	500 m ² (0.05 ha) of the area of the holding		2	5	5		10 or more chickens, ducks or geese combined		<ul style="list-style-type: none"> - Any aquaculture ponds - At least 10 bee colonies
Belize	<ul style="list-style-type: none"> - 0.5 acres (approximately 0.202 ha) 							<ul style="list-style-type: none"> - 2 large animals of 2 years of age and above, or 4 large animals under 2 years of age - 10 small animals - 10 ostriches or emus - 50 geese, turkeys or rabbits - 10 beehives 	
Chile	<ul style="list-style-type: none"> - 0.1 ha of temporary or permanent crops - 0.5 ha of meadows, provided that these are used for animal husbandry - 0.5 ha of forests 					100			
Costa Rica	1 000 m ² (0.1 ha)								
	<ul style="list-style-type: none"> - 1 ha - At least 0.2 ha of any specialized crop - 20 acres of asparagus or cabbage sauerkraut - 15 acres of strawberries - 5 acres in gardening - 10 acres under vine producing original appellation wines (AOC) - 5 acres of vineyards in Champagne or of nursery (wine, ornamental, fruit, forest) 	40 individual fruit trees	1 cow or 2 cattle older than 2 years, 5 calves	6 sheep mothers, 6 sheeps	6 goats, 10 goats for slaughtering	1 sow mother	<ul style="list-style-type: none"> - 100 head of poultry - 1 000 hatching eggs capacity - 500 head of broiler poultry - 50 head of fat poultry - 10 000 eggs 	<ul style="list-style-type: none"> - 10 beehives in production - 10 breeding rabbits (female) - 2 horses for slaughtering - 200 rabbits for meat 	2 tons of chicory or 1 ton of mushrooms or watercress for sale; for animals such as mink, nutria, chinchillas, goats and angora rabbits, as well as game farms in captivity for slaughter or sale-out hunting
French Guyana									
Grenada	0.25 acres (0.1 ha) of garden crops	25 or more nutmeg, cocoa, bananas, fruit, nut and spice trees combined	1 head of cattle	<ul style="list-style-type: none"> - 5 or more sheep, goats or pigs combined - Breeding of sheep 	Breeding of goats	Breeding of pigs	25 or more head of poultry/chicken		Sales of agricultural products in the last 12 months amounting to more than EC\$ 2 500
	<ul style="list-style-type: none"> - 1 ha - At least 0.2 ha of any specialized crop - 20 acres of asparagus or cabbage sauerkraut - 15 acres of strawberries - 5 acres in gardening - 10 acres under vine producing original appellation wines (AOC) - 5 acres of vineyards in Champagne or of nursery (wine, ornamental, fruit, forest) 	40 individual fruit trees	1 cow, or 2 cattle older than 2 years, 5 calves	6 sheep mothers, 6 sheeps	6 goats, 10 goats for slaughtering	1 sow mother	<ul style="list-style-type: none"> - 100 head of poultry - 1 000 hatching eggs capacity - 500 head of broiler poultry - 50 head of fat poultry - 10 000 eggs 	<ul style="list-style-type: none"> - 10 beehives in production - 10 breeding rabbits (female) - 2 horses for slaughtering - 200 rabbits for meat 	<ul style="list-style-type: none"> - 2 tons of chicory or 1 ton of mushrooms or watercress for sale - Four animals such as mink, nutria, chinchillas, goats and angora rabbits, as well as game farms in captivity for slaughter or sale-out hunting
Guadeloupe									
	<ul style="list-style-type: none"> - 4/100 carreau of Utilized Agricultural Area, or UAA (equivalent to 516 m², or 0.05 ha) for land without irrigation and 1.5/100 carreau of UAA (equivalent to 193.5 m², or 0.02 ha) for irrigated land 	5 trees of mango (for holdings with usufruct rights to trees)	3 sheep (breeding females)	3 goats (breeding females)	3 pigs (breeding females)	3 pigs (breeding females)	15 hens	<ul style="list-style-type: none"> - 1 cow or oxen - 5 rabbits (breeding females), or - 5 beehives 	
Haiti									

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Jamaica	1 "square chain" (approx. 400m ² , or 0.04 ha) of cultivation (crops including flowers, whether in a greenhouse/shade house or not)	12 bearing economic trees, e.g. citrus, mangoes, breadfruit	2 head of cattle	5	5	2	50 (any combination) including ducks, turkeys	6 beehives	1 fish (including ornamental) or shrimp pond of any size
Martinique	<ul style="list-style-type: none"> - 1 ha - At least 0.2 ha of any specialized crop - 20 acres of asparagus or cabbage sauerkraut - 15 acres of strawberries - 5 acres in gardening - 10 acres under vine producing original appellation wines (AOC) - 5 acres of vineyards in Champagne or of nursery (wine, ornamental, fruit, forest) 	40 individual fruit trees	1 cow, or 2 cattle older than 2 years, 5 calves	6 sheep mothers, 6 sheeps	6 goats, 10 goats for slaughtering	1 sow mother	<ul style="list-style-type: none"> - 100 head of poultry - 1 000 hatching eggs capacity - 500 head of broiler poultry - 50 head of fat poultry - 10 000 eggs 	<ul style="list-style-type: none"> - 10 beehives in production - 10 breeding rabbits (female) - 2 horses for slaughtering - 200 rabbits for meat 	<ul style="list-style-type: none"> - 2 tons of chicory or 1 ton of mushrooms or watercress for sale - Fur animals such as mink, nutria, chinchillas, goats and angora rabbits, BZ^a as well as game farms in captivity for slaughter or safe-out hunting
Panama	0.01 ha of land								
Paraguay	0.1 ha of temporary crops, commercial orchards and/or permanent crops (fruit trees and permanent industrial crops in regular plantation), or flowers and/or ornamental plants including greenhouses	3	5	5	5	5	100 roosters, hens, chickens, chicks, ducks, guineas, turkeys or geese	3 adult bovines	
Puerto Rico									USD 500 or more of agricultural products were produced and sold, or normally would have been sold, during the census year
Saint Lucia	One eighth of 1 acre (i.e. 0.4 ha) of any temporary crop	<ul style="list-style-type: none"> - 10 bearing trees of any tree crop - 100 mats of banana and/or plantain 	1 head of cattle	2	2 pigs or goats or sheep or 1 head of any 2 of these	2	12 head of poultry, 12 rabbit or 12 head of poultry and rabbits together		
Suriname	<ul style="list-style-type: none"> - 0.02 ha of land under temporary or "semi-perennial" crops - 20 harvested fruit trees - 10 fruit trees of a single type harvested - 20 m² of leek, celery or leaf onions 	<ul style="list-style-type: none"> - 20 harvested fruit trees - 10 fruit trees of a single type harvested 	2 heads of cattle	5	5	<ul style="list-style-type: none"> - 5 pigs - 1 sow 	25 chicken, 25 ducks	5 beehives	1 fishpond greater than 50 m ²
United States of America									Agricultural holdings that do not normally produce and sell USD 1 000 or more of agricultural products per year or do not have such potential are not tabulated as farms
United States Virgin Islands									Agricultural holdings where USD 500 or more of agricultural products were produced and sold, or normally would have been sold, during the 12-month period between 1 January and 31 December 2007

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Venezuela (Bolivarian Republic of)	<ul style="list-style-type: none"> - A minimum cultivated area of 0.5 ha - Any surface cultivated with vegetables or flowers for commercial purposes, or - 5 ha of grassland 	20 fruit trees of the same species	5 head of cattle	15	15	15	5 beehives	<ul style="list-style-type: none"> - 25 m² of water mirror for aquaculture purposes - Any other production unit with organic crops, nurseries or crops with special and/or handicraft techniques - Other animals of agricultural production greater than or equal to 100 head - 100 birds of the same species 	
ASIA (17)	0.05 acres								
Bangladesh	A minimum of 300 m ² (0.03 ha) of land used wholly or partly for agricultural production		Minimum of 2 head of large livestock	A minimum of 3 head of small livestock (sheep, goats, pigs, etc.)			A minimum of 25 head of poultry		
Cambodia	<ul style="list-style-type: none"> - 0.1 mu (approx. 67 m² of arable land or land under permanent crops and water surface of aquaculture at the end of year - Operate more than 0.1 mu of woodland and pasture at the end of year 		Keep at least 1 head of cattle at the end of the year	Keep at least 1 sheep at the end of the year		Keep at least 1 pig at the end of the year	20 head	<ul style="list-style-type: none"> - The income of the yearly sales of agricultural products, including self-consumption, exceeds 500 RMB - The income from providing agricultural services to other households or other entities is more than 500 RMB 	
China			Keep at least 1 head of cattle at the end of the year	Keep at least 1 sheep at the end of the year		Keep at least 1 pig at the end of the year	20 head	<ul style="list-style-type: none"> - Keep at least 1 horse at the end of the year - 20 rabbits 	
Cyprus	<ul style="list-style-type: none"> - 1 decares (0.1 ha) - 0.5 decares (0.05ha) in greenhouses 		1 cow or - 2 other large animals	5 and more small animals			50 and more ostriches or 10 or more rabbits (breeding females)	20 beehives or more	
Iran (Islamic Republic of)	<ul style="list-style-type: none"> - 400 m² (0.04 ha) of arable land, or - 200 m² (0.02 ha) of orchards and nurseries 		1 head of large livestock				10 chickens and any other types of poultry	1 head of large livestock, or 2 head of small livestock	
Japan	<ul style="list-style-type: none"> - 30 ares (0.3 ha) cultivated land - Planted area for outdoor grown vegetables: 15 ares - Cultivated area for greenhouse grown vegetables: 350 m² - Cultivated area for fruit trees: 10 ares - Cultivated area for outdoor green flowers: 10 ares - Cultivated area for greenhouse grown flowers: 250 m² 		1 head			15 head	<ul style="list-style-type: none"> - 150 hens - Broiler chickens shipped each year: 1 000 heads 	Milking cows: 1 head	<ul style="list-style-type: none"> - Others: total sales of farm products equivalent to JPY 500 000 or more during the 1-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 3 ha or more forestland (hereinafter referred to as "owned forest land"
Jordan	1 dunum (0.1 ha) or more of agricultural land, or any protected area		1 or more head of female cattle	10 head	10 head		30 or more head of domestic poultry	5 beehives	Organized farm (such as cattle and poultry farms)

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Lao People's Democratic Republic	At least 0.02 ha of agricultural land in the 2010 wet season or the 2010/11 dry season		2 head of cattle or buffaloes	5 sheep at the time of the census	5 head at the time of the census	5 head at the time of the census	20 head at the time of the census		
Lebanon	– 1 000 m ² (1 dunum) of land in the field, or – 400 m ² under protective cover (greenhouses)		1	7	7			8 beehives	
Myanmar	0.05 acres (202.3 m ²) of land used wholly or partly in crop cultivation		1 head of cattle	4	4	4	30 head of poultry (chicken/duck/quail) kept/bred as of the time of enumeration	1 large head of livestock (buffalo/donkey/mule)	
Nepal	Area under crops greater than or equal to a quarter of a ropanjor (4 anna (0.01272 ha) in hill or mountain districts, or greater than or equal to 8 Dhur (0.01355 ha) in the Terai		1 head of cattle or buffalo	5	5		20		
Oman			1 head of cattle or camel	5	5		50	5 head (mixture of sheep and goat)	
Pakistan	1 Kanal (0.05 ha)		1	1	1		1 head of livestock		
Palestine	Half a dunum (0.05 ha) of cropped land under protective cover, or 1 dunum (0.1 ha) of other cultivated land.		Any number	5	5	5	50 chickens or other poultry, e.g. turkeys, ducks, or rabbits, or a mixture of these	– Any number of camels – 5 head of livestock (mixture of sheep, goats and pigs) – 5 beehives	
Republic of Korea	– 0.1 ha of arable land, or land under permanent crops, at the time of enumeration							– A household of which sales of produced agricultural (crop or livestock) products were at least KRW 1.2 million during the reference year (1 December 2014 – 30 November 2015) – A household raising livestock worthing at least KRW 1.2 million, at the time of enumeration (1 December 2015)	
Saudi Arabia	1 dunum (equivalent to 0.1 ha)		– 1 camel – 1 cow	15	15		30 chickens	– 5 beehives	
Viet Nam	– 3.1 ha for the Southeast and the Mekong River Delta – 2.1 ha for the rest of the provinces – The output value of goods reached VND 700 million in 2010 (approx. USD 33 200)							– Output of goods of VND 1 billion in 2010 (approx. USD 47 430) – Minimum area of 31 ha and the average output value of goods of VND 500 million per year (approx. USD 23 700)	
EUROPE (33)									
Albania	Units having a farming area only as kitchen gardens, smaller than 200 m ² , were excluded							– Forests (wooded areas); ornamental parks or gardens; land not used for agricultural purposes; or completely abandoned land were excluded – Poultry hatcheries; if operated without further breeding were excluded	

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Austria	<ul style="list-style-type: none"> - 1 ha of UAA - Wine-growing holdings with at least 25 ares (0.25 ha) under market vines - Holdings with at least 15 ares (0.15 ha) of intensively utilized fruit orchards, or 10 ares (0.1 ha) under berries, strawberries, vegetables, hops, flowers or decorative plants, or under wine or forest, or nurseries - Holdings that operate greenhouses (high/low glass or foil) covering at least 1 are (0.01 ha), the majority of the produce being grown for market 		3	10	10	5	100 head of poultry of any type		
									Keeping animals, whether or not they produce goods for sale
Belgium	<ul style="list-style-type: none"> - 0.5 ha of UAA, 0.3 ha of arable land or 0.5 ha of natural meadows - 0.1 ha of orchards (compact plantation), vineyards, vegetables, hops, tobacco, spices, medicinal and essential oil crops, flowers, ornamental plants; or - 0.05 ha of greenhouses 		1 head of buffalo-cow 2 head of buffaloes or cattle	5 breeding-ewes	2 breeding she-goats	5 pigs and 1 breeding sow	50 laying hens; or 100 chicken for fattening	1 reproductive male animal used for natural mating (bull, stud, boar, etc.)	
									0.5 livestock units (LSUs) or any number of beehives
Croatia	<ul style="list-style-type: none"> - At least 0.4 ha of UAA - Less than 0.4 ha of UAA - 0.1 ha of vineyards, olive groves and/or orchards - Any area of nurseries, or - Market producers of vegetables, medicinal herbs, strawberries, mushrooms, flowers or ornamental plants 		5 head of cattle	10	10	100 head of poultry including ostriches			
Czechia	<ul style="list-style-type: none"> - Area above 5 ha of UAA - 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 		10 head of cattle	20	20	50 pigs 10 sows	1 000	40 fur animals	A standard output of at least EUR 7 500
Denmark	<ul style="list-style-type: none"> - An agricultural area of at least 5 ha - Fruits, berries and nursery area of at least 0.5 ha - Vegetables and strawberries of at least 0.5 ha - Greenhouse and mushrooms of at least 1 000 m² 		10 head of cattle	20	20	50 pigs 10 sows	1 000	40 fur animals	A standard output of at least EUR 7 500

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Estonia	<ul style="list-style-type: none"> - 0.5 ha of fruit and berry plantations - 0.3 ha of fresh vegetables - 0.2 ha of nursery - 0.01 ha of outdoor flowers, crops under glass or arable land seed - 1 ha of UAA or where agricultural products were produced mainly for sale 		3 head of cattle	10	10	10	100 head of poultry		10 swarms of bees
Finland	<ul style="list-style-type: none"> - A utilized arable land area of at least 1 ha, or - less than 1 ha of arable land used for horticultural production 							At least 1 animal unit of livestock	
Germany	<ul style="list-style-type: none"> - 5 hectares of utilized agricultural area - 0.5 ha of hops or tobacco or of area for fruit growing, under vines or tree nurseries; or of outdoor vegetable or strawberry cultivation - 1.0 ha of permanent outdoor crops - 0.3 ha of outdoor flower or ornamental plant cultivation - 0.1 ha of crops under glass or other accessible protective cover or mushroom 		10 head of cattle	20	20	50 pigs 10 breeding sows	1 000		
Greece	1 stremma (or 0.1 ha) of UAA or half a stremma (0.05 ha) of greenhouses		2					<ul style="list-style-type: none"> - 1 or more cows or 2 or more other "large animals" of any type and age (such as horses, donkeys, mules) - 20 or more hives of "domestic" or "European" bees 	
Hungary	<ul style="list-style-type: none"> - 1 500 m² of productive land area (including jointly or severally arable land, kitchen garden, orchard, vineyard, meadow, pasture, forest, fish-pond, reed) - 500 m² of orchards or vineyards, jointly or severally (at least 400 m² of fruit trees and 200 m² of berries or vines), or - 100 m² land area under cover, or 50 m² mushroom area 		1 head of cattle/buffalo	1	1	1	<ul style="list-style-type: none"> - 1 ostrich - 50 head of poultry - 25 head of rabbits, furred animals, pigeons for slaughter, or 5 bee colonies 	1 head of big animals (horses, emus, donkeys)	
Iceland									The minimum threshold of agricultural activity in the EU definition of an agricultural holding

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Italy	From 0.2 to 0.4 ha, depending on region								Animals or their products, totally or partially intended for marketing
Latvia	UAA – 1 ha and more								Standard Output (SO) – more than EUR 70
Lithuania	1 ha of UAA was used								For the agricultural holdings that operate less than 1 ha of utilized agricultural land, the threshold for the income obtained from agricultural production sales was at least LTL 5 000 per year (approximately EUR 1 448). The small farms with less than 1 ha of utilized agricultural land and income less than LTL 5 000 per year
Luxembourg	<ul style="list-style-type: none"> – 3 ha of UAA – 0.25 ha of fresh vegetables, melons and strawberries, flowers and ornamental plants – 0.30 ha of fruit and berry plantations – 0.50 ha of nurseries, or – 0.10 ha of vineyards 		20	20	50	1 000 laying hens or other poultry, or 1 000 rabbits	10 horses/donkeys or 10 bovines		
Montenegro	1 000 m ² of agricultural land			5 adult sheep	5 adult goats	3 adult pigs	50 head of adult poultry, or 20 beehives.	<ul style="list-style-type: none"> – 1 cow and 1 calf or, 1 cow and 1 heifer, or 1 cow and 2 adult head of small stock – 4 adult head of sheep or goats or pigs together 	<ul style="list-style-type: none"> – Where agricultural production was the only source of income, or – Engaged only in the cultivation of mushrooms in special buildings (cellars or tunnels)
Netherlands									EUR 3 000 SO ("extended size calculation")
North Macedonia	1 000 m ² of agricultural area			5 adult sheep	5 adult goats	3 adult pigs	50 head of adult poultry, or 20 beehives	<ul style="list-style-type: none"> – 1 cow and 1 calf – 1 cow and 1 heifer – 1 cow and 2 adult heads of small livestock, or – 4 adult sheep or goats and pigs together 	
Norway	<ul style="list-style-type: none"> – 0.5 ha of UAA, arable land, permanent grass land, permanent crops – 0.1 ha of permanent outdoor crops included strawberries – 0.2 ha of fresh vegetables, which are outdoors – 0.03 ha of fresh vegetables or flowers and ornamental plants under glass or other accessible protective cover, or – 0.1 ha of nurseries (except nurseries for forest trees) 	10 bovines	20 sheep over 1 year of age	10 goats over 1 year of age	50 pigs	1 000 poultry or 25 beehives	5 breeding sows		

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Poland	<ul style="list-style-type: none"> - At least 1 ha of agricultural area - Less than 1 ha of agricultural area if they have at least: 0.5 ha fruit tree plantations, field fruit shrub plantations, field vegetables and strawberries or hops, 0.3 ha ornamental plants and orchard nurseries, or 0.1 ha vegetables and strawberries under cover or flowers and ornamental plants under cover or tobacco 		10 head total of cattle, or 5 cows	20 sheep	20	50 pigs, or 10 sows	100 head of poultry, or 5 horses		
Portugal	1 ha of UAA for the Mainland, but fulfilling a minimum area (or production) for specific crops							Production in the reference year of livestock above the established threshold	Existence on the day of the interviewer's visit: for the autonomous regions, lower thresholds were applied, i.e. the minimum UAA being 0.1 ha
Republic of Moldova	<ul style="list-style-type: none"> - 10 acres (0.1 ha) of agricultural land, or - 1 are (100 m²) of land under greenhouses 		1 head of cattle	1 sheep	1 goat	1 pig	20 head of poultry		
Romania							10		<ul style="list-style-type: none"> - Units having only unutilized agricultural area - Units with a UAA comprising only kitchen gardens with a total area of less or equal to 15 acres (0.15 ha)
Russian Federation	<ul style="list-style-type: none"> - 1 ha of sown area of agricultural crops; not having agricultural crops - For the households engaged in agricultural production, a threshold of 4 acres (0.04 ha) was established 		More than 3 head of cows	15 head of sheep	15 goats	3 head of cows, or more than 20 head of pigs	30 head of poultry	10 heads of livestock 3 heads of horses	For households engaged in agricultural production, a threshold of 4 acres (0.04 ha) was established
Serbia	<ul style="list-style-type: none"> - Cultivates (uses) 50 or more acres (0.5 ha) of agricultural land for agricultural production, whether such production is intended for the market or not, or - Cultivates (uses) less than 50 acres (0.5 ha) of agricultural land, but practises intensive crop farming, fruit-growing, viticulture, growing of vegetables and flowers, production of mushrooms and livestock raising, i.e. engages in other forms of agricultural production intended for the market 		2 head of cattle, or 1 head of cattle and 2 head of small animals (pig, goat, sheep), in total	5	5	3	50 head of poultry, or 20 colonies of bees	4 head of small animals (pig, goat, sheep), in total	

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
Slovakia	<ul style="list-style-type: none"> - Area of at least 1 ha, or area of vineyards, orchards or nurseries of at least 0.5 ha, or - Area of tobacco, hops, vegetables, flowers, melons, strawberries and areas under protective cover of at least 0.1 ha 		1 head of cattle	5 sheep	5 goats	3 pigs	100 head of poultry		
Slovenia	<ul style="list-style-type: none"> - At least 1 ha of UAA, or less than 1 ha of UAA, but: - at least 0.1 ha of UAA and 0.9 ha of forest - at least 0.3 ha of vineyards and/or orchards - 0.15 to 0.3 ha of vineyards/orchards and 1 or 2 LSUs 							<ul style="list-style-type: none"> - 2 or more LSUs - 50 beehives 	Market producers of vegetables, herbs, strawberries, mushrooms, flowers or ornamental plants
Spain	<ul style="list-style-type: none"> - 1 ha of UAA - 0.2 ha of UAA used for fresh vegetables, melons and strawberries; flowers and ornamental plants (outdoors or under low protective cover); irrigated fruit, berry and citrus plantations; nurseries; or under glass crops; or - 0.1 ha of UAA used for under-glass fresh vegetables, melons and strawberries; under glass flowers and ornamental plants; or - 0.5 ha of UAA used for tobacco, hops or cotton 								1 livestock units (LSU) and a total standard output (TSO) equal to or greater than 0.75 of the economic size (ES) of holdings
Sweden	<ul style="list-style-type: none"> - 2 ha arable land - 5 ha agricultural land - 200 m² under glass - 2 500 m² outdoor horticultural cultivation 		10 head of cattle			10 sows or 50 pigs	1 000 head of poultry	20 ewes	
Switzerland	<ul style="list-style-type: none"> - 1 ha of UAA - 0.3 ha of permanent crops - 0.1 ha of greenhouses 					8 breeding sows or 80 fattening pigs	300 head of poultry of any type		
United Kingdom of Great Britain and Northern Ireland	<ul style="list-style-type: none"> - 5 ha of UAA, or 1 ha orchards/permanent crops; 1 ha hardy nursery stock; 0.5 ha vegetables grown in the open; 0.1 ha glasshouse for flowers, vegetables or fruit 		10 head of cattle	20	20	50 pigs or 10 breeding sows	1 000		For Northern Ireland, the threshold was applied so that the population surveyed included all active farm businesses having 1 ha or more of farmed land, whether owned, leased or taken in conacre, and those with less than 1 ha having any cattle, sheep or pigs or "significant poultry or horticultural activity"

Table A1.8. Minimum thresholds for inclusion of holdings used in the WCA 2010 round

Countries by region	Land	Trees	Cattle/buffalo/camels	Sheep	Goats	Pigs	Poultry	Other livestock	Other
OCEANIA (4)									
Guam									Agricultural holdings in which USD 1 000 or more of agricultural products were produced and sold, or normally would have been sold, during the 12-month period between 1 January and 31 December 2007
Niue	One eighth of an acre (0.05 ha) of any crop	20 coconuts, banana trees or other crops							
Northern Mariana Islands									Agricultural holdings in which USD 1 000 or more of agricultural products were produced and sold, or normally would have been sold, during the 12-month period between 1 January and 31 December 2007
Samoa	One eighth of an acre (0.05 ha) of any crop	20 coconuts, banana trees or other trees							

Table A1.9. Coverage of core items in the WCA 2010 round

Countries by region	Census core items																
	01	02	03	04	05	06	07	08	09	10	11	12.a	12.b	13	14	15	16
	Identification and location	Legal status	Sex of holder	Age of holder	Household size	Main purpose of production	Area according to land use	Total area	Land tenure	Presence of irrigation	Temporary crops	Permanent crops	Whether in compact plantations	Number of animals	Presence of aquaculture	Presence of forest	Other economic production activities
AFRICA (22)																	
Botswana	✓		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓			✓
Burkina Faso	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cabo Verde	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Congo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Côte D'Ivoire	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Egypt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Equatorial Guinea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Eswatini	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Gambia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lesotho	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Malawi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mauritius	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mozambique	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Namibia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Niger	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Réunion	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Senegal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Seychelles	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
South Africa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United Republic of Tanzania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Togo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Uganda	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Africa	22	14	22	22	20	16	20	22	17	21	22	22	21	22	16	16	16
AMERICAS (28)																	
Antigua and Barbuda	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Argentina	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Belize	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table A1.9. Coverage of core items in the WCA 2010 round

Countries by region	Census core items																
	01	02	03	04	05	06	07	08	09	10	11	12.a	12.b	13	14	15	16
	Identification and location	Legal status	Sex of holder	Age of holder	Household size	Main purpose of production	Area according to land use	Total area	Land tenure	Presence of irrigation	Temporary crops	Permanent crops	Whether in compact plantations	Number of animals	Presence of aquaculture	Presence of forest	Other economic production activities
Bolivia (Plurinational State of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Brazil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Canada	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chile	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Colombia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Costa Rica	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
El Salvador	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
French Guiana	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grenada	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guadeloupe	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Haiti	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jamaica	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Martinique	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mexico	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nicaragua	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Panama	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paraguay	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Puerto Rico	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Saint Lucia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Suriname	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United States of America	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United States Virgin Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Uruguay	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Venezuela (Bolivarian Republic of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal North America	28	28	27	27	27	28	28	28	28	27	28	28	28	28	22	25	20

Table A1.9. Coverage of core items in the WCA 2010 round

Countries by region	Census core items																	
	01	02	03	04	05	06	07	08	09	10	11	12.a	12.b	13	14	15	16	
	Identification and location	Legal status	Sex of holder	Age of holder	Household size	Main purpose of production	Area according to land use	Total area	Land tenure	Presence of irrigation	Temporary crops	Permanent crops	Whether in compact plantations	Number of animals	Presence of aquaculture	Presence of forest	Other economic production activities	
ASIA (29)																		
Armenia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Azerbaijan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bangladesh	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bhutan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cambodia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
China	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cyprus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Georgia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
India	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indonesia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iran (Islamic Republic of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Japan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jordan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kazakhstan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Republic of Korea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lao People's Democratic Republic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lebanon	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mongolia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Myanmar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nepal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oman	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pakistan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Palestine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Philippines	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Saudi Arabia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sri Lanka	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tajikistan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

 **Table A1.9. Coverage of core items in the WCA 2010 round**

Countries by region	Census core items																
	01	02	03	04	05	06	07	08	09	10	11	12.a	12.b	13	14	15	16
	Identification and location	Legal status	Sex of holder	Age of holder	Household size	Main purpose of production	Area according to land use	Total area	Land tenure	Presence of irrigation	Temporary crops	Permanent crops	Whether in compact plantations	Number of animals	Presence of aquaculture	Presence of forest	Other economic production activities
Thailand	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Viet Nam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Asia	29	26	28	28	29	26	28	29	27	28	29	29	28	28	24	21	14
EUROPE (36)																	
Albania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Austria	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Belgium	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bulgaria	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Croatia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Czechia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Denmark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Estonia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Finland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
France	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Germany	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Greece	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hungary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iceland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ireland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Italy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Latvia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lithuania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Luxembourg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Malta	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Montenegro	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Netherlands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
North Macedonia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Norway	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

 **Table A1.9. Coverage of core items in the WCA 2010 round**

Countries by region	Census core items																
	01	02	03	04	05	06	07	08	09	10	11	12.a	12.b	13	14	15	16
	Identification and location	Legal status	Sex of holder	Age of holder	Household size	Main purpose of production	Area according to land use	Total area	Land tenure	Presence of irrigation	Temporary crops	Permanent crops	Whether in compact plantations	Number of animals	Presence of aquaculture	Presence of forest	Other economic production activities
Portugal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Republic of Moldova	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Romania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Russian Federation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Serbia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slovakia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slovenia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Spain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sweden	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Switzerland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United Kingdom of Great Britain and Northern Ireland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Europe	36	36	36	36	35	35	36	36	36	33	36	36	33	36	35	34	36
OCEANIA (12)																	
American Samoa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Australia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cook Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fiji	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
New Zealand	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Niue	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Northern Mariana Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Palau	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Samoa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tonga	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vanuatu	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Oceania	12	11	10	10	10	11	11	12	10	6	11	11	11	12	7	8	4
TOTAL	127	115	123	123	121	116	123	127	118	115	126	126	121	126	104	104	90

Table A1.10. Coverage of census themes in the WCA 2010¹

Countries by region	Census themes											
	Theme 1 Land	Theme 2 Irrigation and water management	Theme 3 Crops	Theme 4 Livestock	Theme 5 Agricultural practices	Theme 6 Agricultural services	Theme 7 Demography and social characteristics	Theme 8 Farm labour	Theme 9 Household food security	Theme 10 Aquaculture	Theme 11 Forestry	Theme 12 Management of the holding
AFRICA (22)												
Botswana	✓	✓	✓	✓	✓	✓	✓	✓				
Burkina Faso	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Cabo Verde	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Congo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Côte d'Ivoire	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Egypt	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Equatorial Guinea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Eswatini	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Gambia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Lesotho	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Malawi	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mauritius	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mozambique	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Namibia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Niger	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Réunion	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Senegal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Seychelles	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
South Africa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
United Republic of Tanzania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Togo	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Uganda	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Africa	22	21	22	22	22	16	22	19	8	16	16	5
AMERICAS (28)												
Antigua and Barbuda	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Argentina	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Belize	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

¹ A theme is considered to be covered by a country if at least one item from that theme was included in the census questionnaire.

 **Table A1.10. Coverage of census themes in the WCA 2010¹**

Countries by region	Census themes											
	Theme 1 Land	Theme 2 Irrigation and water management	Theme 3 Crops	Theme 4 Livestock	Theme 5 Agricultural practices	Theme 6 Agricultural services	Theme 7 Demography and social characteristics	Theme 8 Farm labour	Theme 9 Household food security	Theme 10 Aquaculture	Theme 11 Forestry	Theme 12 Management of the holding
Bolivia (Plurinational State of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Brazil	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Canada	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Chile	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Colombia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Costa Rica	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
El Salvador	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
French Guiana	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Grenada	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guadeloupe	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Haiti	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jamaica	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Martinique	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mexico	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nicaragua	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Panama	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Paraguay	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Puerto Rico	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Saint Lucia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Suriname	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United States of America	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United States Virgin Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Uruguay	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Venezuela (Bolivarian Republic of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Americas	28	27	28	28	27	22	28	25	2	22	25	8
ASIA (29)												
Armenia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Azerbaijan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bangladesh	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table A1.10. Coverage of census themes in the WCA 2010¹

Countries by region	Census themes											
	Theme 1 Land	Theme 2 Irrigation and water management	Theme 3 Crops	Theme 4 Livestock	Theme 5 Agricultural practices	Theme 6 Agricultural services	Theme 7 Demography and social characteristics	Theme 8 Farm labour	Theme 9 Household food security	Theme 10 Aquaculture	Theme 11 Forestry	Theme 12 Management of the holding
Bhutan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cambodia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
China	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cyprus	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Georgia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
India	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Indonesia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iran (Islamic Republic of)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Japan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Jordan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Kazakhstan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Republic of Korea	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lao People's Democratic Republic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lebanon	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Mongolia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Myanmar	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Nepal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Oman	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Pakistan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Palestine	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Philippines	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Saudi Arabia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sri Lanka	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tajikistan	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Thailand	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Viet Nam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Asia	29	29	29	29	26	16	28	22	7	24	21	6
EUROPE (36)												
Albania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Austria	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table A1.10. Coverage of census themes in the WCA 2010¹

Countries by region	Census themes											
	Theme 1 Land	Theme 2 Irrigation and water management	Theme 3 Crops	Theme 4 Livestock	Theme 5 Agricultural practices	Theme 6 Agricultural services	Theme 7 Demography and social characteristics	Theme 8 Farm labour	Theme 9 Household food security	Theme 10 Aquaculture	Theme 11 Forestry	Theme 12 Management of the holding
Belgium	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Bulgaria	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Croatia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Czech Republic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Denmark	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Estonia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Finland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
France	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Germany	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Greece	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Hungary	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Iceland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Ireland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Italy	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Latvia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Lithuania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Luxembourg	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Malta	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Republic of Moldova	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Montenegro	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Netherlands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
North Macedonia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Norway	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Poland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Portugal	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Romania	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Russian Federation	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Serbia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slovakia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Slovenia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

 **Table A1.10. Coverage of census themes in the WCA 2010¹**

Countries by region	Census themes											
	Theme 1 Land	Theme 2 Irrigation and water management	Theme 3 Crops	Theme 4 Livestock	Theme 5 Agricultural practices	Theme 6 Agricultural services	Theme 7 Demography and social characteristics	Theme 8 Farm labour	Theme 9 Household food security	Theme 10 Aquaculture	Theme 11 Forestry	Theme 12 Management of the holding
Spain	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sweden	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Switzerland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
United Kingdom of Great Britain and Northern Ireland	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Europe	36	33	36	36	36	15	36	36	0	35	34	1
OCEANIA (12)												
American Samoa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Australia	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cook Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fiji	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Guam	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
New Zealand	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Niue	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Northern Mariana Islands	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Palau	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Samoa	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Tonga	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vanuatu	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Subtotal Oceania	12	6	11	12	10	5	10	7	1	7	8	1

Annex 2

Detailed tables related to international comparison tables

Table A2.1. Trends in number and total area of holdings since the WCA 1930 round

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
WORLD TOTAL (119)									
AFRICA (20)									
Algeria	Number of holdings				899 545			1 023 799	
	Total area				5 544 145			8 458 680	
Angola	Number of holdings				1 067 230				
	Total area				4 179 600				
Benin	Number of holdings						408 020		
	Total area								
Botswana	Number of holdings				48 014	84 660	101 434	51 264	63 246
	Total area				228 209	204 500	322 200	96 840	259 656
Burkina Faso	Number of holdings						886 638		1 330 015
	Total area						3 472 480		5 553 026
Cameroon	Number of holdings				925 895				
	Total area				1 489 758				
Cabo Verde	Number of holdings					25 072	32 193	44 506	45 539
	Total area					36 732	41 383	44 359	36 456
Central African Republic	Number of holdings			231 500	283 450	303 901			
	Total area			450 800	491 465	272 419			
Comoros	Number of holdings							52 464	
	Total area							3 570	
Democratic Republic of the Congo	Number of holdings				2 537 502		4 479 600		
	Total area				5 896 181		2 387 700		
Congo	Number of holdings				143 485	143 235			267 610
	Total area				196 774	141 705			...
Côte d'Ivoire	Number of holdings				549 708			1 117 667	1 407 451
	Total area				2 753 491			4 351 663	3 344 241
Djibouti	Number of holdings						1 135		
	Total area								
Egypt	Number of holdings	1 213 915	1 003 023	1 642 160		2 864 412	3 475 502	4 541 884	5 404 395
	Total area	3 125 688	2 580 940	2 614 090		2 786 166	3 297 281	3 750 699	4 086 930
Eswatini ¹	Number of holdings				39 377	53 368	73 745		108 164
	Total area				766 775	629 205			
Ethiopia	Number of holdings					4 797 300	6 091 840	10 758 597	
	Total area					6 862 200	4 871 020	11 047 249	
Gabon	Number of holdings				71 074				
	Total area				72 738				
Gambia	Number of holdings							69 140	82 027
	Total area							304 856	343 949
Ghana	Number of holdings				805 200	1 849 800			
	Total area				2 574 200				
Guinea	Number of holdings						442 168	840 454	
	Total area						895 620	1 370 145	
Guinea-Bissau	Number of holdings			86 951			84 221		
	Total area			262 570			96 375		
Kenya	Number of holdings			521 009	1 486 639	2 750 013			
	Total area			6 118 725	6 131 776	6 922 060			

¹ Former Swaziland.

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
Lesotho	Number of holdings			161 000	187 421		229 300	337 795	381 731
	Total area			352 754	372 342		331 000		520 423
Liberia	Number of holdings				121 745				
	Total area				365 673				
Libya	Number of holdings			145 518	160 999		175 528	176 658	
	Total area			3 868 728	2 088 383		2 495 906	1 809 596	
Madagascar	Number of holdings			882 000		1 543 537		2 428 492	
	Total area			917 000		2 043 783		2 083 590	
Malawi	Number of holdings				885 000	1 135 600	1 561 416		2 665 565
	Total area				1 361 400	1 332 000	1 167 240		
Mali	Number of holdings			280 260		519 460		805 194	
	Total area			1 220 529		1 699 593			
Mauritania	Number of holdings					99 644			
	Total area					201 270			
Mauritius	Number of holdings								23 456
	Total area								66 449
Morocco	Number of holdings			1 106 765				1 496 349	
	Total area			10 876 000				8 732 223	
Mozambique	Number of holdings							3 064 715	3 827 797
	Total area							3 925 324	5 633 850
Namibia ²	Number of holdings			5 358			113 616	102 357	162 821
	Total area			61 082 869			300 146	295 632	9 811 517
Niger	Number of holdings					699 332			1 627 294
	Total area					3 406 550			6 534 682
Nigeria	Number of holdings		285 000	308 000					
	Total area								
Réunion	Number of holdings				39 111	20 788	15 198	9 387	
	Total area				77 231	74 034	67 154	43 691	
Rwanda	Number of holdings					1 111 897			
	Total area					1 349 923			
Sao Tome and Principe	Number of holdings						13 822		
	Total area						76 214		
Senegal	Number of holdings			295 400				437 037	755 532
	Total area			1 072 343				1 877 684	3 131 680
Seychelles	Number of holdings			1 143				4 685	530
	Total area			25 624					466
Sierra Leone	Number of holdings				286 137	223 265		1 093 000	
	Total area				520 57	364 029			
South Africa	Number of holdings	95 000	116 848	110 362	90 422				39 966
	Total area	82 803 000	86 920 000	105 944 935	89 297 821				
Togo	Number of holdings			217 000	232 657	262 504		429 534	508 599
	Total area			569 821	328 909	405 756		842 124	1 746 265
Tunisia	Number of holdings			325 800				515 850	
	Total area			5 022 000				5 391 800	
Uganda	Number of holdings			1 171 000			1 704 721	3 833 485	3 945 753
	Total area			2 839 400	3 856 136		3 683 288		


² Namibia – WCA 2000 round: The census covered 6 regions of the country (out of 13), making up the Northern Communal; WCA 2010 round: The census covered the whole communal and commercial sectors of the country.

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
United Republic of Tanzania	Number of holdings				2 424 425		3 872 323	4 901 837	5 839 529
	Total area				3 069 950		10 764 000	11 997 071	15 756 174
Zambia	Number of holdings				767 990		520 520	1 305 783	
	Total area				2 416 187				
Zimbabwe	Number of holdings			437 589					
	Total area			27 981 567					
AMERICAS (22)									
Antigua and Barbuda	Number of holdings			5 747		4 654			
	Total area			13 794		1 949			
Argentina	Number of holdings	435 000	547 000	471 756			378 357	295 485	
	Total area		200 209 000	175 142 497			177 437 398	172 105 798	
Bahamas	Number of holdings					4 246	1 760		
	Total area					36 246	20 336		
Barbados	Number of holdings	5 000	5 000	27 912	26 052		17 178		
	Total area		36 000	34 178	29 945		21 560		
Belize	Number of holdings				10 004	11 011			
	Total area				232 519	253 340			
Bolivia (Plurinational State of)	Number of holdings								871 927
	Total area								34 654 984
Brazil	Number of holdings	648 000	2 064 000	3 338 000	4 905 642	5 159 851	5 834 779	4 859 865	5 175 636
	Total area	175 105 000	232 211 000	249 862 142	294 145 466	364 854 421	376 286 577	353 611 246	333 680 037
Canada	Number of holdings	729 000	623 000	481 000	366 128	318 361	280 043	246 923	205 730
	Total area	66 009 000	70 433 000	69 827 959	68 663 191	65 888 916	67 753 700	67 503 924	64 812 723
Chile	Number of holdings			258 657		311 324		316 492	301 269
	Total area		27 712 000	30 644 131		28 771 855		26 502 363	36 439 533
Colombia	Number of holdings		919 000	1 210 000	1 176 811		1 547 846	2 021 895	2 370 099
	Total area		27 748 000	27 337 827	30 993 190		36 033 713	50 705 453	108 993 335
Costa Rica	Number of holdings		43 000	65 000	81 562				93 017
	Total area		1 812 000	2 668 078	3 122 456				2 406 418
Dominica	Number of holdings						9 026		
	Total area						21 146		
Dominican Republic	Number of holdings		275 000	447 000	304 820				
	Total area		2 328 000	2 257 948	2 736 274				
Ecuador	Number of holdings		344 000		519 111			842 882	
	Total area		6 000 000		7 949 403			12 355 831	
El Salvador	Number of holdings		174 000	224 000	318 041				397 433
	Total area		1 530 000	1 559 439	1 451 894				929 308
French Guyana	Number of holdings					2 209	4 491	5 318	
	Total area					7 349	41 553	34 655	
Grenada	Number of holdings					8 202	18 277		9 345
	Total area					13 858	14 164		9 542
Guadeloupe	Number of holdings				22 577	18 957	16 530	12 160	
	Total area				68 714	70 503	53 559	41 700	
Guatemala	Number of holdings		349 000	417 344		531 623		830 684	
	Total area		3 714 000	3 476 326		4 145 624		3 750 855	
Haiti	Number of holdings				616 710				1 018 951
	Total area				863 520				991 287
Honduras	Number of holdings		156 000		195 341		325 750		
	Total area		2 507 404		2 629 859		3 637 469		

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
Jamaica	Number of holdings		68 000	159 000	193 359	183 988		187 791	228 683
	Total area	728 000		692 581	602 659	537 042		407 434	325 810
Martinique	Number of holdings					19 573	16 038	8 039	
	Total area					60 447	50 192	32 041	
Mexico	Number of holdings	858 000	1 383 000	1 365 000	1 020 016		4 437 863		4 067 618
	Total area	131 595 000	145 517 000	169 084 208	139 868 191		183 838 578		68 535 298
Nicaragua	Number of holdings		52 000	102 201				199 549	262 546
	Total area		2 368 000	3 815 932				6 254 514	6 054 869
Panama	Number of holdings		85 000	95 000	115 364	153 194	213 895	236 794	248 560
	Total area		1 159 000	1 806 452	2 098 062	2 258 558	2 941 583	2 769 529	2 698 841
Paraguay	Number of holdings			160 777		248 930	307 221		289 649
	Total area			17 473 474		21 940 531	23 817 737		31 086 894
Peru	Number of holdings			870 000	1 390 877		1 756 141		2 260 973
	Total area			17 772 044	23 545 147		35 381 809		38 742 465
Puerto Rico	Number of holdings	51 000	53 000	46 000	32 687	31 837	20 245	17 659	13 159
	Total area	776 000	725 000	661 244	524 575	426 186	348 530	271 440	236 736
Saint Kitts and Nevis	Number of holdings						3 430	3 066	
	Total area						8 870	6 369	
Saint Lucia	Number of holdings			13 008	10 938		11 551	13 366	9 972
	Total area			35 359	29 138		23 478	20 770	12 223
Saint Vincent and the Grenadines	Number of holdings						8 860	7 380	
	Total area						12 017	7 199	
Suriname	Number of holdings			16 000	16 078	22 103			10 234
	Total area			105 832	93 833	164 790			63 989
Trinidad and Tobago	Number of holdings		31 000	35 796		30 563		19 111	
	Total area		168 000	214 990		132 346		84 990	
United States of America	Number of holdings	6 295 000	5 388 000	3 710 000	2 730 250	2 478 642	2 087 759	2 128 982	2 109 303
	Total area	400 679 000	470 498 000	454 661 045	430 321 437	416 707 081	390 311 617	379 712 151	370 096 212
United States Virgin Islands	Number of holdings		755	501	212	378	267	191	219
	Total area	28 000	26 000	17 831	8 284	9 873	7 197	3 710	2 376
Uruguay	Number of holdings	75 000	85 000	87 000	77 163	68 362	54 819	57 131	44 781
	Total area	16 745 000	16 974 000	16 988 408	16 517 730	16 024 656	15 681 804	16 419 683	16 357 298
Venezuela (Bolivarian Republic of)	Number of holdings	218 000	235 000	320 094	287 919	381 276		500 979	502 676
	Total area	23 372 000	22 127 000	26 004 862	26 470 134	31 278 155		30 071 192	27 073 879
ASIA (29)									
Afghanistan	Number of holdings							3 044 670	
	Total area								
Armenia	Number of holdings								361 064
	Total area								534 399
Azerbaijan	Number of holdings							1 287 385	1 352 121
	Total area							2 341 000	2 362 024
Bahrain	Number of holdings				855	806			
	Total area				3 702	3 538			
Bangladesh	Number of holdings			6 464 400		6 852 558		28 191 544	15 183 183
	Total area			8 792 008		8 886 780		9 782 409	9 026 516
Bhutan	Number of holdings								
	Total area							105 938	94 903

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
Brunei Darussalam	Number of holdings			6 306					
	Total area			32 487					
Cambodia	Number of holdings								2 129 149
	Total area								3 286 713
China	Number of holdings							193 445 894	200 554 307
	Total area							130 039 200	
Cyprus	Number of holdings					44 522	52 089	45 199	38 860
	Total area					201 094	177 760	197 128	137 760
Georgia	Number of holdings							729 542	642 209
	Total area							886 766	842 289
India	Number of holdings		61 780 000	48 882 000	70 493 000	81 569 000	106 637 000	119 894 000	138 348 000
	Total area		135 856 000	131 873 000	162 124 000	163 343 000	165 507 000	159 394 000	159 592 000
Indonesia	Number of holdings			12 237 000	14 375 343	17 628 700	19 713 806	24 868 675	26 135 469
	Total area			14 634 695	16 396 826	19 019 900	17 145 036	19 673 412	
Iran (Islamic Republic of)	Number of holdings			1 877 299			3 602 950	4 332 423	4 032 467
	Total area			11 356 254			15 458 910	17 665 198	16 476 609
Iraq	Number of holdings		125 000	253 000	591 178				
	Total area		6 384 400	8 038 703	5 732 481				
Israel	Number of holdings		17 000		40 210	51 654	25 448		
	Total area		261 000		539 800	584 028	361 080		
Japan	Number of holdings		6 176 000	6 056 000	5 354 074	4 661 384	3 453 550	3 120 215	1 377 266
	Total area		6 195 000	7 141 941	5 388 554	4 772 093	4 282 000	3 734 288	3 451 444
Jordan	Number of holdings				55 548	62 162		92 258	80 152
	Total area				390 403	364 263		306 001	261 508
Kazakhstan	Number of holdings								2 956 306
	Total area								79 725 500
Democratic People's Republic of Korea	Number of holdings								
	Total area								
Kuwait	Number of holdings				449				
	Total area				2 726				
Kyrgyzstan	Number of holdings							1 130 855	
	Total area							1 306 787	
Lao People's Democratic Republic	Number of holdings							668 000	782 800
	Total area							1 047 700	1 870 200
Lebanon	Number of holdings			127 123	142 811			194 829	169 512
	Total area			304 014	619 627			373 600	230 994
Malaysia	Number of holdings							526 265	
	Total area							533 914	
Mongolia	Number of holdings							250 000	
	Total area								802 169
Myanmar	Number of holdings						2 924 898	3 464 769	5 426 083
	Total area						6 886 956	8 721 115	13 328 844
Nepal	Number of holdings				1 721 546	2 193 956	2 736 050	3 364 139	3 831 093
	Total area				1 654 022	2 463 717	2 598 971	2 654 037	2 525 639
Oman	Number of holdings					83 204			166 610
	Total area					83 360			149 105
Pakistan	Number of holdings			5 691 000	3 761 940	4 069 611	5 071 112	6 620 224	8 264 480
	Total area			19 800 824	19 913 400	19 108 965	19 252 672	20 437 554	21 412 545

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
Palestine	Number of holdings								111 310
	Total area								120 706
Philippines	Number of holdings	1 635 000	1 639 000	2 166 000	2 354 469	3 420 323	4 610 041	4 822 739	5 563 138
	Total area	6 691 000	5 727 000	7 772 485	8 493 735	9 749 200	9 974 871	9 670 793	7 271 446
Qatar	Number of holdings							3 553	
	Total area							42 328	
Republic of Korea	Number of holdings			2 332 000	2 421 420	2 157 555	1 768 501	3 269 527	1 088 518
	Total area			4 815 471	2 132 233	2 025 795	1 857 491		1 309 787
Saudi Arabia	Number of holdings				180 670	212 157		242 267	346 829
	Total area				1 213 462	2 135 033		4 046 446	3 421 854
Singapore	Number of holdings				15 741				
	Total area				11 833				
Sri Lanka	Number of holdings			1 170 000	1 645 260	1 816 988		3 264 678	4 353 121
	Total area			1 888 461	2 036 142	1 967 311		1 531 461	2 283 753
Syrian Arab Republic	Number of holdings				524 133	485 691			
	Total area				4 721 383	3 153 436			
Tajikistan	Number of holdings								1 087 298
	Total area								5 002 738
Thailand	Number of holdings		2 112 000	3 214 405		4 018 427	5 647 490	5 792 519	5 911 567
	Total area			11 149 190		14 954 592	19 002 071	18 313 749	18 659 786
Turkey	Number of holdings		2 528 000	3 409 846		3 650 910	4 068 432	3 076 649	
	Total area		19 452 000	17 142 777		22 764 029	23 451 099	18 434 822	
Viet Nam	Number of holdings						9 528 896	10 689 753	10 376 981
	Total area						4 948 302	7 633 882	11 880 117
Yemen	Number of holdings					756 271		1 488 406	
	Total area					1 484 789		1 609 486	
EUROPE (36)									
Albania	Number of holdings						444 300	466 809	321 492
	Total area							1 889 498	371 609
Austria	Number of holdings	396 000	421 000	396 000	362 216	302 579	273 210	199 470	150 170
	Total area	7 616 000	7 717 000	7 683 888	7 490 463	7 325 863	7 217 498	6 804 610	5 847 850
Belgium	Number of holdings	292 000	264 000	268 000	184 005	119 277	87 180	61 710	42 850
	Total area	1 866 000	1 801 000	1 767 447	1 602 864	1 475 140	1 400 364	1 426 780	1 384 880
Bulgaria	Number of holdings								370 490
	Total area								5 260 520
Croatia	Number of holdings							449 896	233 280
	Total area							1 391 622	1 512 410
Czechia	Number of holdings							56 487	22 860
	Total area							5 607 935	5 065 270
Czechoslovakia (Former) ³	Number of holdings		1 210 000		1 472 462	1 391 102	1 245 889		
	Total area		11 643 000		11 874 100	12 788 247	12 790 007		
Denmark	Number of holdings	204 000	207 000	195 000	140 197	122 722	81 267	57 830	41 360
	Total area	3 176 000	3 157 000	3 108 267	2 941 316	3 241 009	3 069 430	2 878 730	3 001 380
Estonia	Number of holdings							83 808	19 610
	Total area							1 705 136	1 241 850
Finland	Number of holdings	240 000	335 000	387 000	297 257	224 721	199 385	81 190	63 870
	Total area	15 534 357	15 306 000	15 959 621	15 150 223	12 800 326	12 338 439	5 865 530	6 250 610

³ Czechoslovakia – Former sovereign state, split in 1993 into the two sovereign states of the Czech Republic and Slovakia.

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
France	Number of holdings	3 966 000		1 899 000	1 587 643	1 262 672	1 016 755	663 810	516 100
	Total area	45 090 000		35 794 300	35 039 217	33 648 959	31 985 606	29 897 670	29 546 440
Germany	Number of holdings		2 052 237	1 761 777	1 074 637	850 006	653 550	471 960	299 130
	Total area		22 190 160	21 381 217	15 236 139	14 487 137	19 179 079	19 097 990	18 387 080
Greece	Number of holdings	953 000	1 000 000	1 156 172	1 047 260	998 876	802 400	817 060	723 060
	Total area	3 880 000	3 606 000	3 673 275	3 586 294		3 609 000	3 875 180	5 461 290
Hungary	Number of holdings		1 213 000		802 892	798 545		966 916	576 810
	Total area		8 000 000		7 476 103	9 303 670		6 448 000	7 102 970
Iceland	Number of holdings								2 590
	Total area								2 560 050
Ireland	Number of holdings	349 000	379 487	360 113	279 450	263 558	170 578	141 530	139 890
	Total area	6 199 000	5 873 000	5 785 332	5 650 000	6 889 230	4 441 755	4 714 970	5 317 860
Italy	Number of holdings	4 196 000		4 294 000	3 607 262	3 270 560	3 023 344	2 590 674	1 620 880
	Total area	64 870 000		26 571 898	25 064 218	23 559 924	22 702 356	19 607 094	17 080 850
Latvia	Number of holdings							180 263	83 390
	Total area							3 586 200	2 879 170
Lithuania	Number of holdings							610 543	199 910
	Total area							3 029 700	3 003 620
Luxembourg	Number of holdings		14 000		7 608	5 173	3 803	2 810	2 200
	Total area		140 000		135 143	130 061	137 653	137 600	137 910
Malta	Number of holdings		14 000	12 000	10 803	12 070		11 959	12 530
	Total area			18 449	15 899	13 969		11 620	12 940
Montenegro	Number of holdings								48 870
	Total area								309 220
Netherlands	Number of holdings	285 000	286 000	300 702	184 613	148 674	127 367	101 550	72 320
	Total area	2 130 000	2 318 000	2 658 297	2 142 597	2 232 126	2 163 472	2 239 290	2 018 620
North Macedonia ⁴	Number of holdings	1 986 000	2 385 000	2 624 000	2 600 140	2 679 581			192 675
	Total area	10 646 000	13 453 657	12 453 440	12 462 422	11 222 124			398 221
Norway ⁵	Number of holdings	209 550	213 441	198 315	154 977	125 302	99 382	70 740	46 620
	Total area	996 418	1 045 564	1 015 795	955 334	953 528	991 077	1 038 246	4 015 620
Poland	Number of holdings			3 601 000	3 398 959		3 783 000	2 933 000	1 506 620
	Total area			22 931 905	16 418 552	31 268 300	31 268 300	19 324 800	16 982 340
Portugal	Number of holdings		853 568		811 656	783 944	598 742	415 969	305 270
	Total area				4 974 157	5 182 902	5 316 161	5 188 955	4 709 130
Republic of Moldova	Number of holdings								902 214
	Total area								2 253 371
Romania	Number of holdings							4 484 893	3 859 040
	Total area							15 707 957	15 695 030
Russian Federation	Number of holdings								23 283 305
	Total area								450 599 500
Serbia	Number of holdings							778 891	631 552
	Total area							2 869 000	5 346 597
Slovakia	Number of holdings							71 038	24 460
	Total area							3 462 427	3 063 000
Slovenia	Number of holdings			194 855	180 228	192 090	156 549	86 465	74 650
	Total area						912 013	950 269	905 990

⁴ The former Yugoslav Republic of Macedonia.

⁵ Norway – WCA 2000 round: the area considered is 'agricultural land';

WCA 2010 round: the area considered is 'total land' = 'agricultural land' + 'forest and other wooded land' + 'other land'.

 **Table A2.1. Trends in number and total area of holdings since the WCA 1930 round**

Countries by region	Data item	1930	1950	1960	1970	1980	1990	2000	2010
Spain	Number of holdings			3 007 626	2 571 059	2 375 327	2 284 944	1 764 456	989 800
	Total area			44 650 089	45 702 620	44 311 769	42 939 208	42 180 951	30 614 170
Sweden	Number of holdings	429 000	378 000	263 000	161 946	115 136		81 410	71 090
	Total area	20 457 000	16 300 000		10 589 946	8 750 648		7 641 890	6 759 760
Switzerland	Number of holdings		229 392		152 859	125 274	108 296		59 070
	Total area				1 292 110	1 271 545	1 283 240		1 163 190
United Kingdom of Great Britain and Northern Ireland	Number of holdings		543 000	467 000	326 698	268 560	244 205	233 250	185 200
	Total area		19 502 000	19 022 873	17 992 312	17 568 330	17 301 000	16 527 630	18 009 980
OCEANIA (12)									
American Samoa	Number of holdings	1 000	2 000	2 000	1 923	1 331	384	7 094	5 840
	Total area		6 000	4 662	4 212	2 428	2 349	7 949	7 690
Australia	Number of holdings	254 000	245 000	252 000	249 485	175 756	129 540	140 516	135 654
	Total area	362 911 000	375 788 000	464 575 646	497 223 700	495 447 000	466 561 000	455 723 000	409 672 625
Cook Islands	Number of holdings						2 188	1 721	1 275
	Total area						2 604	1 029	602
Fiji	Number of holdings				33 521	66 376	95 400		65 037
	Total area				245 332	277 134	591 407		251 859
French Polynesia	Number of holdings						6 223		
	Total area						30 484		
Guam	Number of holdings	2 000	2 000	2 000	1 121	1 999	351	153	104
	Total area		10 000	12 994	10 586	11 582	5 315	667	405
New Caledonia	Number of holdings						10 302	5 574	
	Total area						313 769	289 545	
New Zealand	Number of holdings	85 000	90 000	77 000	62 789	71 505	80 904	70 000	58 071
	Total area	17 550 000	17 465 000	17 813 567	19 030 369	21 237 299	17 489 398	15 640 348	14 393 802
Niue	Number of holdings						450		429
	Total area						2 760		762
Northern Mariana Islands	Number of holdings					299	119	214	256
	Total area					4 932	5 836	952	1 624
Palau	Number of holdings						300		1 179
	Total area						158		
Samoa	Number of holdings						11 099	14 734	15 793
	Total area						67 375	53 382	37 357
Tonga	Number of holdings					10 121		10 328	13 944
	Total area					33 391		27 096	26 874
Vanuatu	Number of holdings						22 000		38 909
	Total area								

Notes:

- The figure in the first column refers to the number of countries covered in the WCA 2010 round in different regions.

Table A2.2. Country area and total area of holdings

Countries by region	Census year	Country area	Total number of holdings	Total area of holdings	
		(1 000 ha)	(1 000 units)	(1 000 ha)	% country area
1	2	3	3	4	5 (=col.4/col.3)
WORLD TOTAL (119)	2006–2015				30
AFRICA (20)					9.0
Botswana	2015	58 173	63	260	0.4
Burkina Faso	2006–2010	27 422	1 330	5 553	20.3
Cabo Verde	2015	403	46	36	9.0
Congo	2014–2015	234 486	268		
Côte d'Ivoire	2014	32 246	1 407	3 344	10.4
Egypt	2009–2010	100 145	5 404	4 087	4.1
Eswatini	2012–2013	1 736	108		
Gambia	2011	1 130	82	344	30.4
Lesotho	2009–2010	3 036	382	520	17.1
Malawi	2006–2007	11 848	2 666		
Mauritius	2014	204	23	66	32.6
Mozambique	2009–2010	79 938	3 828	5 634	7.0
Namibia	2013–2014	82 429	163	9 812	11.9
Niger	2004–2008	126 700	1 627	6 535	5.2
Senegal	2013	19 671	756	3 132	15.9
Seychelles	2011	46	1	0.5	1.0
South Africa	2007	121 909	40		
Togo	2012–2014	5 679	509	1 746	30.7
Uganda	2008–2009	24 155	3 946		
United Republic of Tanzania	2007–2008	94 730	5 840	15 756	16.6
AMERICAS (22)					31.4
Bolivia (Plurinational State of)	2013	109 858	872	34 655	31.5
Brazil	2006	851 577	5 176	333 680	39.2
Canada	2011	987 975	206	64 813	6.6
Chile	2006–2007	75 670	301	36 440	48.2
Colombia	2013	114 175	2 370	108 993	95.5
Costa Rica	2014	5 110	93	2 406	47.1
El Salvador	2007–2008	2 104	397	929	44.2
Grenada	2012	34	9	10	28.1
Haiti	2008–2009	2 775	1 019	991	35.7
Jamaica	2007	1 099	229	326	29.6
Mexico	2007	196 438	4 068	68 535	34.9
Nicaragua	2011	13 037	263	6 055	46.4
Panama	2011	7 532	249	2 699	35.8
Paraguay	2008	40 675	290	31 087	76.4
Peru	2012	128 522	2 261	38 742	30.1
Puerto Rico	2012	887	13	237	26.7
Saint Lucia	2007	62	10	12	19.7
Suriname	2008	16 382	10	64	0.4
United States of America	2012	983 151	2 109	370 096	37.6
United States Virgin Islands	2007	35	0.2	2	6.8

 **Table A2.2. Country area and total area of holdings**

Countries by region	Census year	Country area	Total number of holdings	Total area of holdings	
		(1 000 ha)	(1 000 units)	(1 000 ha)	% country area
1	2	3	3	4	5 (=col.4/col.3)
Uruguay	2011	17 622	45	16 357	92.8
Venezuela (Bolivarian Republic of)	2008	91 205	503	27 074	29.7
ASIA (29)					22.7
Armenia	2014	2 974	361	534	18.0
Azerbaijan	2015	8 660	1 352	2 362	27.3
Bangladesh	2008	14 798	15 183	9 027	61.0
Bhutan	2009	3 839		95	2.5
Cambodia	2013	18 104	2 129	3 287	18.2
China	2006	960 001	200 554		
Cyprus	2010	925	39	138	14.9
Georgia	2014	6 970	642	842	12.1
India	2010-2011	328 726	138 348	159 592	48.5
Indonesia	2013	191 682	26 135		
Iran (Islamic Republic of)	2014	174 515	4 032	16 477	9.4
Japan	2015	37 797	1 377	3 451	9.1
Jordan	2007	8 932	80	262	2.9
Kazakhstan	2006-2007	272 490	2 956	79 726	29.3
Lao People's Democratic Republic	2010-2011	23 680	783	1 870	7.9
Lebanon	2010	1 045	170	231	22.1
Mongolia	2011	156 412		802	0.5
Myanmar	2010	67 659	5 426	13 329	19.7
Nepal	2011-2012	14 718	3 831	2 526	17.2
Oman	2012-2013	30 950	167	149	0.5
Pakistan	2010	79 610	8 264	21 413	26.9
Palestine	2010	602	111	121	20.1
Philippines	2010	30 000	5 563	7 271	24.2
Republic of Korea	2015	10 036	1 089	1 310	13.1
Saudi Arabia	2015	214 969	347	3 422	1.6
Sri Lanka	2013-2014	6 561	4 353	2 284	34.8
Tajikistan	2013	14 138	1 087	5 003	35.4
Thailand	2013	51 312	5 912	18 660	36.4
Viet Nam	2011	33 123	10 377	11 880	35.9
EUROPE (36)					30.5
Albania	2012	2 875	321	372	12.9
Austria	2010	8 388	150	5 848	69.7
Belgium	2010	3 053	43	1 385	45.4
Bulgaria	2010	11 100	370	5 261	47.4
Croatia	2010	8 807	233	1 512	17.2
Czechia	2010	7 887	23	5 065	64.2
Denmark	2010	4 292	41	3 001	69.9
Estonia	2010	4 534	20	1 242	27.4
Finland	2010	33 845	64	6 251	18.5
France	2010	54 909	516	29 546	53.8

 **Table A2.2. Country area and total area of holdings**

Countries by region	Census year	Country area	Total number of holdings	Total area of holdings	
		(1 000 ha)	(1 000 units)	(1 000 ha)	% country area
1	2	3	3	4	5 (=col.4/col.3)
Germany	2010	35 758	299	18 387	51.4
Greece	2010	13 196	723	5 461	41.4
Hungary	2010	9 303	577	7 103	76.4
Iceland	2010	10 300	3	2 560	24.9
Ireland	2010	7 028	140	5 318	75.7
Italy	2010	30 134	1 621	17 081	56.7
Latvia	2010	6 457	83	2 879	44.6
Lithuania	2010	6 529	200	3 004	46.0
Luxembourg	2010	259	2	138	53.2
Malta	2010	32	13	13	40.4
Montenegro	2010	1 381	49	309	22.4
Netherlands	2010	4 154	72	2 019	48.6
North Macedonia	2007	2 571	193	398	15.5
Norway	2010	62 522	47	4 016	6.4
Poland	2010	31 268	1 507	16 982	54.3
Portugal	2009	9 223	305	4 709	51.1
Republic of Moldova	2011	3 385	902	2 253	66.6
Romania	2010	23 840	3 859	15 695	65.8
Russian Federation	2006	1 709 825	23 283	450 600	26.4
Serbia	2012	8 836	632	5 347	60.5
Slovakia	2010	4 903	24	3 063	62.5
Slovenia	2010	2 048	75	906	44.2
Spain	2009	50 594	990	30 614	60.5
Sweden	2010	44 743	71	6 760	15.1
Switzerland	2010	4 129	59	1 163	28.2
United Kingdom of Great Britain and Northern Ireland	2010	24 361	185	18 010	73.9
OCEANIA (12)					52.8
American Samoa	2008	20	6	8	38.5
Australia	2011	774 122	136	409 673	52.9
Cook Islands	2011	24	1	1	2.5
Fiji	2009	1 827	65	252	13.8
Guam	2007	54	0.1		0.8
New Zealand	2012	26 771	58	14 394	53.8
Niue	2009	26	0.4	1	2.9
Northern Mariana Islands	2007	46	0.3	2	3.5
Palau	2015	46	1		
Samoa	2009	284	16	37	13.2
Tonga	2015	75	14	27	35.8
Vanuatu	2007	1 219	39		

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	less than 1	Land size classes (ha)												
						1 - 2	2 - 3	3 - 4	4 - 5	5 - 10	10 - 20	20 - 50	50 - 100	100 - 200	200 - 500	500 - 1 000	1 000 - 2 500	2 500 and over
WORLD TOTAL (105)																		
AFRICA (12)																		
Burkina Faso	2006-2010	Cultivated area	Number of holdings	1 329 439	226 536	171 520	171 520	171 520	171 520	262 004	75 144	13 901	471					
		Cultivated area	Cultivated area	5 522 566	97 070	582 040	582 040	582 040	582 040	1 854 264	1 031 929	394 806	32 462					
	2015	Total Area	Number of holdings	45 539	34 513	1 168	1 168	1 168	1 168	380	90	23	7	1	3			
		Total Area	Total Area	36 456	11 383	3 206	3 206	3 206	3 206	2 475	1 166	616	434	108	862			
Congo	2014	Total Area	Number of holdings	267 419	145 268	63 257	28 684	8 964	8 067	7 080	3 454							
		Total Area	Cultivated area	422 431	34 535	75 466	61 672	19 584	17 625	42 437	83 389							
Egypt	2009-2010	Total Area	Number of holdings	5 404 395	4 389 968	623 709	199 853	46 918	34 529	74 523	25 153	6 974	731	1 462	577			
		Total Area	Total Area	4 086 930	1 141 098	737 389	447 012	156 836	151 262	447 011	297 124	169 213	51 699	103 398	384 889			
Lesotho	2009-2010	Agricultural land	Number of holdings	217 748	98 720	69 321	27 133	22 575										
		Agricultural land	Total Area	514 606	454 242	54 098	5 974	292										
Malawi	2006-2007	Total Area	Number of holdings	2 665 565	1 945 863	506 457	213 245											
		Total Area	Total Area	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mauritius	2014	Total Area	Number of holdings	23 343	17 281	4 535	782	365	105	200	76							
		Total Area	Cultivated area	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Mozambique	2009-2010	Total Area	Number of holdings	3 827 797	1 415 186	1 369 816	580 475	246 032	100 948	99 630	4 344	844	62	22	24	6		
		Total Area	Total Area	5 633 850														
Namibia ¹	2013-2014	Communal farms Land	Number of holdings	159 484	14 884	12 148	10 856	10 856	10 856	40 974	58 909							
		Communal farms Land	Total Area	463 248														
Seychelles	2011	Total Area	Number of holdings	530	355	129	48											
		Total Area	Total Area	466	160	167	141											
Togo	2012-2014	Total Area	Number of holdings	508 599	80 988	96 677	88 389	59 231	59 231	89 465	32 244							
		Total Area	Total Area	1 683 162	648 674	175 413	80 461	47 556	47 556	161 408	522 092							
United Republic of Tanzania	2007-2008	Total Area	Number of holdings	5 839 529	1 831 558	1 668 498	1 045 917	353 030	369 381	571 142								
		Total Area	Total Area	15 756 174														
AMERICAS (22)																		
Bolivia (Plurinational State of)	2013	Total Area	Number of holdings	871 927	240 741	110 819	74 162	52 793	39 047	116 701	95 167	69 401	39 890	12 887	9 833	5 503	3 111	1 872
		Total Area	Total Area	34 654 984	79 727	147 508	170 970	173 497	166 953	8 799 698	1 243 908	2 048 769	2 370 734	1 635 679	3 017 517	3 306 785	4 914 112	6 579 127
Brazil	2006	Total Area	Number of holdings	5 175 636	861 856	442 163	335 007	256 148	215 988	636 344	736 788	843 920	390 882	219 432	150 698	54 158	32 242	
		Total Area	Total Area	333 680 037	264 829	563 889	102 214 161	826 226	947 784	4 464 892	10 289 758	26 120 877	26 483 343	29 218 870	46 384 925	37 240 391	48 640 082	

1 In Namibia, the area of commercial holdings was excluded.

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)												
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1 000	1 000 – 2 500 and over
Canada	2011	Total Area	Number of holdings	205 730	3 248	11 667	3 248	3 248	1 363	6 814	13 627	32 202	37 481	32 622	34 071	19 327	6 814
		Total Area	Total Area	64 812 723	5 688	24 541 210	5 687	5 687	18 723	21 244	46 139	187 229	978 983	2 597 198	4 650 934	10 617 942	13 283 196
Chile	2006–2007	Total Area	Number of holdings	280 484	36 524	21 244	22 674	21 244	21 244	46 139	42 611	36 965	14 911	8 149	5 677	2 056	1 048
		Total Area	Total Area	29 781 691	17 923	52 450	20 795 394	52 450	52 450	325 200	595 899	1 145 153	1 028 222	1 125 248	1 736 509	1 414 035	1 440 758
Colombia	2013	Total Area	Number of holdings	2 370 099	333 858	333 857	333 857	333 857	333 857	253 349	82 088	246 114	60 394	11 907	35 720	5 448	5 842
		Total Area	Total Area	108 993 335	432 070	432 069	432 069	432 069	1 801 601	1 789 241	5 367 724	4 217 217	2 357 419	7 072 256	3 794 994	80 432 535	
Costa Rica	2014	Total Area	Number of holdings	93 017	16 798	11 356	8 673	6 089	5 556	14 453	10 034	4 774	2 383	2 146			
		Total Area	Total Area	2 406 418	8 653	14 503	19 701	19 782	23 611	98 631	145 027	306 568	324 889	316 388	1 128 666		
El Salvador	2007–2008	Total Area	Number of holdings	397 433	148 780	126 232	33 482	33 482	9 832	22 090	10 110	7 121	4 128	1 435	741		
		Total Area	Total Area	929 308													
Grenada	2012	Total Area	Number of holdings	9 345													
		Total Area	Total Area	9 542	1 907	1 596	868	868	281	1 403	516	2 102					
Haiti	2008–2009	Total Area	Number of holdings	1 018 951	665 997	200 777	99 313	34 974	9 901	5 944	2 045						
		Total Area	Total Area	949 752	322 201	242 884	173 374	107 109	43 202	39 420	21 561						
Jamaica	2007	Total Area	Number of holdings	228 683	180 000	10 933	10 933	10 933	10 933	2 922	855	766	170	100	140		
		Total Area	Total Area	325 810	47 712	21 503	21 503	21 503	21 503	19 721	12 777	18 295	11 742	13 707	115 854		
Mexico	2007	Total Area	Number of holdings	4 067 618	898 377	898 375	323 591	320 729	320 729	314 688	629 375	217 392	78 004	6 953	20 859	34 765	3 783
		Total Area	Total Area	68 535 298	988 357	19 857 657	1 152 732	1 152 732	3 247 642	6 495 285	6 867 598	5 626 467	1 795 942	5 390 826	8 984 710	5 985 998	
Nicaragua	2011	Total Area	Number of holdings	262 546	58 903	31 989	20 984	15 304	9 625	31 875	27 724	35 901	16 889	7 860	5 493		
		Total Area	Total Area	6 054 869	28 538	45 881	55 721	53 357	50 994	234 736	430 940	1 099 790	1 088 671	961 726	2 004 515		
Panama	2011	Total Area	Number of holdings	248 560	120 375	27 484	17 054	10 646	6 868	20 095	17 757	16 289	7 184	3 051	1 369	294	94
		Total Area	Total Area	2 698 841	14 320	31 312	174 319	32 823	28 030	130 762	232 960	485 640	474 737	396 350	377 283	189 564	130 744
Paraguay	2008	Total Area	Number of holdings	289 649	16 361	25 411	25 411	25 411	25 411	66 218	57 735	22 865	6 879	5 234	5 251	2 737	1 291
		Total Area	Total Area	31 086 894	6 883	57 780	57 780	57 780	57 780	416 702	685 381	619 986	459 555	699 257	1 600 537	1 810 119	2 700 199
Peru	2012	Total Area	Number of holdings	2 260 973	879 309	430 877	240 694	154 291	96 710	218 564	118 274	75 435	23 363	23 455			
		Total Area	Total Area	38 742 465	304 633	536 481	531 380	491 510	404 748	1 418 311	1 522 078	2 172 245	1 519 797	29 841 281			
Puerto Rico	2012	Total Area	Number of holdings	13 159	1 307	1 305	1 305	1 285	715	2 568	2 376	1 125	733	421			
		Total Area	Total Area	236 736	2 162	2 163	2 163	2 407	3 954	17 643	28 756	36 031	49 612	91 846			
Saint Lucia	2007	Total Area	Number of holdings	9 972	6 408	1 878	578	578	76	378	51	24					
		Total Area	Total Area	12 223	1 765	2 194	1 472	1 472	409	2 044	709	2 159					
Suriname	2008	Total Area	Number of holdings	10 234	5 024	2 125	1 008	531	381	598	293	150	60	23	25	16	
		Total Area	Total Area	63 989													
United States of America	2012	Total Area	Number of holdings	2 109 303	37 272	62 121	62 121	62 121	36 847	184 234	368 468	442 628	320 655	212 717	168 274	151 845	
		Total Area	Total Area	370 096 212	67 234	112 056	112 056	112 056	382 102	3 821 023	14 641 783	22 211 867	29 792 366	52 668 920	244 274 235		

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	less than 1	Land size classes (ha)															
						1-2	2-3	3-4	4-5	5-10	10-20	20-50	50-100	100-200	200-500	500-1 000	1 000-2 500 and over				
United States Virgin Islands	2007	Total Area	Number of holdings	219	72	35	26	19	9	26	12	20									
		Total Area	Total Area	2 376	42	49	155	135													
Uruguay	2011	Total Area	Number of holdings	44 781	1 007	1 007	1 007	1 007	1 007	4 225	4 900	6 883	5 720	5 569	6 496	3 847	2 976	1 135			
		Total Area	Total Area	16 357 298	2 839	2 839	2 839	2 839	28 517	805 817	222 177	407 886	795 030	2 089 581	2 705 399	4 506 938	4 785 417				
Venezuela (Bolivarian Republic of)	2008	Total Area	Number of holdings	502 676	105 154	52 900	33 247	33 247	33 247	63 423	53 414	53 287	29 259	19 988	15 994	5 890	2 917	711			
		Total Area	Total Area	27 073 879	12 222	60 020	95 483	95 483	95 483	4 864 088	683 365	1 594 533	1 949 056	4 666 458	3 837 223	4 215 279	2 281 579				
ASIA (25)																					
Armenia	2014	Total Area	Number of holdings	361 064	221 185	69 908	17 853	17 853	17 853	12 394	2 901	868	153	58	38						
		Total Area	Total Area	534 399	75 217	106 806	56 483	56 483	84 788	38 337	23 379	11 015	7 034	18 373							
Azerbaijan	2015	Total Area	Number of holdings	1 352 121	880 113	227 876	63 006	63 006	63 006	37 553	9 857	4 426	1 716	891	556	114					
		Total Area	Total Area	2 362 024	247 703	597 343	188 408	188 408	188 408	249 258	124 116	126 497	108 179	114 877	157 611	71 215					
Bangladesh	2008	Total Area	Number of holdings	15 183 183	12 812 373	1 068 208	1 068 208	234 396													
		Total Area	Total Area	9 025 516	4 587 854	1 666 126	1 666 126	1 106 411													
Cambodia	2013	Agricultural land	Number of holdings	1 875 712	869 493	283 364	283 364	222 235	111 173	18 200	3 681	840									
		Agricultural land	Total Area	3 071 384	395 290	493 283	493 283	119 752	598 762	219 428	98 307	159 995									
Cyprus	2010	UAA	Number of holdings	38 860	14 847	14 355	1 873	1 873	1 873	2 030	1 010	660	220	120							
		UAA	Total Area	118 400	9 490	5 797	5 797	5 797	13 890	13 980	19 820	14 570	19 770								
Georgia	2014	Total Area	Number of holdings	642 209	469 304	129 989	22 238	7 835	3 490	5 099	1 743	1 011	546	434	393	127					
		Total Area	Total Area	842 289	180 395	161 283	22 874	58 703	51 094	30 199	118 356	25 835	15 030	32 310	37 546	128 663					
India	2010-2011	Total Area	Number of holdings	138 348 000	92 826 000	24 779 000	9 649 000	4 247 000	2 431 000	3 444 000	799 000	174 000									
		Total Area	Total Area	159 592 000	35 908 000	35 244 000	23 164 000	14 540 000	10 762 000	23 066 000	10 489 000	6 418 000									
Indonesia	2013	Total Area	Number of holdings	26 135 469	19 339 055	3 648 448	1 584 732	633 259	358 040	451 460	94 898	21 113	3 328	1 136							
		Total Area	Total Area	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Iran (Islamic Republic of)	2014	Total Area	Number of holdings	4 032 467	1 911 218	319 055	319 055	319 055	319 055	226 900	453 799	129 265	35 065								
		Total Area	Total Area	16 476 609	403 061	703 351	703 351	703 351	1 995 912	3 548 277	3 724 131										
Japan	2015	Total Area	Number of holdings	1 377 266	267 321	251 233	251 233	251 233	52 229	25 396	19 677	6 121	1 590								
		Total Area	Total Area	3 451 444	290 761	290 761	290 761	290 761	354 833	349 760	604 254	406 602	282 189								
Jordan	2007	Total Area	Number of holdings	80 152	47 165	11 905	5 617	5 582	2 160	3 969	1 147	517	202	109							
		Total Area	Total Area	261 508	13 072	15 462	13 104	18 234	9 225	25 995	22 877	32 872	33 221	25 358	52 088						
Kazakhstan	2006-2007	Agricultural land	Number of holdings	203 851	13 775	10 600	10 600	10 600	27 480	21 921	22 945	17 300	17 359	19 110	9 650	3 773	7 939				
		Agricultural land	Total Area	79 132 200	25 840	25 840	25 840	25 840	186 100	294 900	27 156 800	1 218 100	2 400 100	5 935 000	6 704 700	7 452 863	27 654 438				
Lao People's Democratic Republic	2010-2011	Total Area	Number of holdings	782 800	177 900	245 600	150 500	208 800													
		Total Area	Total Area	1 870 200	97 500	334 100	350 400	1 088 000													

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	less than 1	Land size classes (ha)												
						1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1 000	1 000 – 2 500 and over	
Lebanon	2010	Total Area	Number of holdings	169 512	118 865	26 289	6 989	6 989	2 206	5 106	1 966	835	288					
		Total Area	Total Area	230 994	42 117	341 149	18 228	18 228	10 299	31 535	25 634	24 020	26 786					
Myanmar	2010	agricultural land	Number of holdings	5 419 756	1 689 436	1 438 619	668 111	668 111	177 429	583 355	175 398	19 297						
		agricultural land	Total Area	12 794 176	755 127	1 838 807	1 781 660	1 781 660	936 508	3 268 582	1 923 193	508 638						
Nepal	2011–2012	Total Area	Number of holdings	3 831 093	3 086 569	548 974	129 364	39 507	14 881	10 744	1 054							
		Total Area	Total Area	2 525 639	1 183 139	749 810	308 569	134 353	65 365	69 177	15 227							
Oman	2012–2013	Total Area	Number of holdings	166 610	135 431	14 371	3 015	3 015	3 015	5 501	1 619	447	195					
		Total Area	Total Area	149 105	17 762	18 863	8 775	8 775	8 775	30 308	17 721	10 943	27 183					
Pakistan	2010	Total Area	Number of holdings	8 264 480														
		Total Area	Total Area	21 412 545	1 689 511	2 431 810	2 053 010	2 053 010	3 793 730	2 723 748	1 962 131	2 652 562						
Palestine	2010	Total Area	Number of holdings	111 310	88 787	13 763	5 319	2 598	1 531	4 313								
		Total Area	Total Area	120 706														
Philippines	2010	Total Area	Number of holdings	5 563 138	3 162 683	869 682	889 682	130 199	130 199	304 798	33 466	20 676	1 753					
		Total Area	Total Area	7 271 446	872 686	1 293 468	1 293 468	530 949	530 949	1 427 550	441 749	348 223	532 406					
Republic of Korea	2015	Total Area	Number of holdings	1 088 518	752 077	185 111	62 635	32 891	16 439	29 114	10 251							
		Total Area	Total Area	1 309 787	320 471	265 699	153 526	114 131	74 109	200 131	181 720							
Saudi Arabia	2015	Total Area	Number of holdings	346 829	225 656	28 616	11 565	11 565	11 565	24 455	12 523	9 771	4 548	3 408	2 363	794		
		Total Area	Total Area	3 421 854	44 888	37 689	35 006	35 006	35 006	155 173	165 085	273 500	303 077	404 315	630 404	1 302 706		
Sri Lanka	2013–2014	Total Area	Number of holdings	2 318 790	1 681 887	444 972	76 014	70 335	8 351	37 232								
		Total Area	Total Area	2 186 759														
Thailand	2013	Total Area	Number of holdings	5 911 567	1 377 499	1 276 404	1 147 326	464 595	464 595	927 576	188 204	50 238	15 130					
		Total Area	Total Area	18 659 786	641 314	1 949 640	2 476 638	2 000 804	2 000 804	5 575 966	2 402 718	893 604	718 296					
Viet Nam	2011	Total Area	Number of holdings	9 598 723	7 766 047	1 127 920	206 106	206 106	206 106	74 098	9 459	1 739	423	233	390	95		
		Total Area	Total Area	6 851 843	2 436 762	1 825 705	571 897	571 897	571 897	460 996	115 022	46 608	29 755	33 768	124 725	62 813		
EUROPE (36)																		
Albania	2012	Total Area	Number of holdings	321 492	215 033	76 550	20 073	3 150	3 150	1 665	1 871							
		Total Area	Total Area	371 609	99 758	109 987	48 544	11 989	11 989	11 573	77 769							
Austria	2010	UAA	Number of holdings	150 170	9 160	8 080	10 073	10 073	10 073	26 590	32 590	32 260	8 430	2 850				
		UAA	UAA	2 878 170	9 530	32 947	32 947	32 947	32 947	194 040	471 340	988 110	568 470	528 300				
Belgium	2010	UAA	Number of holdings	42 840	3 087	2 135	1 483	1 483	1 483	5 190	6 800	12 170	6 780	2 260				
		UAA	UAA	1 358 020	2 147	2 145	4 957	4 957	4 957	37 620	98 990	401 160	466 910	334 160				
Bulgaria	2010	UAA	Number of holdings	370 490	160 630	147 480	10 130	10 130	10 130	10 730	6 820	6 010	2 930	5 490				
		UAA	UAA	4 475 550	72 090	72 090	30 150	30 150	30 150	72 700	92 450	186 220	201 670	3 687 860				

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)												
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1 000	1 000 – 2 500
Croatia	2010	UAA	Number of holdings	233 280	61 510	18 477	18 477	18 477	18 477	30 240	13 880	7 800	2 290	850			
		UAA		1 316 010	50 340	59 157	59 157	59 157	208 860	188 580	235 390	154 230	250 790				
Czechia	2010	UAA	Number of holdings	22 860	1 280	990	420	420	4 180	3 950	4 370	2 420	4 420				
		UAA		3 483 500	910	1 330	1 330	1 330	29 390	55 590	188 180	169 360	3 085 160				
Denmark	2010	UAA	Number of holdings	41 360	260	317	317	317	8 050	7 790	9 210	5 920	8 080				
		UAA		2 646 860	177	1 137	1 137	1 137	57 640	112 080	296 550	426 080	1 750 750				
Estonia	2010	UAA	Number of holdings	19 610	1 257	1 417	1 417	1 417	4 070	3 470	2 650	1 090	1 720				
		UAA		940 930	1 460	4 700	4 700	4 700	29 300	48 690	81 020	76 210	688 710				
Finland	2010	UAA	Number of holdings	63 870	1 120	720	1 447	1 447	7 970	13 340	21 730	10 840	3 820				
		UAA		2 290 980	497	5 470	5 470	5 470	59 550	197 000	706 530	746 910	563 590				
France	2010	UAA	Number of holdings	516 100	42 780	33 290	20 897	20 897	46 640	50 150	88 520	97 780	94 250				
		UAA		27 837 290	31 227	68 287	68 287	68 287	332 500	718 070	3 005 490	7 059 970	16 453 960				
Germany	2010	UAA	Number of holdings	299 130	8 540	7 130	3 897	3 897	47 310	63 160	76 070	51 620	33 620				
		UAA		16 704 040	7 127	13 250	13 250	13 250	343 960	945 800	2 535 020	3 628 400	9 196 880				
Greece	2010	UAA	Number of holdings	723 060	189 770	183 580	61 273	61 273	87 770	46 580	25 520	5 480	1 540				
		UAA		5 177 510	154 757	154 755	191 963	191 963	603 720	622 390	758 860	356 960	1 950 180				
Hungary	2010	UAA	Number of holdings	576 810	249 160	206 370	15 353	15 353	26 540	19 430	15 390	6 410	7 450				
		UAA		4 686 340	69 000	47 557	47 557	47 557	183 910	268 840	472 980	445 860	3 034 080				
Iceland	2010	UAA	Number of holdings	2 590	57	25	7	7	20	30	130	230	2 090				
		UAA		1 595 670	17	15	17	17	110	430	4 370	16 770	1 573 920				
Ireland	2010	UAA	Number of holdings	139 890	1 237	1 105	2 460	2 460	15 750	33 580	55 360	20 760	4 720				
		UAA		4 991 350	1 260	8 873	8 873	8 873	119 420	500 780	1 802 610	1 389 390	1 150 010				
Italy	2010	UAA	Number of holdings	1 620 880	414 970	409 680	119 223	119 223	186 150	120 120	87 610	29 210	15 490				
		UAA		12 856 050	363 497	373 283	373 283	373 283	1 295 300	1 663 480	2 685 900	1 994 070	3 370 460				
Latvia	2010	UAA	Number of holdings	83 390	5 117	4 795	6 130	6 130	22 660	17 490	9 620	2 740	2 570				
		UAA		1 796 290	4 707	4 705	21 010	21 010	161 620	242 980	287 760	187 680	843 790				
Lithuania	2010	UAA	Number of holdings	199 910	16 417	16 155	28 277	28 277	39 900	21 470	12 510	4 630	3 800				
		UAA		2 742 560	23 297	23 295	88 670	88 670	276 810	296 010	388 690	328 410	1 140 040				
Luxembourg	2010	UAA	Number of holdings	2 200	120	100	53	53	220	170	360	640	440				
		UAA		131 110	60	190	190	190	1 560	2 450	12 840	47 540	66 030				
Malta	2010	UAA	Number of holdings	12 530	5 737	5 395	373	373	230	40	10						
		UAA		11 450	2 987	2 985	1 097	1 097	1 540	460	160						

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	less than 1	Land size classes (ha)												
						1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1 000	1 000 – 2 500 and over	
Montenegro	2010	UAA	Number of holdings	48 870	18 227	17 635	2 543	2 543	2 543	2 710	1 160	640	440	430				
		UAA	UAA	221 300	11 500	7 833	7 833	18 540	20 210	31 650	88 900							
Netherlands	2010	UAA	Number of holdings	72 320	5 700	4 000	3 667	3 667	12 377	73 990	156 970	644 690	607 980	343 090				
		UAA	UAA	1 872 350	4 250	4 250	12 377	12 377	6 279	1 658								
North Macedonia	2007	UAA	Number of holdings	192 378	122 099	25 211	25 211	5 960	5 960	6 279	1 658							
		UAA	UAA	321 814	74 835	54 326	26 676	26 676	48 352	36 624								
Norway	2010	UAA	Number of holdings	46 620	2 317	525	1 137	1 137	1 137	8 110	13 440	15 300	3 020	500				
		UAA	UAA	1 005 940	500	4 130	4 130	4 130	60 470	197 200	465 420	199 800	69 660					
Poland	2010	UAA	Number of holdings	1 506 620	185 570	177 610	156 067	156 067	334 950	218 510	95 280	16 840	9 650					
		UAA	UAA	14 447 290	237 457	509 757	509 757	509 757	2 387 340	3 010 790	2 779 080	1 145 010	3 120 900					
Portugal	2009	UAA	Number of holdings	305 270	77 630	76 230	25 687	25 687	33 170	18 980	11 740	4 360	6 110					
		UAA	UAA	3 668 150	78 717	78 715	79 867	79 867	230 340	262 130	357 890	303 090	2 117 670					
Republic of Moldova	2011	UAA	Number of holdings	902 214	640 438	139 440	64 482	29 581	11 933	1 868	1 212	617	963	550				
		UAA	UAA	2 243 540	245 615	726 248	156 172	98 153	52 660	74 138	24 980	38 454	44 425	89 860	314 416			
Romania	2010	UAA	Number of holdings	3 859 040	1 500 577	1 365 865	242 463	242 463	182 440	49 610	17 940	7 480	13 730					
		UAA	UAA	13 306 130	859 180	859 180	743 310	743 310	1 210 510	571 390	549 250	518 300	6 508 390					
Russian Federation	2006	Total agricultural enterprises	Number of holdings	59 208	8 047	827	827	827	1 860	1 564	2 695	2 472	2 719	4 756	3 875	8 419	19 948	
		Total agricultural enterprises	Total Area	410 263 700	1 427	1 425	1 425	2 467	12 333	24 500	94 600	187 100	397 800	1 598 700	3 622 221	13 677 727	390 640 553	
Serbia	2012	UAA	Number of holdings	631 552	184 675	123 719	60 830	60 830	89 083	32 313	13 029	4 394	1 851					
		UAA	UAA	3 437 423	91 838	181 785	198 684	198 684	617 281	435 499	389 512	314 096	811 362					
Slovakia	2010	UAA	Number of holdings	24 460	5 100	4 360	2 097	2 097	2 660	1 630	1 430	780	2 210					
		UAA	UAA	1 895 500	4 637	4 635	6 373	6 373	18 150	22 860	44 190	55 430	1 726 490					
Slovenia	2010	UAA	Number of holdings	74 650	10 330	10 140	8 307	8 307	17 440	8 350	2 990	380	100					
		UAA	UAA	482 650	10 950	10 950	27 487	27 487	122 320	113 120	84 630	25 350	32 880					
Spain	2009	UAA	Number of holdings	989 800	157 640	135 140	77 600	77 600	141 850	110 960	107 740	52 470	51 190					
		UAA	UAA	23 752 690	148 610	148 610	245 600	245 600	995 440	1 558 920	3 391 090	3 663 770	13 089 450					
Sweden	2010	UAA	Number of holdings	71 090	1 020	280	2 543	2 543	15 820	14 180	15 170	9 070	7 930					
		UAA	UAA	3 066 320	170	9 770	9 770	9 770	112 930	202 680	488 330	643 730	1 569 000					
Switzerland	2010	UAA	Number of holdings	59 070	3 260	1 920	1 627	1 627	9 330	18 390	18 390	1 830	120					
		UAA	UAA	1 047 800	1 990	1 990	5 743	5 743	70 570	286 320	537 710	115 320	16 670					
United Kingdom of Great Britain and Northern Ireland	2010	UAA	Number of holdings	185 200	4 790	2 250	2 673	2 673	26 650	28 690	42 380	32 990	39 240					
		UAA	UAA	16 881 690	2 317	2 315	9 143	9 143	194 550	412 790	1 400 800	2 360 080	12 481 400					

Table A2.3. Number and area of holdings classified by land size

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)													
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1 000	1 000 – 2 500	2 500 and over
OCEANIA (10)																		
American Samoa	2008	Total Area	Number of holdings	5 840	4 087	877	492	101	59	173	52							
		Total Area	Total Area	7 691	2 120	1 405	1 131	358	267	873	1 536							
Cook Islands	2011	Total Area	Number of holdings	1 275	798	257	60	60	60	40								
		Total Area	Total Area	602	118	133	55	55	55	187								
Fiji	2009	Total Area	Number of holdings	65 037	28 563	8 602	8 602	3 956	3 956	6 917	3 041	990	285	126				
		Total Area	Total Area	251 859	11 820	14 748	14 748	15 552	15 552	46 866	41 491	29 118	21 397	40 567				
Guam	2007	Total Area	Number of holdings	104	43	15	11	4	4	4	27							
		Total Area	Total Area	405	26	25	25	18	20	291								
New Zealand	2012	Total Area	Number of holdings	58 071	1 801	1 801	1 801	1 801	2 209	5 760	5 958	7 646	6 937	8 304	8 777	3 412	1 455	405
		Total Area	Total Area	1 267	1 006	223	16	16	6	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Niue	2009	Total Area	Number of parcels	1 267	1 006	223	16	16	6									
		Total Area	Total Area	762	388	259	41	41	34									
Northern Mariana Islands	2007	Total Area	Number of holdings	256	89	54	25	14	10	32	14	20						
		Total Area	Total Area	1 624	51	72	56	40	50	187	192	975						
Palau	2015	agricultural land	Number of holdings	1 179	1 179													
		agricultural land	Total Area		n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a	n.a
Samoa	2009	Total Area	Number of holdings	15 793	5 365	5 178	1 589	1 589	344	1 121	453	156						
		Total Area	Total Area	37 357	492	866	2 217	2 217	3 197	10 644	5 273	12 451						
Vanuatu	2007	Total Area	Number of holdings	38 879														
		Total Area	Total Area	7 511	6 668	287	258	57	52	188								

Notes:

- Interpolated data are printed in bold text.
- Holdings without land were added to the class "less than 0.1 ha"

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)												
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500
	1971	Total area	Number of holdings	115 364	30 124	14 859	6 503	6 503	13 937	14 179	14 138	5 526	863	211	108		
	2011	Total Area	Total Area	2 698 841	14 319	31 312	32 823	28 030	130 762	232 960	485 640	474 737	396 350	377 283	189 564	130 744	
	2001	Total area	Total area	2 769 529	17 273	27 539	25 350	25 350	101 864	199 721	484 939	493 790	419 984	416 101	180 680	351 587	
	1990	Total area	Total area	2 941 583	15 162	27 584	26 601	26 601	103 986	196 241	486 161	522 322	412 164	396 453	150 171	551 535	
	1981	Total area	Total area	2 258 558	11 307	20 135	19 252	19 252	91 226	178 465	407 282	390 620	330 824	318 565	138 891	313 486	
	1971	Total area	Total area	2 098 062	5 243	16 717	18 378	18 378	89 971	182 521	415 008	363 439	252 262	238 270	138 360	341 136	
Puerto Rico	2012	Total Area	Number of holdings	13 159	1 305	1 305	1 285	715	2 588	2 376	1 125	733	421				
	2002	Total area	Number of holdings	17 659			3 103	3 103	3 461	2 287	1 528	572	501				
	1987	Total area	Number of holdings	20 245			3 764	3 764	3 520	2 418	1 688	674	654				
	1978	Total area	Number of holdings	11 211			857	857	2 390	2 005	1 500	707	410	281			
	1970	Total area	Number of holdings	32 687	2 477	5 108	4 032	4 032	5 683	3 543	2 001	810	557	412			
	2012	Total Area	Total Area	236 736	2 163	2 163	2 407	3 954	17 643	28 756	36 031	49 612	91 846				
	2002	Total area	Total area	271 440			6 315	6 315	23 375	30 489	46 597	40 003	112 031				
	1987	Total area	Total area	348 530			6 713	6 713	23 879	32 128	51 603	45 777	175 005				
	1978	Total area	Total area	337 495			2 715	2 715	16 413	26 649	46 596	48 884	56 810	132 676			
	1970	Total area	Total area	525 000	1 000	6 000	11 333	11 333	38 000	47 000	61 000	56 000	87 000	195 000			
Saint Lucia	2007	Total Area	Number of holdings	9 972	6 409	1 878	578	578	378	51	24						
	1996	Total area	Number of holdings	13 366	8 394	2 402	658	658	435	94	66						
	1986	Total area	Number of holdings	11 551	9 835	562	204	204	360	100	42	16	12	13			
	1974	Total area	Number of holdings	10 938	7 625	1 435	410	410	325	201	66	20	18	19			
	2007	Total Area	Total Area	12 223	1 764	2 194	1 472	409	2 044	709	2 159						
	1996	Total area	Total area	20 770	6 457	3 426	1 368	1 368	921	662	5 201						
	1986	Total area	Total area	23 478	5 388	1 315	728	728	2 375	1 319	1 242	1 099	1 479	7 077			
	1974	Total area	Total area	29 138	2 095	2 034	1 149	1 149	1 972	2 541	2 102	1 534	2 486	10 927			
United States of America	2012	Total Area	Number of holdings	2 108 303	37 272	62 121	62 121	36 847	184 234	368 468	442 628	320 655	212 717	168 274	151 645		
	2002	Total area	Number of holdings	2 128 982			76 176	76 176	211 864	297 944	459 660	344 141	244 952	201 981	139 913		

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)														
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over	
United States Virgin Islands	1987	Total area	Number of holdings	2 087 759		74 026	74 026	74 026	74 026	157 220	212 970	429 141	384 448	308 593	243 667	129 643			
	1979	Total area	Number of holdings	2 476 340		86 622	86 622	86 622	86 622	181 122	245 178	531 574	495 588	382 010	257 863	123 150			
	1969	Total area	Number of holdings	2 730 250	69 604	38 766	30 456	30 456	30 456	158 970	276 868	633 588	633 177	461 304	250 876	69 958	45 771		
	2012	Total Area	Total Area	370 096 212	67 234	112 056	112 056	112 056	382 102	1 910 512	3 821 023	14 641 763	22 211 867	29 792 366	52 658 920	244 274 235			
	2002	Total area	Total area	379 712 151		180 143	180 143	180 143	180 143	1 446 884	4 214 923	14 879 051	24 204 526	34 303 773	62 327 929	237 794 635			
	1987	Total area	Total area	390 311 617		141 467	141 467	141 467	141 467	1 094 014	3 159 370	14 100 582	27 393 780	43 556 049	73 764 941	226 818 480			
	1979	Total area	Total area	394 061 235		168 290	168 290	168 290	168 290	1 295 377	3 707 989	17 597 156	35 119 796	53 679 232	77 301 030	204 655 766			
	1969	Total area	Total area	430 321 000	28 000	56 000	104 667	104 667	104 667	1 159 000	4 037 000	21 205 000	44 890 000	64 745 000	75 100 000	47 223 000	171 564 000		
	2007	Total Area	Number of holdings	219	72	35	26	19	9	26	12	20							
	2002	Total area	Number of holdings	191	95	14	14	14	14	24	7	14							
1987	Total area	Number of holdings	267	114	19	19	19	19	31	27	19								
1978	Total area	Number of holdings	378	149	36	36	36	36	44	25	23								
1970	Total area	Number of holdings	212	58	13	13	13	13	23	18	19								
2007	Total Area	Total Area	2 376	43	49	50	48	46	155	135	1 851								
2002	Total area	Total area	3 710	69	43	43	43	43	173	90	451								
1987	Total area	Total area	7 197	94	60	60	60	60	202	363	600								
1978	Total area	Total area	9 873	115	100	100	100	100	290	346	672								
1970	Total area	Total area	8 284	40	36	36	36	36	141	271	562								
ASIA (6)																			
Cyprus	2010	UAA	Number of holdings	38 860	14 845	1 873	1 873	1 873	2 030	1 010	660								
	2003	Agricultural area	Number of holdings	45 199	24 780	2 413	2 413	2 413	2 850	1 522	845								
	1994	Agricultural area	Number of holdings	52 089	31 307	4 112	4 112	4 112	5 427	1 982	789								
	1985	Agricultural area	Number of holdings	48 046	20 375	4 149	4 149	4 149	6 453	2 442	619								
	2010	UAA	UAA	118 400	9 490	5 797	5 797	5 797	13 890	13 980	19 820								

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)													
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over
India	2003	Agricultural area	Agricultural area	156 380	9 954	10 633	7 518	7 518	7 518	19 652	21 197	25 723	17 951	28 716				
	1994	Agricultural area	Agricultural area	177 760		23 333	12 836	12 836	12 836	36 802	26 246	22 361	11 153	19 357				
	1985	Agricultural area	Agricultural area	178 058	11 094	8 818	13 105	13 105	13 105	43 536	32 509	16 786	7 916	18 083				
	2010–2011	Total area	Number of holdings	138 348 000	92 826 000	24 779 000	9 649 000	4 247 000	2 431 000	3 444 000	799 000	174 000						
	2001	Total area	Number of holdings	119 894 000	75 390 000	22 687 000	5 546 333	5 546 333	5 546 333	3 948 000	1 004 000	226 000						
	1991	Total area	Number of holdings	106 637 000	63 388 000	20 092 000	5 605 667	5 605 667	5 605 667	4 686 000	1 654 000							
	1977	Total area	Number of holdings	81 569 000	44 523 000	14 728 000	4 832 333	4 832 333	4 832 333	5 381 000	1 943 000	450 000	47 000					
	1971	Total area	Number of holdings	70 493 000	35 682 000	13 432 000	4 455 000	4 455 000	4 455 000	5 248 000	2 135 000	566 000	65 000					
	2010–2011	Total Area	Total Area	159 592 000	35 906 000	35 244 000	23 164 000	14 540 000	10 762 000	23 066 000	10 489 000	6 418 000						
	2001	Total area	Total area	159 394 000	29 806 000	32 129 000	16 596 000	16 596 000	16 596 000	26 579 000	13 220 000	7 872 000						
1991	Total area	Total area	165 507 000	24 894 000	28 827 000	17 074 333	17 074 333	17 074 333	31 903 000	28 660 000								
1977	Total area	Total area	163 343 000	17 509 000	20 905 000	14 996 333	14 996 333	14 996 333	37 067 000	26 035 000	12 310 000	4 528 000						
1971	Total area	Total area	162 124 000	14 545 000	19 282 000	13 976 000	13 976 000	13 976 000	36 305 000	28 521 000	15 572 000	5 971 000						
Nepal	2011–2012	Total Area	Number of holdings	3 831 093	3 086 569	548 974	129 364	39 507	14 881	10 744	1 054							
	2002	Total area	Number of holdings	3 364 139	2 521 292	588 649	76 280	76 280	76 280	21 575	3 783							
	1992	Total area	Number of holdings	2 736 050	1 909 811	529 467	85 538	85 538	85 538	31 952	8 206							
	1982	Total area	Number of holdings	2 193 956	1 463 321	379 051	92 210	92 210	92 210	60 082	14 872							
	1972	Total area	Number of holdings	1 721 546	1 335 478	190 295	48 812	48 812	48 812	36 666	10 997	1 512	147	14				
	2011–2012	Total Area	Total Area	2 525 639	1 183 139	749 810	308 569	134 353	65 365	69 177	15 227							
	2002	Total area	Total area	2 654 037	1 031 944	791 965	212 057	212 057	212 057	139 750	54 207							
	1982	Total area	Total area	2 598 971	793 454	716 532	242 772	242 772	242 772	209 338	151 331							
	1982	Total area	Total area	2 463 717	426 929	490 413	278 421	278 421	278 421	388 679	322 434							
	1972	Total area	Total area	1 654 000	450 000	287 000	152 000	152 000	152 000	256 000	149 000	43 000	9 000	4 000				
Pakistan	2010	Total Area	Number of holdings	8 264 480														
	2000	Total area	Number of holdings	6 620 054	2 389 423	1 425 370	619 055	619 055	619 055	580 200	260 791	87 408	19 696					

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)													
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over
Philippines	1989	Total area	Number of holdings	5 070 963	1 367 771	1 036 286	566 227	566 227	566 227	623 110	237 929	85 297	21 888					
	1980	Total area	Number of holdings	4 069 419	701 380	685 014	534 022	534 022	534 022	706 395	263 989	89 989	20 587					
	1971–73	Total area	Number of holdings	3 761 940	520 617	538 421	500 257	500 257	500 257	739 928	289 146	94 951	24 105					
	2010	Total Area	Total Area	21 412 545	1 689 511	2 431 810	2 053 010	2 053 010	2 053 010	3 793 730	2 723 748	1 982 131	2 652 562					
	2000	Total area	Total area	20 406 782	1 183 789	1 981 277	1 899 762	1 899 762	1 899 762	3 891 228	3 324 310	2 355 906	1 970 985					
	1989	Total area	Total area	19 149 637	703 523	1 446 796	1 761 077	1 761 077	1 761 077	4 134 346	3 032 872	2 279 270	2 269 598					
	1980	Total area	Total area	19 058 970	370 640	972 766	1 730 978	1 730 978	1 730 978	4 703 818	3 392 721	2 463 823	1 982 267					
	1971–73	Total area	Total area	19 913 000	268 000	769 000	1 664 333	1 664 333	1 664 333	5 286 000	3 729 000	2 605 000	2 263 000					
	2010	Total Area	Number of holdings	5 563 138	3 162 683	889 682	889 682	130 199	130 199	304 798	33 466	20 676	1 753					
	2002	Total area	Number of holdings	4 822 739	1 935 874	1 349 903	377 850	377 850	377 850	303 139	79 608	20 666						
1991	Total area	Number of holdings	4 610 041	1 685 380	1 314 492	392 116	392 116	392 116	325 243	85 582	22 996							
1981	Total area	Number of holdings	3 420 323	775 791	964 220	400 658	400 658	400 658	360 006	92 645	25 686							
1971	Total area	Number of holdings	2 354 469	319 363	644 375	343 851	343 851	343 851	243 847	85 736	24 035	5 560						
2010	Total Area	Total Area	7 271 446	872 686	1 293 468	1 293 468	530 949	530 949	1 427 550	441 749	348 223	532 406						
2002	Total area	Total area	9 559 958	827 031	1 635 995	1 047 999	1 047 999	1 047 999	1 914 396	965 695	1 072 845							
1991	Total area	Total area	9 974 871	728 112	1 582 728	1 096 754	1 096 754	1 096 754	2 046 380	1 040 686	1 286 703							
1981	Total area	Total area	9 749 200	369 000	1 189 900	1 133 000	1 133 000	1 133 000	2 242 900	1 128 591	1 419 809							
1971	Total area	Total area	8 494 000	162 000	802 000	1 033 000	1 033 000	1 033 000	1 553 000	1 084 000	613 000	1 181 000						
Thailand	2013	Total Area	Number of holdings	5 911 567	1 377 499	1 276 404	1 147 326	464 595	464 595	927 576	188 204	50 238	15 130					
2003	Total area	Number of holdings	5 795 519	1 314 902	1 321 917	692 480	692 480	692 480	829 813	207 676	40 771							
1983	Total area	Number of holdings	5 647 490	1 114 038	1 272 048	700 786	700 786	700 786	912 378	203 861	36 688	6 119						
1978	Total area	Number of holdings	4 018 427	638 664	834 138	501 832	501 832	501 832	811 989	200 832	27 308							
2013	Total Area	Total Area	18 659 786	641 314	1 949 640	2 476 638	2 000 804	2 000 804	5 575 966	2 402 718	893 604	718 296						
2003	-	-	-	-	-	-	-	-	-	-	-	-						
1983	Total area	Total area	19 002 071	574 967	1 721 244	2 134 538	2 134 538	2 134 538	5 926 035	2 520 596	976 842	878 774						
1978	Total area	Total area	14 954 592	341 498	1 148 784	1 575 760	1 575 760	1 575 760	5 325 824	2 523 061	888 144							

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)															
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over		
EUROPE (15)																				
Austria	2010	UAA	Number of holdings	150 170	9 160	8 080	10 073	10 073	10 073	26 590	32 590	32 260	8 430	2 850						
		Agricultural area	Number of holdings	199 470		29 110	14 480	14 480	14 480	38 170	44 760	35 080	5 980	2 930						
	1999–2000	Total area	Number of holdings	273 210	8 890	19 368	19 368	20 008	20 008	48 678	54 508	58 719	9 958	2 724	1 177	314	334			
		Productive area	Number of holdings	312 418	20 907	33 641	20 008	20 008	20 008	52 495	63 632	64 166	12 059	3 660	1 833					
	1989	Productive area	Number of holdings	362 216	34 171	41 669	23 678	23 678	23 678	62 281	73 464	62 413	11 597	3 651	1 936					
		UAA	Total Area	2 878 170	9 530	32 947	32 947	32 947	194 040	471 340	988 110	568 470	528 300							
	1999–2000	Agricultural area	Total area	6 804 610	148 860	119 113	119 113	119 113	656 790	1 208 900	1 636 300	650 490	2 145 930							
		Total area	Total area	7 217 498	6 570	62 788	95 736	95 736	490 221	973 319	2 004 177	726 871	404 834	365 038	216 558	1 679 914				
	1980	Productive area	Total area	7 325 863	10 742	52 227	69 430	69 430	393 117	975 457	2 019 035	883 031	559 129	2 224 836						
		Productive area	Total area	7 490 463	26 485	64 518	81 707	81 707	463 905	1 104 026	1 925 931	855 383	555 508	2 249 586						
Belgium	2010	UAA	Number of holdings	42 840	3 085	2 135	1 483	1 483	5 190	6 800	12 170	6 780	2 260							
		Agricultural area	Number of holdings	61 710		10 610	2 807	2 807	8 300	10 140	16 720	6 230	1 290							
	1999–2000	Agricultural area	Number of holdings	87 180	12 698	7 385	4 512	4 512	12 922	16 944	18 783	4 131	780							
		Agricultural area	Number of holdings	119 277	25 424	10 411	5 499	5 499	19 031	25 015	19 136	3 196	568							
	1970	Agricultural area	Number of holdings	184 005	53 608	15 373	9 600	9 600	33 059	33 480	17 089	2 222	375							
		UAA	UAA	1 358 020	2 145	2 145	4 957	4 957	37 620	98 990	401 160	466 910	334 160							
	1999–2000	Agricultural area	Total area	1 426 780	12 380	10 287	10 287	10 287	62 870	153 600	551 060	425 130	190 880							
		Agricultural area	Total area	1 400 364	9 667	12 183	16 278	16 278	98 050	255 189	586 511	278 044	111 886							
	1979	Agricultural area	Total area	1 475 140	16 433	19 707	19 707	19 707	145 594	370 080	577 079	213 365	77 222							
		Agricultural area	Total area	1 602 864	30 416	24 459	34 571	34 571	251 881	488 619	500 439	151 897	51 439							
Denmark	2010	UAA	Number of holdings	41 360	1 120	260	317	317	8 050	7 790	9 210	5 920	8 080							
		Agricultural area	Number of holdings	57 830	980	340	340	340	9 460	11 530	17 170	11 510	6 160							
	1989	Agricultural area	Number of holdings	81 267		14 749	19 605	31 348	12 162	3 403										

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)																
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over			
Finland	1979	Agricultural area	Number of holdings	122 722		5 553	5 553	5 553	5 553	21 588	32 098	40 928	9 363	2 085							
	1970	Agricultural area	Number of holdings	140 197		4 843	4 843	4 843	4 843	29 510	43 589	43 904	7 055	1 611							
	2010	UAA	Total area	2 646 860	175	1 137	1 137	1 137	1 137	57 640	112 080	296 550	426 090	1 750 750							
	1999–2000	Agricultural area	Total area	2 878 730	3 140	1 783	1 783	1 783	1 783	79 990	185 360	599 480	853 950	1 151 460							
	1989	Agricultural area	Agricultural area	2 774 127					95 462	284 791	1 007 856	818 355	567 663								
	1979	Agricultural area	Agricultural area	2 919 721			13 217	13 217	13 217	157 631	465 679	1 262 565	612 709	381 486							
	1970	Agricultural area	Agricultural area	2 941 316			13 837	13 837	13 837	216 135	623 279	1 304 838	455 430	300 124							
	2010	UAA	Number of holdings	63 870	1 120	720	1 447	1 447	1 447	7 970	13 340	21 730	10 840	3 820							
	1999–2000	Agricultural area	Number of holdings	81 190		2 750	1 927	1 927	1 927	11 120	20 220	30 360	9 270	1 700							
	1990	Total area	Number of holdings	199 385		27 114	13 967	13 967	13 967	42 786	47 665	35 108	4 311	500							
1980	Total area	Number of holdings	224 721		20 673	16 257	16 257	16 257	69 172	56 806	26 346	2 566	387								
1970	Total area	Number of holdings	297 257		33 573	25 074	25 074	25 074	97 935	67 989	20 625	1 620	292								
2010	UAA	UAA	2 290 980	495	495	5 470	5 470	5 470	59 550	197 000	706 530	746 910	563 590								
1999–2000	Agricultural area	Total area	5 865 530	62 800	56 183	56 183	56 183	56 183	416 110	1 092 980	2 500 220	1 196 790	428 080								
1990	Arable area	Total area	12 338 439	614 660	540 490	540 490	540 490	540 490	2 395 496	3 340 276	3 393 687	708 722	264 129								
1980	Arable area	Total area	12 800 326	369 272	563 495	563 495	563 495	563 495	3 831 196	3 790 019	2 457 670	465 777	195 908								
1970	Arable area	Total area	15 150 223	498 156	837 742	837 742	837 742	837 742	5 028 987	4 409 763	2 126 332	381 895	191 865								
2010	UAA	Number of holdings	516 100	42 760	33 290	20 897	20 897	20 897	46 640	50 150	88 520	97 780	94 250								
1999–2000	Agricultural area	Number of holdings	663 810	1 111 740	27 207	27 207	27 207	27 207	60 510	71 240	137 800	122 150	78 750								
1989	Agricultural area	Number of holdings	1 016 755	89 320	38 895	38 895	38 895	38 895	111 925	166 548	288 055	128 261	43 714								
1980	Agricultural area	Number of holdings	1 262 672	119 671	87 930	49 737	49 737	49 737	166 719	243 204	347 319	114 079	34 538								
1971	Agricultural area	Number of holdings	1 587 643	166 719	115 873	69 933	69 933	69 933	250 466	354 826	369 610	93 222	27 129								
2010	UAA	UAA	27 837 290	31 225	31 225	68 287	68 287	68 287	332 500	718 070	3 005 490	7 059 970	16 453 960								
1999–2000	Agricultural area	Total area	29 897 670	212 000	212 000	131 707	131 707	131 707	564 790	1 250 550	5 176 970	9 148 280	13 149 960								
1989	Agricultural area	Total area	31 985 606	121 424	182 092	195 946	195 946	195 946	1 097 744	2 978 714	10 458 826	9 341 299	7 217 668								

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)														
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over	
Germany	1980	Agricultural area	Total area	33 648 959	178 025	224 821	253 642	253 642	253 642	1 654 609	4 340 654	12 305 818	8 319 990	5 864 115					
	1971	Agricultural area	Total area	35 039 217	243 910	316 984	353 538	353 538	353 538	2 476 654	6 298 473	12 892 497	6 895 577	4 854 509					
	2010	UAA	Number of holdings	299 130	8 540	7 130	3 897	3 897	3 897	47 310	63 160	76 070	51 620	33 620					
	1999–2000	Agricultural area	Number of holdings	471 960		37 830	26 600	26 600	26 600	73 950	87 360	114 350	54 310	24 360					
	1995	Agricultural area	Number of holdings	566 900		90 600	29 533	29 533	29 533	84 000	100 000	132 300	51 600	19 800					
	1979	Agricultural area	Number of holdings	850 006	42 539	102 536	52 276	52 276	52 276	152 971	186 425	178 454	25 983	4 269					
	1971	Agricultural area	Number of holdings	1 074 637	57 054	138 144	75 140	75 140	75 140	213 417	252 773	166 691	17 898	3 240					
	2010	UAA	UAA	16 704 040	7 125	7 125	13 250	13 250	13 250	343 950	945 800	2 535 020	3 628 400	9 196 880					
	1999–2000	Agricultural area	Total area	19 097 900	63 790	136 673	136 673	136 673	136 673	714 450	1 578 670	4 270 460	4 078 210	7 982 300					
	1995	Agricultural area	Total area	17 156 900	103 000	98 267	98 267	98 267	98 267	605 300	1 457 300	4 215 000	3 506 000	6 975 500					
1979	Agricultural area	Total area	14 487 137	39 908	210 805	220 786	220 786	220 786	1 349 701	3 220 721	6 131 021	1 967 679	904 945						
1971	Agricultural area	Total area	15 236 139	88 298	271 500	307 510	307 510	307 510	1 852 995	4 311 461	5 623 646	1 423 739	741 971						
Greece	2010	UAA	Number of holdings	723 060	189 770	183 580	61 273	61 273	61 273	87 770	45 580	25 520	5 480	1 540					
	1999–2000	Agricultural area	Number of holdings	817 060	400 690	75 500	75 500	75 500	75 500	109 000	52 670	23 920	3 350	930					
	1995	Agricultural area	Number of holdings	802 400	354 500	82 900	82 900	82 900	82 900	120 000	54 000	21 800	2 700	700					
	1971	Agricultural area	Number of holdings	1 047 260	236 480	197 987	197 987	197 987	197 987	164 340	42 760	8 840	880						
	2010	UAA	UAA	5 177 510	154 755	154 755	191 963	191 963	191 963	603 720	622 390	758 860	356 960	1 950 180					
	1999–2000	Agricultural area	Total area	3 875 180	442 040	265 793	265 793	265 793	265 793	791 000	739 860	707 980	225 720	171 200					
Ireland	1995	Agricultural area	Agricultural area	3 578 200	315 300	262 300	262 300	262 300	262 300	818 700	731 500	625 800	172 400	127 600					
	1971	Agricultural area	Agricultural area	3 586 294	113 482	498 353	498 353	498 353	498 353	1 092 600	552 988	243 258	88 906						
	2010	UAA	Number of holdings	139 890	1 235	1 105	2 460	2 460	2 460	15 750	33 580	55 360	20 760	4 720					
	2000	Agricultural area	Number of holdings	141 530	3 100	2 857	2 857	2 857	2 857	16 740	34 290	54 670	19 540	4 620					
	1991	Agricultural area	Number of holdings	170 578	1 530	2 930	4 906	4 906	4 906	24 134	48 265	59 392	15 701	3 298	611				
	1979	Agricultural area	Number of holdings	263 558	22 469	10 071	10 071	10 071	10 071	49 691	72 609	68 826	15 902	3 849					

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)														
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over	
	1970	Agricultural area	Number of holdings	279 450	7 476	15 619	11 156	11 156	11 156	56 577	78 903	67 399	15 920	4 087					
	2010	UAA	UAA	4 991 350	1 260	8 873	8 873	8 873	8 873	119 420	500 780	1 802 610	1 388 390	1 150 010					
	2000	Agricultural area	Total area	4 714 970	5 210	12 453	12 453	12 453	141 680	543 020	1 864 840	1 366 740	756 120						
	1991	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1979	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1970	Agricultural area	Total area	5 650 000	6 000	24 000	46 667	46 667	451 000	1 155 000	2 072 000	1 084 000	718 000						
Italy	2010	UAA	Number of holdings	1 620 880	414 970	409 680	119 223	119 223	186 150	120 120	87 610	29 210	15 490						
	2000	Total area	Number of holdings	2 590 674	986 031	496 231	177 477	177 477	262 536	158 495	103 599	31 288	20 063						
	1990	Total area	Number of holdings	3 023 344	997 253	590 942	236 615	236 615	354 401	201 321	114 985	32 722	21 875						
	1982	Total area	Number of holdings	3 270 560	1 046 590	644 730	262 983	262 983	400 790	218 210	116 640	54 650							
	1970	Total area	Number of holdings	3 607 262	1 167 295	680 063	296 571	296 571	467 362	240 362	111 103	29 265	22 098						
	2010	UAA	UAA	12 856 050	363 495	363 495	373 283	373 283	1 295 300	1 663 480	2 685 900	1 994 070	3 370 460						
	2000	Total area	Total area	19 607 094	472 729	696 959	558 231	558 231	1 831 387	2 200 929	3 155 271	2 136 698	7 438 429						
	1990	Total area	Total area	22 702 356	481 722	814 640	736 926	736 926	2 436 234	2 747 371	3 432 212	2 217 720	8 361 678						
	1982	Total area	Total area	23 559 924	505 956	889 897	820 225	820 225	2 753 009	2 973 736	3 460 818	10 515 834							
	1970	Total area	Total area	25 064 218	615 096	1 030 344	979 205	979 205	3 325 069	3 354 160	3 352 727	2 037 416	8 411 792						
Luxembourg	2010	UAA	Number of holdings	2 200	120	100	53	53	220	170	360	640	440						
	1999–2000	Agricultural area	Number of holdings	2 810	350	93	93	93	270	210	530	900	270						
	1990	Agricultural area	Number of holdings	3 803	326	197	155	155	319	388	992	1 010	106						
	1980	Agricultural area	Number of holdings	5 173	476	331	193	193	513	679	1 807	744	43						
	1970	Agricultural area	Number of holdings	7 608	669	506	325	325	994	1 547	2 619	298							
	2010	UAA	UAA	131 110	60	60	190	190	1 560	2 450	12 840	47 540	66 030						
	1999–2000	Agricultural area	Total area	137 600	450	390	390	390	2 170	3 700	21 070	69 700	39 340						
	1990	Agricultural area	Agricultural area	126 298	149	283	522	522	2 301	5 721	35 329	67 768	13 180						
	1980	Agricultural area	Agricultural area	130 061	209	472	652	652	3 761	10 133	61 847	46 487	5 196						
	1970	Agricultural area	Agricultural area	135 143	288	722	1 068	1 068	7 314	22 983	81 412	19 239							

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)														
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over	
Netherlands	2010	UAA	Number of holdings	72 320	5 700	4 000	3 667	3 667	3 667	10 260	10 820	19 220	9 130	2 210					
	1999–2000	Agricultural area	Number of holdings	101 550	16 120	5 207	5 207	5 207	15 780	17 510	28 180	7 150	1 190						
	1989	Agricultural area	Number of holdings	127 367	13 234	9 993	6 274	6 274	21 651	26 555	31 440	5 058	613						
	1979	Agricultural area	Number of holdings	148 674	16 809	11 289	6 862	6 862	27 065	38 553	30 628	3 362	362						
	1970	Agricultural area	Number of holdings	184 613	20 494	14 483	9 338	9 338	39 155	52 079	27 881	2 283	224						
	2010	UAA	UAA	1 872 350	4 250	4 250	12 377	12 377	73 990	156 970	644 690	607 980	343 090						
	1999–2000	Agricultural area	Total area	2 239 290		22 050	19 927	19 927	123 700	272 710	954 960	490 220	315 870						
	1989	Agricultural area	Agricultural area	1 965 031	4 689	10 308	13 655	13 655	118 571	355 543	995 598	314 102	85 256						
	1979	Agricultural area	Agricultural area	2 033 483	7 345	16 970	22 555	22 555	199 136	554 982	893 304	215 348	78 732						
	1970	Agricultural area	Agricultural area	2 142 597	9 711	20 344	31 350	31 350	290 172	736 700	794 010	143 986	53 624						
Norway	2010	UAA	Number of holdings	46 620	2 315	525	1 137	1 137	8 110	13 440	15 300	3 020	500						
	1999	Agricultural area	Number of holdings	70 740	1 122	2 482	3 638	3 638	16 720	22 286	15 640	1 451	119	7					
	1989	Agricultural area	Number of holdings	99 382	4 261	9 343	7 809	7 809	24 969	25 330	11 194	801	57						
	1979	Agricultural area	Number of holdings	125 302	7 917	16 637	12 488	12 488	32 716	21 632	8 228	655	53						
	1969	Agricultural area	Number of holdings	154 977	12 077	21 237	18 389	18 389	42 240	17 938	5 822	496							
	2010	UAA	UAA	1 005 940	500	500	4 130	4 130	60 470	197 200	465 420	199 800	69 660						
	1999	Agricultural area	Agricultural area	1 038 246	338	3 501	12 600	12 600	121 246	322 217	444 725	91 889	14 766	1 765					
Portugal	1989	Agricultural area	Agricultural area	991 077	2 809	12 937	25 775	25 775	177 475	355 193	307 374	50 155	7 809						
	1979	Agricultural area	Agricultural area	953 528	5 217	22 891	41 061	41 061	228 755	296 390	277 092								
	1969	Agricultural area	Agricultural area	955 333	8 820	31 217	61 499	61 499	291 655	241 299	162 832	35 012							
	2009	UAA	Number of holdings	305 270	71 630	25 687	25 687	25 687	33 170	18 980	11 740	4 360	6 110						
	1999	Agricultural area	Number of holdings	415 969	111 802	115 272	33 572	33 572	42 123	23 064	13 088	4 126	5 779						
1989	Agricultural area	Number of holdings	594 418	178 930	167 480	47 222	47 222	56 097	27 414	13 596	3 846	2 417	2 973						
1979	Agricultural area	Number of holdings	783 944	348 386	171 984	52 189	52 189	60 395	26 060	12 068	3 587	2 146	1 795	433					

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)												
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500
Spain	1968	Agricultural area	Number of holdings	811 656	316 627	167 189	60 476	60 476	60 476	77 748	41 716	17 716	4 494	2 102	1 497	652	488
	2009	UAA	UAA	3 668 150	78 715	79 867	79 867	79 867	230 340	262 130	357 890	303 090	2 117 670				
	1999	Agricultural area	Total area	5 188 955	146 386	331 130	181 555	181 555	446 878	502 468	506 326	360 662	2 350 439				
	1989	Agricultural area	Agricultural area	4 005 594	91 833	230 813	145 096	145 096	386 610	374 771	407 243	268 912	338 671	1 471 454			
	1979	Productive area	Total area	5 182 902	210 925	272 168	179 150	179 150	462 977	395 977	405 124	283 427	352 626	637 799	398 693	1 225 735	
	1968	Total area	Total area	4 975 000	125 000	208 000	179 000	179 000	475 000	579 000	504 000	298 000	282 000	458 000	443 000	1 066 000	
	2009	UAA	Number of holdings	989 800	157 640	135 140	77 600	77 600	141 850	110 960	107 740	52 470	51 190				
	1999	Total area	Number of holdings	1 764 456	455 424	262 835	126 764	126 764	226 005	177 104	137 010	58 994	33 278	21 594	11 919		
	1989	Total area	Number of holdings	2 284 944	654 441	355 839	160 448	160 448	302 253	216 649	154 712	59 040	29 544	18 934	7 104	5 083	
	1982	Total area	Number of holdings	2 375 327	626 244	362 347	172 813	172 813	334 285	241 925	168 253	61 618	31 118	19 240	6 947	4 911	
1972	Total area	Number of holdings	2 571 059	631 937	394 567	194 778	194 778	388 002	271 160	181 443	59 102	29 063	19 452	6 955	5 045		
2009	UAA	UAA	23 752 690	148 610	148 610	245 600	245 600	995 440	1 558 920	3 391 090	3 683 770	13 089 450					
1999	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1989	Total area	Total area	42 939 208	287 727	492 127	507 153	507 153	2 105 962	2 987 872	4 725 044	4 064 342	4 030 124	5 782 870	4 867 110	12 074 570		
1982	Total area	Total area	44 311 769	264 960	493 854	544 226	544 226	3 324 654	3 339 424	5 126 525	4 234 152	4 255 428	5 887 565	4 778 802	11 973 726		
1972	Total area	Total area	45 702 620	271 819	542 170	618 343	618 343	2 708 830	3 742 303	5 489 373	4 052 560	3 994 376	5 944 423	4 774 676	12 326 861		
United Kingdom of Great Britain and Northern Ireland	2010	UAA	Number of holdings	185 200	4 790	2 250	2 673	2 673	26 850	28 690	42 380	32 990	39 240				
1989–2000	Agricultural area	Number of holdings	233 250														
1983	Total area	Number of holdings	244 205														
1979	Agricultural area	Number of holdings	268 560	9 420	9 820	9 127	9 127	32 480	40 080	68 040	43 580	24 050	10 640	3 070	1 149		
1970	Total area	Number of holdings	326 698	14 213	17 588	13 368	13 368	39 517	49 576	80 399	47 318	24 669	10 295	1 890			
2010	UAA	UAA	16 881 690	2 315	2 315	9 143	9 143	194 550	412 790	1 400 800	2 360 080	12 481 400					
1989–2000	Agricultural area	Total area	16 527 630	46 900		28 800	28 800	206 600	471 530	1 662 100	2 711 940	11 342 160					
1983	Total area	Total area	17 144 777	15 142		23 625	23 625	216 774	533 733	1 967 213	3 005 847	3 516 936	3 416 648	4 402 610			
1979	Agricultural area	Total area	17 568 330	13 000	17 140	35 920	35 920	249 050	609 230	2 302 700	3 155 120	3 399 610	3 220 930	4 493 790			
1970	Total area	Total area	17 992 312	7 845	24 926	45 040	45 040	286 811	727 981	2 625 306	3 331 052	3 377 813	3 017 022	1 277 981	3 180 455		

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)													
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over
OCEANIA (3)																		
American Samoa	2008	Total Area	Number of holdings	5 940	4 087	877	492	101	59	173	52							
	2003	Total area	Number of holdings	7 094	4 064	1 867	309	309	309	189	40	8						
	1990	Total area	Number of holdings	384	77	87	33	33	33	77	27	18						
	1979	Total area	Number of holdings	1 331	535	467	93	93	93	34	11	6						
	1970	Total area	Number of holdings	1 923	783	598	131	131	131	86	53	9						
	2008	Total Area	Total Area	7 691	2 121	1 405	1 131	358	267	873	1 536							
	2003	Total area	Total area	7 949	1 511	2 245	784	784	784	1 097	483	261						
	1990	Total area	Total area	2 349	35	116	89	89	89	454	340	1 136						
	1979	Total area	Total area	2 428	268	620	231	231	231	199	142	505						
	1970	Total area	Total area	4 212	1 201	372	372	372	372	500	636	758						
Guam	2007	Total Area	Number of holdings	104	43	15	11	4	4	27								
	2002	Total area	Number of holdings	153	46	24	14	14	14	24	10	7						
	1987	Total area	Total number of holdings	351	118	86	25	25	25	34	21	16						
	1978	Total area	Total number of holdings	1 999	1 525	225	52	52	52	47	19	14	12					
	1970	Total area	Total number of holdings	1 121	535	276	58	58	58	56	36	25	18					
	2007	Total Area	Total Area	405	25	25	25	18	20	291								
	2002	Total area	Total area	667	18	27	40	40	40	142	117	243						
	1987	Total area	Total area	5 315	51	111	74	74	74	210	264	4 458						
	1978	Total area	Total area	11 582	462	252	141	141	141	322	263	386	9 485					
	1970	Total area	Total area	10 586	166	231	205	205	205	392	457	774	7 952					
Northern Mariana Islands	2007	Total Area	Number of holdings	256	89	54	25	14	10	32	14	20						
	2002	Total area	Number of holdings	214	56	59	20	20	20	18	8	14						
	1990	Total area	Total number of holdings	119	26	22	10	10	10	14	10	17						

Table A2.4. Changes in distribution of number and area of holdings in the WCA 2010 round as compared to the previous rounds

Countries by region	Census year	Category of land used for classification	Data item	Total	Land size classes (ha)													
					less than 1	1 – 2	2 – 3	3 – 4	4 – 5	5 – 10	10 – 20	20 – 50	50 – 100	100 – 200	200 – 500	500 – 1000	1000 – 2500	2500 and over
	1980	Total area	Total number of holdings	299	44	54	41	41	41	42	17	20						
	2007	Total Area	Total Area	1 624	51	72	56	40	50	187	192	975						
	2002	Total area	Total area	962	31	70	55	55	55	113	115	458						
	1990	Total area	Total area	5 836	13	32	29	29	29	98	126	5 460						
	1980	Total area	Total area	4 932	21	80	111	111	111	269	220	4 009						

Notes:

- Interpolated data are printed in bold

Table A2.5. Average land size and fragmentation of holdings¹

Countries by region	Census year	Total number of holdings	Total area of holdings	Total number of parcels	Average area per holding	Average number of parcels per holding
		(units)	(ha)	(units)	(ha)	(units)
1	2	3	4	5	6(=col4/col3)	7(=col5/col3)
WORLD TOTAL (119)	2006–2015					
Pooled averages					4.8	2.1
Medians of averages					6.3	2.1
AFRICA (20)						
Pooled averages					2.7	2.4
Medians of averages					2.8	2.9
Botswana	2015	63 246	259 656		4.1	
Burkina Faso	2006–2010	1 330 015	5 553 026	11 446 524	4.2	8.6
Cabo Verde	2015	45 539	36 456	75 169	0.8	1.7
Congo	2014–2015	267 610			1.6	
Côte d'Ivoire	2014	1 407 451	3 344 241		2.4	
Egypt	2009–2010	5 404 395	4 086 930	6 273 070	0.8	1.2
Eswatini	2012–2013	108 164				
Gambia	2011	82 027	343 949		1.4	
Lesotho	2009–2010	381 731	520 423	7 686 111		2.9
Malawi	2006–2007	2 665 565			2.8	
Mauritius	2014	23 456	66 449		1.5	
Mozambique	2009–2010	3 827 797	5 633 850	637 950	60.3	3.9
Namibia	2013–2014	162 821	9 811 517		4.0	
Niger	2004–2008	1 627 294	6 534 682		4.1	
Senegal	2013	755 532	3 131 680	621	0.9	1.2
Seychelles	2011	530	466			
South Africa	2007	39 966			4.2	
Togo	2011–2014	508 599	1 746 265	2 698 695	3.4	5.3
Uganda	2008–2009	3 945 753				
United Republic of Tanzania	2007–2008	5 839 529	15 756 174		2.7	
AMERICAS (23)						
Pooled averages					55.8	1.9
Medians of averages					20.6	1.5
Bolivia (Plurinational State of)	2013	871 927	34 654 984		39.7	
Brazil	2006	5 175 636	333 680 037		64.5	
Canada	2011	205 730	64 812 723		315.0	
Chile	2006–2007	301 269	36 439 533		121.0	
Colombia	2013	2 370 099	108 993 335		46.0	
Costa Rica	2014	93 017	2 406 418		25.9	
El Salvador	2007–2008	397 433	929 308		2.3	
Grenada	2012	9 345	9 542	13 813	1.0	1.5
Haiti	2008–2009	1 018 951	991 287		1.0	
Jamaica	2007	228 683	325 810		1.4	
Mexico	2007	4 067 618	68 535 298	7 494 369	16.8	1.8
Nicaragua	2011	262 546	6 054 869		23.1	
Panama	2011	248 560	2 698 841		10.9	
Paraguay	2008	289 649	31 086 894		107.3	
Peru	2012	2 260 973	38 742 465	5 191 655	17.1	2.3
Puerto Rico	2012	13 159	236 736		18.0	

¹ For European countries, except Albania and Russian Federation, "total area" and "average area per holding" correspond to the total area reported in Table A2.1 in order to keep consistency with Table A2.6.

 **Table A2.5. Average land size and fragmentation of holdings¹**

Countries by region	Census year	Total number of holdings	Total area of holdings	Total number of parcels	Average area per holding	Average number of parcels per holding
		(units)	(ha)	(units)	(ha)	(units)
1	2	3	4	5	6(=col4/col3)	7(=col5/col3)
Saint Lucia	2007	9 972	12 223	11 503	1.2	1.2
Suriname	2008	10 234	63 989	15 037	6.3	1.5
United States of America	2012	2 109 303	370 096 212		175.5	
United States Virgin Islands	2007	219	2 376		10.8	
Uruguay	2011	44 781	16 357 298		365.3	
Venezuela (Bolivarian Republic of)	2008	502 676	27 073 879	479 483	53.9	1.0
ASIA (29)						
Pooled Averages					1.7	1.8
Medians of Averages					1.5	1.4
Armenia	2014	361 064	534 399		1.5	
Azerbaijan	2015	1 352 121	2 362 024		1.7	
Bangladesh	2008	15 183 183	9 026 516		0.6	
Bhutan	2009		94 903			
Cambodia	2013	2 129 149	3 286 713	3 731 551	1.5	1.8
China	2006	200 554 307				
Cyprus	2010	38 860	137 760		3.5	
Georgia	2014	642 209	842 289	641 795	1.3	1.0
India	2010–2011	138 348 000	159 592 000		1.2	
Indonesia	2013	26 135 469				
Iran (Islamic Republic of)	2014	4 032 467	16 476 609		4.1	
Japan	2015	1 377 266	3 451 444		2.5	
Jordan	2007	80 152	261 508		3.3	
Kazakhstan	2006–2007	2 956 306	79 725 500		27.0	
Lao People's Democratic Republic	2010–2011	782 800	1 870 200	2 089 100	2.4	2.7
Lebanon	2010	169 512	230 994		1.4	
Mongolia	2011		802 169			
Myanmar	2010	5 426 083	13 328 844	7 561 603	2.5	1.4
Nepal	2011–2012	3 831 093	2 525 639	12 096 417	0.7	3.2
Oman	2012–2013	166 610	149 105		0.9	
Pakistan	2010	8 264 480	21 412 545		2.6	
Palestine	2010	111 310	120 706		1.1	
Philippines	2010	5 563 138	7 271 446	7 897 371	1.3	1.4
Republic of Korea	2015	1 088 518	1 309 787		1.2	
Saudi Arabia	2015	346 829	3 421 854	293 874	9.9	0.8
Sri Lanka	2013–2014	4 353 121	2 283 753		0.5	
Tajikistan	2013	1 087 298	5 002 738		4.6	
Thailand	2013	5 911 567	18 659 786		3.2	
Viet Nam	2011	10 376 981	11 880 117		1.1	
EUROPE (36)						
Pooled averages					18.2	3.4
Medians of averages					23.8	3.8
Albania	2012	321 492	371 609		1.2	
Austria	2010	150 170	5 847 850		38.9	
Belgium	2010	42 850	1 384 880		32.3	
Bulgaria	2010	370 490	5 260 520		14.2	
Croatia	2010	233 280	1 512 410		6.5	
Czechia	2010	22 860	5 065 270		221.6	
Denmark	2010	41 360	3 001 380		72.6	
Estonia	2010	19 610	1 241 850		63.3	

 **Table A2.5. Average land size and fragmentation of holdings¹**

Countries by region	Census year	Total number of holdings	Total area of holdings	Total number of parcels	Average area per holding	Average number of parcels per holding
		(units)	(ha)	(units)	(ha)	(units)
1	2	3	4	5	6(=col4/col3)	7(=col5/col3)
Finland	2010	63 870	6 250 610		97.9	
France	2010	516 100	29 546 440		57.2	
Germany	2010	299 130	18 387 080		61.5	
Greece	2010	723 060	5 461 290		7.6	
Hungary	2010	576 810	7 102 970		12.3	
Iceland	2010	2 590	2 560 050		988.4	
Ireland	2010	139 890	5 317 860	526 182	38.0	3.8
Italy	2010	1 620 880	17 080 850	5 574 952	10.5	3.4
Latvia	2010	83 390	2 879 170		34.5	
Lithuania	2010	199 910	3 003 620		15.0	
Luxembourg	2010	2 200	137 910		62.7	
Malta	2010	12 530	12 940		1.0	
Montenegro	2010	48 870	309 220		2.5	
Netherlands	2010	72 320	2 018 620	107 791	6.3	2.2
North Macedonia	2007	192 675	398 221		27.9	
Norway ²	2010	46 620	4 015 620		2.1	
Poland	2010	1 506 620	16 982 340		86.1	
Portugal	2009	305 270	4 709 130		11.3	
Republic of Moldova	2011	902 214	2 253 371	1 797 377	15.4	5.9
Romania	2010	3 859 040	15 695 030		4.1	
Russian Federation	2006	23 283 305	450 599 500		19.4	
Serbia	2012	631 552	5 346 597	3 496 662	8.5	5.5
Slovakia	2010	24 460	3 063 000		125.2	
Slovenia	2010	74 650	905 990		12.1	
Spain	2009	989 800	30 614 170		30.9	
Sweden	2010	71 090	6 759 760		95.1	
Switzerland	2010	59 070	1 163 190		19.7	
United Kingdom of Great Britain and Northern Ireland	2010	185 200	18 009 980		97.2	
OCEANIA (11)						
Pooled averages					1431.8	2.1
Medians of averages					3.2	2.6
American Samoa	2008	5 840	7 690		1.3	
Australia	2011	135 654	409 672 625		3020.0	
Cook Islands	2011	1 275	602		0.5	
Fiji	2009	65 037	251 859		3.9	
Guam	2007	104	405		3.9	
New Zealand	2012	58 071	14 393 802		247.9	
Niue	2009	429	762	1 267	1.8	3.0
Northern Mariana Islands	2007	256	1 624		6.3	
Palau	2015	1 179				
Samoa	2009	15 793	37 357	33 332	2.4	2.1
Tonga	2015	13 944	26 874		1.9	
Vanuatu	2007	38 909				

² In Norway, area considered is 'total land' = 'agricultural land' + 'forest and other wooded land' + 'other land'.

Table A2.6. Trends in average size of holdings since the WCA 1930 round¹

Countries by region	Average size of holdings (ha)							
	1930	1950	1960	1970	1980	1990	2000	2010
WORLD TOTAL								
Pooled averages	57.3	20.5	17.5	14.2	11.3	10.4	4.8	9.1
Medians of averages	18.5	15.3	6.6	6.2	4.9	6.1	4.4	5.4
AFRICA								
Pooled averages	65.6	79.9	22.5	9.4	1.7	1.5	2.1	2.6
Medians of averages	437.1	373.2	4.0	3.0	1.5	2.1	2.4	2.8
Algeria				6.2			8.3	
Angola				3.9				
Botswana				4.8	2.4	3.2	1.9	4.1
Burkina Faso						3.9		4.2
Cameroon				1.6				
Cabo Verde					1.5	1.3	1.0	0.8
Central African Republic			1.9	1.7	0.9			
Comoros							0.1	
Democratic Republic of the Congo				2.3		0.5		
Congo				1.4	1.0			
Côte d'Ivoire				5.0			3.9	2.4
Egypt	2.6	2.6	1.6		1.0	0.9	0.8	0.8
Eswatini				19.5	11.8			
Ethiopia					1.4	0.8	1.0	
Gabon				1.0				
Gambia							4.4	4.2
Ghana				3.2				
Guinea						2.0	1.6	
Guinea-Bissau			3.0			1.1		
Kenya			11.7	4.1	2.5			
Lesotho			2.2	2.0		1.4		1.4
Liberia				3.0				
Libya			26.6	13.0		14.2	10.2	
Madagascar			1.0		1.3		0.9	
Malawi				1.5	1.2	0.7		
Mali			4.4		3.3			
Mauritania					2.0			
Mauritius								2.8
Morocco			9.8				5.8	
Mozambique							1.3	1.5
Namibia ²						2.6	2.9	60.3
Niger					4.9			4.0
Réunion				2.0	3.6	4.4	4.7	
Rwanda					1.2			
Sao Tome and Principe						5.5		

¹ For European countries, except Albania and Russian Federation, "average size of holdings" in the 2010 round was calculated using the total area reported in Table A2.1 in order to keep consistency with previous census rounds. Readers interested in calculating averages using Utilized Agricultural Area (UAA) for these countries, could obtain UAA figures in Table A2.3 or refer to FAO (2019).

² In Namibia in the 2010 round, the census covered both the household (communal sector) and non-household (commercial sector) sectors of the country.

 **Table A2.6. Trends in average size of holdings since the WCA 1930 round¹**

Countries by region	Average size of holdings (ha)							
	1930	1950	1960	1970	1980	1990	2000	2010
Senegal			3.6				4.3	4.1
Seychelles			22.4					0.9
Sierra Leone					1.6			
South Africa	871.6	743.9	960.0	987.6				
Togo			2.6	1.4	1.5		2.0	3.4
Tunisia			15.4				10.5	
Uganda			3.3			2.2		
United Republic of Tanzania				1.3		2.8	2.4	2.7
Zambia				3.1				
Zimbabwe			63.9					
AMERICAS								
Pooled averages	91.8	94.3	91.3	72.9	95.5	75.7	87.1	55.8
Medians of averages	107.2	32.3	22.6	16.9	13.4	13.8	15.0	20.5
Antigua and Barbuda			2.4		0.4			
Argentina		366.0	371.3			469.0	582.5	
Bahamas					8.5	11.6		
Barbados		7.2	1.2	1.1		1.3		
Belize				23.2	23.0			
Bolivia (Plurinational State of)								39.7
Brazil	270.2	112.5	74.9	60.0	70.7	64.5	72.8	64.5
Canada	90.5	113.1	145.2	187.5	207.0	241.9	273.4	315.0
Chile			118.5		92.4		83.7	121.0
Colombia		30.2	22.6	26.3		23.3	25.1	46.0
Costa Rica		42.1	41.0	38.3				25.9
Dominica						2.3		
Dominican Republic		8.5	5.1	9.0				
Ecuador		17.4		15.3			14.7	
El Salvador		8.8	7.0	4.6				2.3
French Guyana					3.3	9.3	6.5	
Grenada					1.7	0.8		1.0
Guadeloupe				3.0	3.7	3.2	3.4	
Guatemala		10.6	8.3		7.8		4.5	
Haiti				1.4				1.0
Honduras		16.1		1.0		11.2		
Jamaica			4.4	3.1	2.9		2.2	1.4
Martinique					3.1	3.1	4.0	
Mexico	153.4	105.2	123.9	137.1		41.4		16.8
Nicaragua		45.5	37.3				31.3	23.1
Panama		13.6	19.0	18.2	14.7	13.8	11.7	10.9
Paraguay			108.7		88.1	77.5		107.3
Peru			20.4	16.9		20.1		17.1
Puerto Rico	15.2	13.7	14.4	16.0	13.4	17.2	15.4	18.0
Saint Kitts and Nevis						2.6	2.1	
Saint Lucia			2.7	2.7		2.0	1.6	1.2
Saint Vincent and the Grenadines						1.4	1.0	
Suriname			6.6	5.8	7.5			6.3
Trinidad and Tobago		5.4	6.0		4.3		4.4	

 **Table A2.6. Trends in average size of holdings since the WCA 1930 round¹**

Countries by region	Average size of holdings (ha)							
	1930	1950	1960	1970	1980	1990	2000	2010
United States of America	63.7	87.3	122.6	157.6	168.1	187.0	178.4	175.5
United States Virgin Islands		34.4	35.6	39.1	26.1	27.0	19.4	10.8
Uruguay	223.3	199.7	195.3	214.1	234.4	286.1	287.4	365.3
Venezuela (Bolivarian Republic of)	107.2	94.2	81.2	91.9	82.0		60.0	53.9
ASIA								
Pooled averages	4.1	2.4	2.6	2.2	2.1	1.7	1.0	1.7
Medians of averages	4.1	5.6	3.1	4.3	2.9	2.3	1.6	1.5
Armenia								1.5
Azerbaijan							1.8	1.7
Bahrain				4.3	4.4			
Bangladesh			1.4		1.3		0.3	0.6
Brunei Darussalam			5.2					
Cambodia								1.5
China							0.7	
Cyprus					4.5	3.4	4.4	3.5
Georgia							1.2	1.3
India		2.2	2.7	2.3	2.0	1.6	1.3	1.2
Indonesia			1.2	1.1	1.1	0.9	0.8	
Iran (Islamic Republic of)			6.0			4.3	4.1	4.1
Iraq		51.1	31.8	9.7				
Israel		15.4		13.4	11.3	14.2		
Japan		1.0	1.2	1.0	1.0	1.2	1.2	2.5
Jordan				7.0	5.9		3.3	3.3
Kazakhstan								27.0
Democratic People's Republic of Korea								
Kuwait				6.1				
Kyrgyzstan							1.0	
Lao People's Democratic Republic							1.6	2.4
Lebanon			2.4	4.3			1.9	1.4
Malaysia							1.0	
Myanmar						2.4	2.5	2.5
Nepal				1.0	1.1	0.9	0.8	0.7
Oman					1.0			0.9
Pakistan			3.5	5.3	4.7	3.8	3.1	2.6
Palestine								1.1
Philippines	4.1	3.5	3.6	3.6	2.9	2.2	2.0	1.3
Qatar							11.9	
Republic of Korea			2.1	0.9	0.9	1.1		1.2
Saudi Arabia				6.7	10.1		16.7	9.9
Singapore				0.8				
Sri Lanka			1.6	1.2	1.1		0.5	0.5
Syrian Arab Republic				9.0	6.5			
Tajikistan								4.6
Thailand			3.5		3.7	3.4	3.2	3.2
Turkey		7.7	5.0		6.2	5.8	6.0	
Viet Nam						0.5	0.7	1.1
Yemen					2.0		1.1	

 **Table A2.6. Trends in average size of holdings since the WCA 1930 round¹**

Countries by region	Average size of holdings (ha)							
	1930	1950	1960	1970	1980	1990	2000	2010
EUROPE								
Pooled averages	13.5	12.1	10.7	11.5	13.4	14.8	12.6	18.2
Medians of averages	13.4	10.0	10.5	10.5	15.0	17.0	22.1	23.8
Albania							4.0	1.2
Austria	19.2	18.3	19.4	20.7	24.2	26.4	34.1	38.9
Belgium	6.4	6.8	6.6	8.7	12.4	16.1	23.1	32.3
Bulgaria								14.2
Croatia							3.1	6.5
Czechia							99.3	221.6
Czechoslovakia		9.6		8.1	9.2	10.3		
Denmark	15.6	15.3	15.9	21.0	26.4	37.8	49.8	72.6
Estonia							20.3	63.3
Finland	64.7	45.7	41.2	51.0	57.0	61.9	72.2	97.9
France	11.4		18.8	22.1	26.6	31.5	45.0	57.2
Germany		10.8	12.1	14.2	17.0	29.3	40.5	61.5
Greece	4.1	3.6	3.2	3.4	0.0	4.5	4.7	7.6
Hungary		6.6		9.3	11.7		6.7	12.3
Iceland ³								988.4
Ireland	17.8	15.5	16.1	20.2	26.1	26.0	33.3	38.0
Italy	15.5		6.2	6.9	7.2	7.5	7.6	10.5
Latvia								34.5
Lithuania								15.0
Luxembourg		10.0		17.8	25.1	36.2	49.0	62.7
Malta			1.5	1.5	1.2		1.0	1.0
Montenegro								6.3
Netherlands	7.5	8.1	8.8	11.6	15.0	17.0	22.1	27.9
North Macedonia	5.4	5.6	4.7	4.8	4.2			2.1
Norway ⁴	4.8	4.9	5.1	6.2	7.6	10.0	14.7	86.1
Poland			6.4	4.8		8.3	6.6	11.3
Portugal				6.1	6.6	8.9	12.5	15.4
Republic of Moldova								2.5
Romania							3.5	4.1
Russian Federation								19.4
Serbia							3.7	8.5
Slovakia							48.7	125.2
Slovenia						5.8	11.0	12.1
Spain			14.8	17.8	18.7	18.8	23.9	30.9
Sweden	47.7	43.1		65.4	76.0		93.9	95.1
Switzerland				8.5	10.2	11.8		19.7
United Kingdom of Great Britain and Northern Ireland		35.9	40.7	55.1	65.4	70.8	70.9	97.2

³ In Iceland, holdings' land is constituted of 61 percent of "Permanent meadows and pastures" and 37 percent of "Unutilized agricultural land and other areas".

⁴ In Norway, the area considered is 'total land' = 'agricultural land' + 'forest and other wooded land' + 'other land'.

 **Table A2.6. Trends in average size of holdings since the WCA 1930 round¹**

Countries by region	Average size of holdings (ha)							
	1930	1950	1960	1970	1980	1990	2000	2010
OCEANIA								
Pooled averages	1,122.3	1,160.1	1,448.7	1,480.7	1,579.2	1,438.3	1,884.5	1,431.8
Medians of averages	817.6	99.5	118.9	9.4	5.8	6.2	4.4	3.1
American Samoa		3.0	2.3	2.2	1.8	6.1	1.1	1.3
Australia	1,428.8	1,533.8	1,843.6	1,993.0	2,818.9	3,601.7	3,243.2	3,020.0
Cook Islands						1.2	0.6	0.5
Fiji				7.3	4.2	6.2		3.9
French Polynesia						4.9		
Guam		5.0	6.5	9.4	5.8	15.1	4.4	3.9
New Caledonia						30.5	51.9	
New Zealand	206.5	194.1	231.3	303.1	297.0	216.2	223.4	247.9
Niue						6.1		1.8
Northern Mariana Islands					16.5	49.0	4.4	6.3
Palau						0.5		
Samoa						6.1	3.6	2.4
Tonga					3.3		2.6	1.9

Notes:

- For limitations on the data reported in this table, please refer to notes on the table A2.1.
- Pool average: Calculated as the average of countries' individual average size of holdings, weighted by the number of holdings.
- Medians average: Calculated as the median of countries' individual average size of holdings.
- Europe: Figures for Europe as a region cannot be compared to the figures in the publication (FAO, 2013). The figures for this publication used the data from all countries, without excluding certain countries' data considered as outliers.

CAUTION:

The pooled averages and medians of averages reported here for regions are not precisely representative, as data was lacking for several countries in different rounds. However, these were calculated to capture broad regional trends on the basis of available data. Readers should also be aware that the pooled averages may carry a dominant influence of data for some countries. For example, South Africa dominate the pooled average(s) for Africa. Pooled averages for the Americas are dominated by Canada, Mexico and the United States of America. In Oceania, the pooled averages are dominated by figures of Australia and New Zealand. In addition, when observing the trends in averages over different rounds, attention should be paid to the countries included in the calculation of averages, which may differ for various rounds.

Table A2.7. Gender of agricultural holders

Countries by region	Census year	Agricultural holdings operated by civil persons				
		Total (units)	Headed by		Shares	
			Male (units)	Female (units)	Male (%)	Female (%)
			4	5	6 (=col4/col3)	7 (=col5/col3)
1	2	3	4	5	6 (=col4/col3)	7 (=col5/col3)
WORLD TOTAL (90)	2006-2015				85.5	14.5
AFRICA (15)					82.8	17.2
Botswana	2015	62 975	40 687	22 288	64.6	35.4
Congo	2014	267 419	190 896	76 523	71.4	28.6
Côte d'Ivoire	2014	1 742 838	1 363 180	379 658	78.2	21.8
Egypt	2009-2010	5 401 432	5 188 653	212 779	96.1	3.9
Eswatini	2012-2013	108 164	62 724	45 440	58.0	42.0
Gambia	2011	82 027	74 633	7 394	91.0	9.0
Lesotho	2009-2010	225 435	146 821	78 614	65.1	34.9
Mauritius	2014	25 122	18 149	6 973	72.2	27.8
Mozambique	2009-2010	3 826 913	2 775 234	1 051 679	72.5	27.5
Niger	2004-2008	1 627 294	1 519 144	108 150	93.4	6.6
Senegal	2013	755 532	640 195	115 337	84.7	15.3
Seychelles	2011	642	522	120	81.3	18.7
Togo	2012-2014	508 599	418 704	89 895	82.3	17.7
Uganda	2008-2009	3 575 065	2 821 070	753 994	78.9	21.1
United Republic of Tanzania	2007-2008	5 838 522	4 651 702	1 186 820	79.7	20.3
AMERICAS (16)					81.7	18.2
Bolivia (Plurinational State of) ¹	2013	868 522	649 198	219 205	74.7	25.2
Brazil	2006	4 952 265	4 319 123	633 142	87.2	12.8
Canada	2011	293 925	213 265	80 665	72.6	27.4
Colombia	2013	234 966	225 561	9 405	96.0	4.0
Costa Rica	2014	80 987	68 389	12 598	84.4	15.6
Grenada	2012	9 306	6 631	2 678	71.3	28.8
Haiti	2008-2009	1 015 024	757 354	257 670	74.6	25.4
Mexico	2007	4 067 618	3 427 353	640 265	84.3	15.7
Nicaragua	2011	261 321	200 428	60 893	76.7	23.3
Panama	2011	245 105	165 974	79 131	67.7	32.3
Peru	2012	2 246 702	1 554 781	691 921	69.2	30.8
Saint Lucia	2007	9 800	6 894	2 906	70.3	29.7
Suriname	2008	10 188	6 652	3 536	65.3	34.7
United States of America	2012	2 109 303	1 821 039	288 264	86.3	13.7
Uruguay ¹	2011	44 781	28 433	8 839	63.5	19.7
Venezuela (Bolivarian Republic of)	2008	410 705	329 721	80 984	80.3	19.7
ASIA (16)					86.9	13.1
Armenia	2014	317 346	236 558	80 788	74.5	25.5
Azerbaijan	2015	1 350 736	1 013 067	337 669	75.0	25.0
Bangladesh	2008	15 183 183	14 734 773	448 410	97.0	3.0
Cyprus	2010	38 860	30 850	8 010	79.4	20.6
Georgia	2014	639 963	441 787	198 176	69.0	31.0
India	2010-2011	138 109 900	120 427 100	17 682 800	87.2	12.8

¹ Bolivia (Plurinational State of), Oman, Uruguay – The sex of the head of some holdings operated by civil persons was missing and stated as “Not Specified” or “No information”, and the sum of the shares headed by males and females was not equal to 100 percent.

 **Table A2.7. Gender of agricultural holders**

Countries by region	Census year	Agricultural holdings operated by civil persons				
		Total	Headed by		Shares	
			Male	Female	Male	Female
			(units)	(units)	(%)	(%)
1	2	3	4	5	6 (=col4/col3)	7 (=col5/col3)
Indonesia	2013	26 135 469	23 313 702	2 821 767	89.2	10.8
Lao People's Democratic Republic	2010–2011	510 200	501 600	8 600	98.3	1.7
Lebanon	2010	169 022	154 457	14 565	91.4	8.6
Mongolia	2011	243 100	209 600	33 500	86.2	13.8
Nepal	2011–2012	3 831 093	3 104 338	726 755	81.0	19.0
Oman ¹	2012–2013	192 039	177 068	14 753	92.2	7.7
Republic of Korea	2015	1 088 518	894 446	194 072	82.2	17.8
Sri Lanka	2013–2014	2 311 366	1 879 633	431 733	81.3	18.7
Thailand	2013	5 905 714	3 761 602	2 144 112	63.7	36.3
Viet Nam	2011	10 368 143	8 484 257	1 883 886	81.8	18.2
EUROPE (34)²					72.5	27.5
Albania	2012	321 492	292 990	28 502	91.1	8.9
Austria	2010	150 170	98 390	51 780	65.5	34.5
Belgium	2010	42 850	36 410	6 450	85.0	15.1
Bulgaria	2010	370 490	286 140	84 350	77.2	22.8
Croatia	2010	233 280	181 870	51 400	78.0	22.0
Czechia	2010	22 860	19 420	3 450	85.0	15.1
Denmark	2010	41 360	37 630	3 740	91.0	9.0
Estonia	2010	19 610	12 590	7 020	64.2	35.8
Finland	2010	63 870	56 770	7 100	88.9	11.1
France	2010	516 100	398 990	117 120	77.3	22.7
Germany	2010	299 130	273 920	25 220	91.6	8.4
Greece	2010	723 060	522 990	200 070	72.3	27.7
Hungary	2010	576 810	424 940	151 870	73.7	26.3
Iceland	2010	2 590	2 190	400	84.6	15.4
Ireland	2010	139 890	123 770	16 120	88.5	11.5
Italy	2010	1 620 880	1 123 040	497 850	69.3	30.7
Latvia	2010	83 390	44 380	39 010	53.2	46.8
Lithuania	2010	199 910	104 550	95 360	52.3	47.7
Luxembourg	2010	2 200	1 850	350	84.1	15.9
Malta	2010	12 530	11 140	1 390	88.9	11.1
Montenegro	2010	48 870	42 580	6 290	87.1	12.9
Netherlands	2010	72 320	67 910	4 420	93.9	6.1
Norway	2010	46 620	40 060	6 560	85.9	14.1
Poland	2010	1 506 620	1 058 500	448 120	70.3	29.7
Portugal	2009	305 270	215 900	89 370	70.7	29.3
Republic of Moldova	2011	898 768	571 573	327 195	63.6	36.4
Romania	2010	3 859 040	2 610 460	1 248 580	67.6	32.4
Serbia	2012	628 552	518 016	110 536	82.4	17.6
Slovakia	2010	24 460	20 290	4 170	83.0	17.0
Slovenia	2010	74 650	54 310	20 340	72.8	27.2
Spain	2009	989 800	775 420	214 380	78.3	21.7

² Eurostat reports gender breakdown only for managers, which include both holders (civil persons) that manage the holding themselves and managers that are not holders, including of legal units.

 **Table A2.7. Gender of agricultural holders**

Countries by region	Census year	Agricultural holdings operated by civil persons				
		Total <i>(units)</i>	Headed by		Shares	
			Male	Female	Male	Female
			<i>(units)</i>	<i>(units)</i>	<i>(%)</i>	<i>(%)</i>
1	2	3	4	5	6 (=col4/col3)	7 (=col5/col3)
OCEANIA (9)					86.8	13.2
American Samoa	2008	5 840	4 707	1 133	80.6	19.4
Cook Islands	2011	1 030	954	76	92.6	7.4
Fiji	2009	63 622	61 309	2 313	96.4	3.6
Guam	2007	104	91	13	87.5	12.5
Niue	2009	488	375	113	76.8	23.2
Northern Mariana Islands	2007	256	226	30	88.3	11.7
Samoa	2009	24 640	19 009	5 631	77.1	22.9
Tonga	2015	13 936	11 290	2 646	81.0	19.0
Vanuatu	2007	38 879	31 215	7 664	80.3	19.7

Table A2.8. Land tenure types: Number and area of holdings

Countries by region	Census year	Total number of holdings ¹ (units)	Category of land used for classification			Owned by the holder or in owner – like possession			Rented from others			Operated under other forms of tenure			Under more than one form of tenure ⁴				
			Total area (ha)	Number (units)	Share (%)	Total area (ha)	Number (units)	Share (%)	Total area (ha)	Number (units)	Share (%)	Total area (ha)	Number (units)	Share (%)	Total area (ha)	Number (units)	Share (%)	Total area (ha)	Number (units)
1	2	3	4	5	6(=col5 /col3)	7	8(=col17 /col4)	9	10(col9 /col3)	11	12(col11 /col4)	13	14(=col13 /col3)	15	16(=col15 /col4)	17	18(=col.17 /col.3)	19	20(=col.19 /col.4)
WORLD TOTAL (81)	2006–2015																		
AFRICA (6)																			
Cabo Verde ²	2015	45 539	36 456			19 951	54.7		5 605	15.4		10 900	30						
Egypt	2009–2010	5 404 395	4 086 930			3 473 460	85.0	212 482	4	189 220	4.6	50 856	0.9	222 191	5.4	136 685	3	202 059	4.9
Malawi	2006–2007	2 665 565				2 079 140	78.0					586 425	22.0						
Mauritius	2014	23 456	66 449			56 177	84.5		9 161	13.8		1 111	1.7						
Seychelles	2011	530	466			149	32.0		277	59.4		41	9						
Togo	2011–2014	508 599	1 746 265			1 536 713	88.0		165 895	9.5		43 657	2.5						
AMERICAS (17)																			
Bolivia (Plurinational State of) ³	2013	871 927	34 654 984			29 140 111	84.1	22 860	3	463 000	1.4	71 640	8.2	5 031 873	14.5				
Brazil	2006	5 175 636	333 680 037			318 552 592	95.5		15 127 498	4.5									
Canada ⁵	2011	205 730	68 127 147			41 865 023	61.5	97 892	48	23 841 892	35.0	21 175	10.3	2 420 232	3.6				
Costa Rica	2014	93 017	2 406 418			2 194 208	91.2		179 905	7.5		32 305	1.3						
El Salvador	2007–2008	397 433	929 308			690 091	74.3		194 586	20.9		44 631	4.8						
Grenada	2012	9 345	9 542			8 219	88.0	600	6	917	9.6	384	4.1	468	4.9				
Haiti	2008–2009	1 018 951	991 267			982 612	99.1					8 675	0.9						
Mexico	2007	4 067 618	68 535 298			64 333 339	93.9	235 743	6	2 426 869	3.5	113 314	2.8	1 775 090	2.6				
Nicaragua	2011	262 546	6 054 869			5 952 860	98.3		78 884	1.3		23 125	0.4						
Panama	2011	248 560	2 698 841			2 160 233	80.0	2 218	1	35 120	1.3					12 479	5	503 469	18.7
Paraguay	2008	289 649	31 086 894			27 039 975	87.0	22 456	8	2 467 234	7.9	13 854	4.8	1 579 686	5.1				
Peru	2012	2 260 973	38 742 465			36 493 145	94.2	94 244	4	380 504	1.0	51 264	2.3	481 904	1	200 660	9	1 386 911	3.6
Puerto Rico	2012	13 159	236 736			169 587	71.6	2 728	21	67 149	28.4								
Suriname	2008	10 234	63 989			14 637	22.9		34 828	54.4		14 525	22.7						
United States of America	2012	2 109 303	370 096 212			228 071 298	61.6	666 945	32	142 024 914	38.4								

¹ 'Total number of holdings' refer to the number of holdings reporting land tenure types. The figures broken down may not add up because the same holding could be reported more than once in different land tenure types.

² For Cabo Verde, the category 'not declared' is included in other form of tenure.

³ For Bolivia (Plurinational State of), the figures provided are for holdings with land.

⁴ For countries that reported data for holdings operated under two or more tenure types (col. 17–20). Data in col. 5–16 refer only to holdings operated under one tenure type.

⁵ In Canada, 'total area' includes also "total area of land used by others" (3 314 424 ha).

Table A2.8. Land tenure types: Number and area of holdings

Countries by region	Census year	Total number of holdings ¹ (units)	Category of land used for classification			Owned by the holder or in owner-like possession			Rented from others			Operated under other forms of tenure			Under more than one form of tenure ⁴				
			Total area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	
1	2	3	4	5	6(=col5 /col3)	7	8(=col7 /col4)	9	10(col9 /col3)	11	12(col11 /col4)	13	14(=col13 /col3)	15	16(=col15 /col4)	17	18(=col.17 /col.3)	19	20(=col.19 /col.4)
United States Virgin Islands	2007	219	Total area	130	59.4	2 376		112	51										
Uruguay	2011	44 781	Total area	27 405	61.2	16 357 298	46.0	6 087	14	2 262 067	13.8	6 057	13.5	2 955 153	18.1	5 232	12	3 613 344	22.1
ASIA (17)																			
Azerbaijan	2015	1 352 121	Total area	8 672 725	57.1	4 967 167	55.0	473 251	3	172 364	1.9			16 869	0.7	6 037 207	40	3 886 985	43.1
Bangladesh	2008	15 183 183	Total area	3 285 713	96.4	3 168 184	96.4			108 946	3.3			9 583	0.3				
Cambodia	2013	21 229 149	Total area	118 400	89.7	54 580	46.1	6 260	16	61 070	51.6	1 300	3.3	2 750	2				
Cyprus	2010	38 860	UAA	642 209	99.8	734 825	87.2	16 407	3	107 464	12.8								
Georgia	2014	6 422 009	Total area	135 040 000	97.6	155 918 000	97.7	724 000	1	624 000	0.4	728 000	0.5	917 000	1	1 856 000	1		
India	2010-2011	138 348 000	Total area	261 508	95.0	216 978	83.0	1 973	3	22 568	8.6	72	0.1	116	0.0	1 941	2	21 846	8.4
Jordan	2017	80 152	Total area	730 800	93.4	1 738 400	93.0	68 900	9	110 700	5.9	19 600	2.5	21 100	1.1				
Laos People's Democratic Republic ⁶	2010-2011	782 800	Total area	142 303	83.9	163 481	70.8	12 954	8	48 596	21.0	14 255	8.4	18 917	8				
Lebanon	2010	169 512	UAA	230 994															
Myanmar ⁷	2010	5 426 083	Total area	12 794 176		12 365 387	96.6							428 790	3.4				
Nepal	2011-2012	3 831 093	Total area	3 241 881	84.6	2 014 266	79.8	34 984	1	24 416	1.0	13 398	0.3	2 359	0	540 829	14	484 599	19.2
Oman	2012-2013	166 610	Total area	149 105	93.4			3 680	2			6 537	3.9			734	0		
Pakistan	2010	8 264 480	Total area	21 412 545		15 957 905	74.5			2 385 398	11.1					3 069 232			14.3
Palestine ⁸	2010	111 310	Total area	95 149	85.5	120 706		4 577	4			4 212	3.8			7 372	7		
Philippines	2010	5 563 138	Total area	3 452 564	62.1	4 366 075	60.0	1 404 660	25	1 553 526	21.4	177 161	3.2	417 351	6	528 753	10	934 494	12.9
Republic of Korea	2015	1 088 518	Total area	706 577	64.9	532 036	40.6	87 178	8	102 001	7.8	793 755	72.9	0	0	284 285	26	675 751	51.6
Saudi Arabia	2015	346 829	Total area	272 447	78.6	3 199 892	93.5	11 549	3	206 714	6.0	29	0.0	51	0.0	1 141	0	15 244	0.4
EUROPE⁹ (34)																			
Albania	2012	321 492	Total area	320 021	99.5	304 638	82.0	18 171	6	59 539	16.0	15 457	4.8	7 432	2.0				
Austria	2010	150 170	UAA	137 170	91.3	1 855 900	64.5	70 110	47	891 230	31.0	30 540	20.3	131 040	5				
Belgium	2010	42 850	UAA	37 350	87.2	446 950	32.9	32 450	76	895 640	66.0	1 460	3.4	15 420	1.1				
Bulgaria	2010	370 490	UAA	342 080	92.3	1 580 550	35.3	73 040	20	2 894 980	64.7								
Croatia	2010	233 280	UAA	229 160	98.2	715 720	54.4	65 470	28	600 290	45.6								

⁶ For Lao PDR, the figures provided are for holdings with land.

⁷ For Myanmar, the figures provided are for agricultural holdings only.

⁸ For Palestine, the category 'not stated' is included in 'Other form of land tenure'.

⁹ Category of land use for most European countries is UAA (Utilized Agricultural Area).

Table A2.8. Land tenure types: Number and area of holdings

Countries by region	Census year	Total number of holdings ¹ (units)	Category of land used for classification			Owned by the holder or in owner – like possession			Rented from others			Operated under other forms of tenure			Under more than one form of tenure ⁴				
			Total area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	
1	2	3	4	5	6(=col5 /col3)	7	8(=col7 /col4)	9	10(col9 /col3)	11	12(col11 /col4)	13	14(=col13 /col3)	15	16(=col15 /col4)	17	18(=col.17 /col.3)	19	20(=col.19 /col.4)
Czechia	2010	22 860	3 483 500	19 740	86.4	767 120	22.0	14 080	62	2 716 380	78.0								
Denmark	2010	41 360	2 646 860	39 270	94.9	1 820 890	68.8	19 710	48	825 970	31.2								
Estonia	2010	19 610	940 930	17 620	89.9	377 980	40.2	4 690	24	495 620	52.7	2 410	12.3	67 330	7				
Finland	2010	63 870	2 290 980	61 040	95.6	1 498 160	65.4	37 680	59	792 820	34.6								
France	2010	516 100	27 837 290	361 100	70.0	6 555 990	23.6	337 170	65	20 949 070	75.3	22 490	4.4	332 230	1				
Germany	2010	299 130	16 704 040	270 290	90.4	6 460 560	38.7	221 970	74	9 982 640	59.8	29 160	9.7	260 850	1.6				
Greece	2010	723 060	5 177 510	686 930	95.0	2 161 580	41.7	146 320	20	1 227 800	23.7	16 050	2.2	1 788 120	35				
Hungary	2010	576 610	4 686 340	524 360	90.9	2 040 350	43.5	24 640	4	2 340 170	49.9	14 670	2.5	305 820	6.5				
Iceland	2010	2 590	1 595 670	2 340	90.3	1 229 430	77.0	800	31	161 130	10.1	450	17.4	205 110	13				
Ireland	2010	139 890	4 991 350	134 650	96.3	3 784 560	75.8	41 440	30	784 380	15.7	30	0.0	422 410	8.5				
Italy	2010	1 620 880	12 856 050	1 525 870	94.1	8 340 390	64.9	260 290	16	3 797 840	29.5	7 730	0.5	717 820	6				
Latvia	2010	83 390	1 796 290	79 410	95.2	1 231 370	68.6	14 400	17	564 920	31.4								
Lithuania	2010	199 910	2 742 560	187 570	93.8	1 406 610	51.3	61 110	31	1 273 390	46.4	4 510	2.3	62 560	2				
Luxembourg	2010	2 200	131 110	2 090	95.0	53 480	40.8	2 070	94	76 720	58.5	750	34.1	910	0.7				
Malta	2010	12 530	11 450	5 590	44.6	2 720	23.8	9 600	77	8 730	76.2								
Montenegro	2010	48 870	221 300	48 220	98.7	97 930	44.3	450	1	2 220	1.0	1 670	3.4	121 150	55				
Netherlands	2010	72 320	1 872 350	63 960	88.4	1 100 890	58.8	33 690	47	507 020	27.1	25 800	35.7	264 440	14.1				
Norway	2010	46 620	1 005 940	41 070	88.1	587 520	58.4	30 480	65	418 430	41.6								
Poland	2010	1 506 620	14 447 290	1 306 900	86.7	10 265 210	71.1	252 240	17	2 706 250	18.7	207 250	13.8	1 475 830	10.2				
Portugal	2009	305 270	3 668 150	287 010	94.0	2 641 920	72.0	33 950	11	824 850	22.5	23 820	7.8	201 370	6				
Republic of Moldova	2011	902 214	2 243 540	877 290	97.2	1 285 138	57.3	2 685	0	571 504	25.5	22 239	2.5	386 899	17.2				
Romania	2010	3 659 040	13 306 130	3 576 870	92.7	8 033 580	60.4	69 380	2	3 642 000	27.4	323 640	8.4	1 630 540	12.3				
Serbia	2012	631 552	3 437 423	608 642	96.4	2 418 416	70.4	145 525	23	1 019 008	29.6								
Slovakia	2010	24 460	1 895 500	20 620	84.3	225 750	11.9	6 570	27	1 669 750	88.1								
Slovenia	2010	74 650	482 650	73 420	98.4	345 260	71.5	21 960	29	129 170	26.8	1 640	2.2	8 220	2				
Spain	2009	989 800	23 752 690	855 890	86.5	14 486 910	61.0	210 110	21	7 545 110	31.8	92 540	9.3	1 720 670	7.2				
Sweden	2010	71 090	3 066 320	64 300	90.4	1 748 840	57.0	32 970	46	1 317 480	43.0								
Switzerland	2010	59 070	1 047 800	52 260	88.5	537 160	51.3	47 810	81	494 380	47.2	3 700	6.3	16 330	1.6				
United Kingdom of Great Britain and Northern Ireland	2010	185 200	16 881 690	158 530	85.6	10 881 940	64.5	63 370	34	4 804 500	28.5	110	0.1	1 185 250	7				

Table A2.8. Land tenure types: Number and area of holdings

Countries by region	Census year	Total number of holdings ¹ (units)	Category of land used for classification			Owned by the holder or in owner – like possession			Rented from others			Operated under other forms of tenure			Under more than one form of tenure ⁴				
			Total area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	Number (units)	Share (%)	Area (ha)	
1	2	3	4	5	6(=col5 /col3)	7	8(=col7 /col4)	9	10(col9 /col3)	11	12(col11 /col4)	13	14(=col13 /col3)	15	16(=col15 /col4)	17	18(=col.17 /col.3)	19	20(=col.19 /col.4)
OCEANIA (7)																			
American Samoa	2008	5 840	Total area	7 690	97.0	7 580	98.6	174	3	111	1.4								
Australia	2011	135 654	Total area	409 672 625	96.1	264 578 978	64.6	41 294	30	142 486 212	34.8	4 149	3.1	2 607 435	0.6				
Cook Islands	2011	1 275	Total area	602		321	53.3			120	19.9			160	26.6				
Guam	2007	104	Total area	405	83	79.8	320	79.0	25	24	85	20.9							
Northern Mariana Islands	2007	256	Total area	1 624	146	57.0	465	28.6	115	45	1 159	71.4							
Samoa	2009	15 793	Total area	37 357		35 246	94.4			1 717	4.6			394	1.1				
Vanuatu	2006-2008	38 909	Total area	7 511		7 066	94.1			59	0.8			384	5.1				

Table A2.9. Legal status of the holder: number and area of holdings

Countries by region	Census year	Individual(s)			Juridical			Others								
		Total number of holdings (units)	Total area of holdings (ha)	Share in number of holdings (%)	Number of holdings (units)	Share in number of holdings (%)	Area of holdings (ha)	Share in area of holdings (%)	Number of holdings (units)	Share in number of holdings (%)	Area of holdings (ha)	Share in area of holdings (%)				
1	2	3	4	5	6 (=col.5/col.3)	7	8 (=col.7/col.4)	9	10 (=col.9/col.3)	11	12 (col.11/col.4)	13	14 (=col.13/col.3)	15	16 (col.15/col.4)	
WORLD TOTAL (82)	2006–2015															
AFRICA (13)																
Botswana	2015	63 246	259 656	62 975	99.6	204 965	78.9	271	0.4	54 691	21.1					
Burkina Faso	2006–2010	1 330 015	5 553 026	1 329 439	100.0	5 522 566	99.5	576	0.0	30 460	0.5					
Cabo Verde	2015	45 539	36 456	45 399	99.7	35 968	98.7	140	0.3	488	1.3					
Congo	2014	267 610		267 419	99.9	422 431		191	0.1							
Egypt	2009–2010	5 404 395	4 086 930	5 401 432	99.9	3 765 229	92.1	2 963	0.1	321 701	7.9					
Eswatini	2012–2013	108 164		97 429	90.1			444	0.4			10 291	9.5			
Mauritius	2014	23 456	66 449	23 343	99.5	13 009	19.6	113	0.5	53 440	80.4					
Namibia	2013–2014	162 821	9 811 517	159 484	98.0	463 248	4.7	3 337	2.0	9 348 269	95.3					
Niger ¹	2004–2008	1 627 294	6 534 682			1 721 515	26.3									
Seychelles	2011	530	466	498	94.0			32	6.0							
South Africa	2007	39 966		34 123	85.4			5 606	14.0			237	0.6			
Togo	2012–2014	508 599	1 746 265	508 599	100.0	1 746 265	100.0									
Uganda ²	2008–2009	3 945 753		3 469 321	87.9			476 432	12.1							
AMERICA (16)																
Bolivia (Plurinational State of)	2013	871 927	34 654 984	855 356	98.1	28 744 711	82.9	15 422	1.8	4 195 854	12.1	1 149	0.1	1 714 420	4.9	
Brazil	2006	5 175 636	333 680 037	4 952 265	95.7	280 849 807	84.2	184 300	3.6	49 657 989	14.9	39 071	0.8	3 172 241	1.0	
Chile ³	2006–2007	301 269	36 439 533	268 968	89.3	13 000 966	35.7	11 516	3.8	16 780 725	46.1					
Costa Rica	2014	93 017	2 406 418	80 987	87.1	1 316 807	54.7	10 935	11.8	1 022 032	42.5	1 095	1.2	67 579	2.8	
Grenada	2012	9 345	9 542	9 306	99.6			26	0.3			13	0.1			
Jamaica	2007	228 683	325 810	210 853	92.2			17 830	7.8							
Nicaragua	2011	262 546	6 054 869	261 791	99.7	5 908 537	95.9	322	0.1	50 301	0.8	433	0.2	196 031	3.2	
Panama	2011	248 560	2 698 841	246 820	99.3	2 385 107	88.4	663	0.3	244 951	9.1	1 077	0.4	68 783	2.5	
Paraguay	2008	289 649	31 086 894	286 807	99.0	21 776 705	70.1	1 707	0.6	8 623 820	27.7	1 135	0.4	686 369	2.2	

¹ In Niger, plots are managed either individually or collectively. The bulk of the holding plots (74 percent of holding area) are managed collectively.

² In Uganda, non-declared holdings are included in the category 'Others'.

³ In Chile, the figures provided for individual(s) and juridical persons are only for agricultural holdings. Total area included forestry holdings' land area.

Table A2.9. Legal status of the holder: number and area of holdings

Countries by region	Census year	Total				Individual(s)				Juridical				Others			
		Total number of holdings (units)	Total area of holdings (ha)	Number of holdings (units)	Share in number of holdings (%)	Number of holdings (units)	Area of holdings (ha)	Share in area of holdings (%)	Number of holdings (units)	Share in number of holdings (%)	Area of holdings (ha)	Share in area of holdings (%)	Number of holdings (units)	Share in number of holdings (%)	Area of holdings (ha)	Share in area of holdings (%)	
1	2	3	4	5	6 (=col.5/col.3)	7	8 (=col.7/col.4)	9	10 (=col.9/col.3)	11	12 (col.11/col.4)	13	14 (=col.13/col.3)	15	16 (col.15/col.4)		
Peru	2012	2 280 973	38 742 465	2 246 702	99.4	14 112 231	36.4	14 271	0.6	24 630 233	63.6	13	2.8	8 888	3.8		
Puerto Rico	2012	13 159	236 736	11 938	90.7	164 489	69.5	855	6.5	63 360	26.8	366	2.8	8 888	3.8		
Saint Lucia	2007	9 972	12 223	9 956	99.8	11 609	95.0	16	0.2	614	5.0						
Suriname	2008	10 234	63 989	10 188	99.6	38 958	60.9	46	0.4	25 031	39.1						
United States of America	2012	2 109 303	370 096 212	1 828 946	86.7	227 608 837	61.5	244 703	11.6	116 286 289	31.4	35 654	1.7	26 201 086	7.1		
United States Virgin Islands	2007	219	2 376	210	95.9			5	2.3			4	1.8				
Uruguay	2011	44 781	16 357 298	37 272	83.2	8 635 939	52.8	7 509	16.8	7 721 359	47.2						
ASIA (15)																	
Armenia	2014	361 064	534 399	360 611	99.9	513 000	96.0	453	0.1	21 399	4.0						
Azerbaijan	2015	1 352 121	2 362 024	1 350 736	99.9	2 047 569	86.7	1 385	0.1	314 455	13.3						
Cambodia	2013	2 129 149	3 286 713	2 129 048	100.0	2 480 085	75.5	101	0.0	806 628	24.5						
Cyprus	2010	38 860	137 760	38 390	98.8	123 610	89.7	470	1.2	14 150	10.3						
Georgia ⁴	2014	642 209	842 289	639 567	99.6	727 925	86.4	2 642	0.4	114 364	13.6						
Iran (Islamic Republic of)	2014	4 032 467	16 476 609	4 023 439	99.8			9 028	0.2								
Japan	2015	1 377 266	3 451 444	1 344 287	97.6	2 917 513	84.5	32 979	2.4	533 931	15.5						
Jordan	2007	80 152	261 508	75 181	93.8	207 495	79.3	3 212	4.0	38 442	14.7	1 759	2.2	15 571	6.0		
Oman	2012-2013	166 610	149 105	155 413	93.3	135 632	91.0	11 197	6.7	13 473	9.0						
Pakistan	2010	8 264 480	21 412 545	8 212 838	99.4	21 054 681	98.3	51 642	0.6	357 864	1.7						
Palestine	2010	111 310	120 706	111 202	99.9	119 751	99.2	108	0.1	955	0.8						
Philippines	2010	5 563 138	7 271 446	5 557 998	99.9	6 861 993	94.4	5 140	0.1	409 453	5.6						
Saudi Arabia ⁵	2015	346 829	3 421 854	278 902	80.4	3 002 858	87.8	6 257	1.8	415 911	12.2	7	0.0	3 084	0.1		
Thailand	2013	5 911 567	18 659 786	5 905 560	99.9	18 583 668	99.6	3 936	0.1	64 086	0.3	2 071	0.0	12 032	0.1		
Viet Nam	2011	10 376 981	11 880 117	10 368 143	99.9	9 477 860	79.8	8 838	0.1	2 402 258	20.2						
EUROPE (33)																	
Austria	2010	150 170	5 847 850	146 180	97.3	4 429 530	75.7	3 990	2.7	1 418 320	24.3						
Belgium	2010	42 850	1 384 880	38 600	90.1	1 218 260	88.0	4 250	9.9	166 620	12.0						

⁴ In Georgia, the figures provided for individuals and juridical persons are given only for holdings with land.

⁵ In Saudi Arabia, the figures provided for individuals and juridical persons are given only for holdings with land.

Table A2.9. Legal status of the holder: number and area of holdings

Countries by region	Census year	Total		Individual(s)				Juridical				Others			
		number of holdings (units)	area of holdings (ha)	Number of holdings (units)	Share in number of holdings (%) (=col.5/col.3)	Area of holdings (ha)	Share in area of holdings (%) (=col.7/col.4)	Number of holdings (units)	Share in number of holdings (%) (=col.9/col.3)	Area of holdings (ha)	Share in area of holdings (%) (=col.11/col.4)	Number of holdings (units)	Share in number of holdings (%) (=col.13/col.3)	Area of holdings (ha)	Share in area of holdings (%) (=col.15/col.4)
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Bulgaria	2010	370 480	5 280 520	365 110	98.5	1 799 980	34.2	5 380	1.5	3 460 540	65.8				
Croatia	2010	233 280	1 512 410	231 070	99.1	1 286 940	85.1	2 210	0.9	225 470	14.9				
Czechia	2010	22 860	5 065 270	19 780	86.5	1 064 290	21.0	3 080	13.5	4 000 980	79.0				
Denmark	2010	41 360	3 001 380	39 510	95.5	2 683 790	89.4	1 850	4.5	317 590	10.6				
Estonia	2010	19 610	1 241 850	17 890	91.2	685 100	55.2	1 720	8.8	556 750	44.8				
Finland	2010	63 870	6 250 610	62 620	98.0	6 111 710	97.8	1 250	2.0	138 900	2.2				
France	2010	516 100	29 546 440	404 080	78.3	18 684 320	63.2	112 020	21.7	10 862 120	36.8				
Germany	2010	299 130	18 387 080	294 070	98.3	15 272 050	83.1	5 060	1.7	3 115 030	16.9				
Greece	2010	723 060	5 461 290	722 400	99.9	3 736 000	68.4	660	0.1	1 725 290	31.6				
Hungary	2010	576 810	7 102 970	567 630	98.4	2 702 610	38.0	9 180	1.6	4 400 360	62.0				
Iceland	2010	2 590	2 560 050	2 240	86.5	2 218 230	86.6	350	13.5	341 820	13.4				
Ireland	2010	139 890	5 317 860	139 560	99.8	4 873 190	91.6	330	0.2	444 670	8.4				
Italy	2010	1 620 880	17 080 850	1 603 710	98.9	13 990 560	81.9	17 170	1.1	3 090 290	18.1				
Latvia	2010	83 390	2 879 170	83 270	99.9	2 842 090	98.7	120	0.1	37 080	1.3				
Lithuania	2010	199 910	3 003 620	199 270	99.7	2 622 610	87.3	640	0.3	381 010	12.7				
Luxembourg	2010	2 200	1 37 910	2 150	97.7	137 130	99.4	50	2.3	780	0.6				
Malta	2010	12 530	12 940	12 500	99.8	12 760	98.6	30	0.2	180	1.4				
Montenegro	2010	48 870	309 220	48 820	99.9	294 400	95.2	50	0.1	14 820	4.8				
Netherlands	2010	72 320	2 018 620	68 140	94.2	1 877 570	93.0	4 180	5.8	141 050	7.0				
North Macedonia	2007	192 675	388 221	192 378	99.8	321 813	80.8	297	0.2	76 408	19.2				
Norway	2010	46 620	4 015 620	46 150	99.0	3 985 260	99.2	470	1.0	30 360	0.8				
Poland	2010	1 506 620	16 982 340	1 502 470	99.7	15 003 210	88.3	4 150	0.3	1 979 130	11.7				
Portugal	2009	305 270	4 709 130	297 380	97.4	3 218 330	68.3	7 890	2.6	1 490 800	31.7				
Romania	2010	3 859 040	15 695 030	3 828 350	99.2	8 307 450	52.9	30 690	0.8	7 387 580	47.1				
Serbia	2012	631 552	5 346 597	628 552	99.5	3 538 376	66.2	3 000	0.5	1 808 221	33.8				
Slovakia	2010	24 460	3 063 000	22 190	90.7	379 720	12.4	2 270	9.3	2 683 280	87.6				
Slovenia	2010	74 650	905 990	74 430	99.7	875 950	96.7	220	0.3	30 040	3.3				
Spain	2009	989 800	30 614 170	929 690	93.9	19 511 240	63.7	60 110	6.1	11 102 930	36.3				

Table A2.9. Legal status of the holder: number and area of holdings

Countries by region	Census year	Total			Individual(s)			Juridical			Others					
		Total number of holdings (units)	Total area of holdings (ha)	Share in number of holdings (%)	Number of holdings (units)	Area of holdings (ha)	Share in area of holdings (%)	Number of holdings (units)	Area of holdings (ha)	Share in area of holdings (%)	Number of holdings (units)	Area of holdings (ha)	Share in area of holdings (%)			
1	2	3	4	5	6 (=col.5/col.3)	7	8 (=col.7/col.4)	9	10 (=col.9/col.3)	11	12 (col.11/col.4)	13	14 (=col.13/col.3)	15	16 (col.15/col.4)	
Sweden	2010	71 090	6 759 760	65 860	92.6	5 535 920	81.9	5 240	7.4	1 223 840	18.1					
Switzerland	2010	59 070	1 163 190	52 990	89.7	1 037 390	89.2	6 080	10.3	125 800	10.8					
United Kingdom of Great Britain and Northern Ireland	2010	185 200	18 009 980	177 840	96.0	14 716 860	81.7	7 360	4.0	3 293 120	18.3					
OCEANIA (5)																
Fiji	2009	65 037	251 859	64 156	98.6			881	1.4							
Guam	2007	104	405	87	83.7			17	16.3							
Northern Mariana Islands	2007	256	1 624	232	90.6			23	9.0			1	0.4		0.0	
Samoa ⁶	2009	15 793	37 357	15 692	99.4	37 140	99.4	97	0.6	209	0.6	4	0.0	8	0.0	
Tonga	2015	13 944	26 874	13 936	99.9			8	0.1							

⁶ In Samoa, holdings not stated are included in the category 'Others'.

Table A2.10. Demography of farms and source of farm labour

Countries by region	Census year	Total number of holdings		Members of holder's household				Household members engaged in agriculture				Household members engaged in agriculture		Hired permanent workers on holdings ¹			
		2	3	Total		Male		Female		Total	Male	Female	Total	Male	Female	Total	Average per holding
				(persons)	(persons)	(persons)	(persons)	(persons)	(persons)								
1				4	5	6	7	8	9	10 (=col.7/col.4)	11 (=col.8/col.4)	12 (=col.9/col.4)	13	14 (=col.13/col.3)			
WORLD TOTAL² (97)	2006–2015						37.0	16.7	14.5	60.0	23.0	25.3		0.2		0.1	
AFRICA (17)							72										
Botswana	2015	63 246	191 259	115 854	75 405	8 272 084											
Burkina Faso	2006–2010	1 330 015	11 457 180	5 497 506	5 959 674	8 272 084											
Cabo Verde	2015	45 539	182 396	89 560	92 836												
Congo	2014	267 610	1 249 783	602 050	647 733	514 358	41	19	22								
Egypt	2009–2010	5 404 395				14 738 171	9 672 947	5 065 224									
Eswatini	2012–2013	108 164	728 223	348 825	379 398												
Gambia	2011	82 027	861 739	436 100	425 639												
Lesotho	2009–2010	381 731	1 168 378	592 615	575 763												
Mauritius	2014	23 456	88 592	45 327	43 265	40 355	46	28	18								
Mozambique	2009–2010	3 827 797															
Namibia	2013–2014	162 821	907 714	417 577	490 137	609 211	67	31	36								
Niger	2004–2008	1 627 294	10 108 795	5 111 760	4 987 034	4 842 197	48	23	25								
Seychelles	2011	530	2 039	1 066	973												
South Africa	2007	39 966				47 570	34 951	12 619									
Togo	2012–2014	508 599	3 748 430	1 828 854	1 909 576												
Uganda	2006–2009	3 945 753	19 254 223	9 723 027	9 531 196												
United Republic of Tanzania	2007–2008	5 839 529				31 013 026	15 487 217	15 525 810									
AMERICAS (17)						76	22	26	1								
Brazil	2006	5 175 636	12 801 406	8 291 357	4 510 049	12 577 729	98										
Canada	2011	205 730															
Chile	2006–2007	301 269															
Colombia	2013	2 370 099															
Costa Rica	2014	93 017	269 602	146 124	123 478	128 546	48	34	14								
El Salvador	2007–2008	397 433				550 171											

¹ Data printed in bold text in columns 13 and 14 for EU countries correspond to 'Regular non-family labour force'.

² Percentage and average per holding at regional and global levels were calculated only for countries without missing data.

Table A2.10. Demography of farms and source of farm labour

Countries by region	Census year	Total number of holdings		Members of holder's household				Household members engaged in agriculture				Household members engaged in agriculture			Hired permanent workers on holdings ²			
		1	2	3	4	5	6	7	8	9	10 (=col.7/col.4)	11 (=col.8/col.4)	12 (=col.9/col.4)	13	14 (=col.13/col.3)	Total	Average per holding (persons)	
																		(units)
Grenada	2012			9 345	30 265	16 046	14 219											
Haiti	2008-2009			1 018 951				4 297 249			2 382 282		1 914 967					
Mexico	2007			4 067 618				7 578 170			5 832 389		1 745 781					
Nicaragua	2011			262 546													132 445	1
Panama	2011			248 560	856 839	450 186	406 653	241 582	166 727	74 855	20	9						
Paraguay	2008			289 649	1 077 589			421 667									81 754	
Peru	2012			2 260 973	7 646 887	5 564 446	2 082 441	3 830 549	1 632 956	2 197 593	50	21	29					
Saint Lucia	2007			9 972	32 919			7 195	4 669	2 526	22	14	8					
Suriname	2008			10 234	33 781	17 050	16 731	18 533	10 274	8 259	55	30	24					
Uruguay	2011			44 781	144 383	96 583	47 800	120 398	86 417	33 981	83	60	24					
Venezuela (Bolivarian Republic of)	2008			502 676	1 091 047	606 173	484 874											
ASIA (22)								33			16		14					
Armenia	2014			361 064				1 012 466	512 277	500 189								
Azerbaijan	2015			1 352 121	5 450 434	2 758 234	2 692 200											
Bangladesh	2008			15 183 183	78 847 728	41 040 446	37 807 282	22 429 272	16 412 262	6 017 010	28	21	8					
China	2006			200 554 307				342 463 995	160 412 772	182 051 223								
Cyprus	2010			38 860				39 340	19 040	20 300								
Georgia	2014			642 209	2 238 095	1 099 762	1 138 333											
Japan	2015			1 377 266	4 880 368	2 431 439	2 448 929	3 398 903	1 869 899	1 529 004	70	38	31				220 152	
Jordan	2007			80 152													20 788	
Lao People's Democratic Republic	2010-2011			782 800	4 501 000	2 262 400	2 238 600	2 654 700	1 317 300	1 337 400	59	29	30					
Lebanon	2010			169 512	817 513			404 594			50							
Mongolia	2011			929 200				635 300			68							
Myanmar	2010			5 426 083	25 720 907	12 560 995	13 159 912	18 094 407	9 056 650	9 037 557	70	35	35					
Nepal	2011-2012			3 831 093	20 552 543	10 317 681	10 234 862											
Oman	2012-2013			166 610				237 265	165 846	71 419							375 576	2
Pakistan	2010			8 264 480	170 897 500	88 576 600	82 320 900	27 734 367	17 711 043	10 023 324	16	10	6				1 678 404	
Palestine	2010			111 310	276 332	181 622	94 710										15 700	

Table A2.10. Demography of farms and source of farm labour

Countries by region	Census year	Total number of holdings		Members of holder's household						Household members engaged in agriculture			Household members engaged in agriculture			Hired permanent workers on holdings ²	
		2	3	Total		Male		Female		Total	Male	Female	Total	Male	Female	Total	Average per holding
				(units)	(persons)	(persons)	(persons)	(persons)	(persons)								
				4	5	6	7	8	9	10 (=col.7/col.4)	11 (=col.8/col.4)	12 (=col.9/col.4)	13	14 (=col.13/col.3)			
Philippines	2010	5 563 138	25 034 610			8 512 092				34							
Republic of Korea	2015	1 088 518	2 569 387	1 264 652	1 304 735	1 984 185	1 002 365	981 820		77	39	38					
Saudi Arabia	2015	346 829	2 258 835			632 149				28							
Sri Lanka	2013–2014	4 353 121	9 133 268	4 519 152	4 614 116												
Thailand	2013	5 911 567	18 202 113	8 809 508	9 392 605	8 548 391	4 145 690	4 402 701		47	23	24					
Viet Nam	2011	10 376 981	25 454 595	13 084 889	12 369 706	23 928 874	11 559 168	12 369 706		94	45	49					
EUROPE (36)																	
Albania	2012	321 492		684 913	374 955	309 958									98 264		
Austria	2010	150 170		174 410	88 620	85 790									27 080		
Belgium	2010	42 850		27 920	10 460	17 460									14 440		
Bulgaria	2010	370 490		316 480	94 310	222 170									57 430		
Croatia	2010	233 280		273 190	96 850	176 340									14 330		
Czechia	2010	22 860		23 210	12 180	11 030									89 760	4	
Denmark	2010	41 360		16 760	4 740	12 020									22 640	1	
Estonia	2010	19 610		21 800	10 500	11 300									12 920	1	
Finland	2010	63 870		48 700	20 180	28 520									14 120		
France	2010	516 100		165 960	82 610	83 350									446 410	1	
Germany	2010	299 130		283 310	113 850	169 460									172 360	1	
Greece	2010	723 060		464 120	224 880	239 240									26 260		
Hungary	2010	576 810		485 510	127 470	356 040									90 680		
Iceland	2010	2 590		1 930	790	1 140									1 730	1	
Ireland	2010	139 890		116 080	61 490	54 590									16 410		
Italy	2010	1 620 880		1 625 860	753 880	871 980									163 150		
Latvia	2010	83 390		80 660	37 420	43 240									17 440		
Lithuania	2010	199 910		141 500	62 990	78 510									27 920		
Luxembourg	2010	2 200		1 980	1 030	950									880		
Malta	2010	12 530		5 520	3 160	2 360									870		
Montenegro	2010	48 870		49 390	16 790	32 590									760		

Table A2.10. Demography of farms and source of farm labour

Countries by region	Census year	Total number of holdings			Members of holder's household						Household members engaged in agriculture			Hired permanent workers on holdings ²			
		3	4		5	6		7	8		9	10 (=col.7/col.4)	11 (=col.8/col.4)	12 (=col.9/col.4)	13	14 (=col.13/col.3)	
			(units)	Total		Male	Female		Total	Male							Female
Netherlands	2010	72 320					79 970	29 210		50 760						63 710	1
North Macedonia	2007	192 675					471 069	268 743		202 326						109 606	1
Norway	2010	46 620					61 760	30 520		31 240						17 370	
Poland	2010	1 506 620					2 233 540	1 014 650		1 218 890						86 470	
Portugal	2009	305 270					360 450	146 980		213 470						50 250	
Republic of Moldova	2011	902 214														60 386	
Romania	2010	3 859 040					3 222 950	1 132 220		2 090 730						105 630	
Russian Federation	2006	23 283 305														2 447 200	
Serbia	2012	631 552					797 199	295 712		501 487						28 064	
Slovakia	2010	24 460					23 870	9 860		14 010						44 900	2
Slovenia	2010	74 650					134 030	58 760		75 270						3 250	
Spain	2009	989 800					1 089 900	615 180		474 720						275 260	
Sweden	2010	71 090					53 980	20 610		33 370						21 700	
Switzerland	2010	59 070					69 350	24 570		44 780						44 470	1
United Kingdom of Great Britain and Northern Ireland	2010	185 200					142 310	67 990		74 320						99 270	1
OCEANIA (5)							64	32		32							
Cook Islands	2011	1 275					1 578	1 213		365							
Fiji	2009	65 037					278 060	149 711		128 349							
Niue	2009	429					1 273										
Tonga	2015	13 944					82 353	41 016		41 337						65	33
Vanuatu	2007	38 909					175 051	90 398		84 653						64	33

Table A2.11. Land use on agricultural holdings

Countries by region	Census year	Country area (ha)	Country population (persons)	Total area of holdings (ha)	Agricultural land					Forests and other wooded land (ha)	Other land (ha)	Arable land per person 13 (=col.8/ col.4)	Cropland per person 14 (=col.7/ col.4)	Agricultural land per person 15 (=col.6/ col.4)
					Total (ha)	Cropland		Permanent meadows and pastures (ha)	Permanent crops (ha)					
						Total (ha)	Arable land (ha)							
1	2	3	4	5	6 (=col.7+ col.10)	7 (=col.8+ col.9)	8	9	10	11	12	13 (=col.8/ col.4)	14 (=col.7/ col.4)	15 (=col.6/ col.4)
WORLD TOTAL (89)	2006–2015													
AFRICA (5)														
Cabo Verde	2015	403 000	501 000	36 456	34 095	33 525	32 242	1 283	570	1 081	1 279	0.1	0.1	0.1
Côte D'Ivoire	2014	32 246 000	20 153 000	3 344 241	3 331 654				12 588					0.2
Egypt ¹	2009–2010	100 145 000	82 537 000	4 086 930	3 811 282	3 811 282	3 155 749	655 533	3 381	272 266	272 266	0.0	0.0	
Mauritius	2014	204 000	1 286 000	66 449	54 526	52 038	11 092	40 946	2 488	5 125	6 798	0	0	0.0
Seychelles ²	2011	46 000	86 000	466	418	418	77	341		49	0.0	0.0	0.0	0.0
AMERICAS (21)														
Bolivia (Plurinational State of)	2013	109 858 000	10 088 000	34 654 984	18 656 538	5 485 802	5 265 251	220 550	13 170 736	13 844 735	2 153 712	0.5	0.5	1.8
Brazil	2006	851 577 000	196 655 000	333 680 037	228 850 150	66 808 088	57 128 936	11 679 152	160 042 062	91 724 815	13 107 485	0	0	1.2
Canada	2011	987 975 000	34 483 000	64 812 723	57 689 763	37 463 781	37 285 042	178 739	20 235 982	7 112 960	1.1	1.1	1.1	1.7
Chile ³	2006–2007	75 670 000	17 270 000	36 439 533	13 895 580	1 296 394			12 246 149	6 404 907	9 481 204	0	0	0.8
Colombia ⁴	2013	114 174 900	46 927 000	108 993 335			18 105 400		24 797 933	63 214 574	2 875 428	0.4		
Costa Rica	2014	5 110 000	4 727 000	2 406 418	1 589 257	544 348	167 133	377 214	1 044 910	736 505	80 656	0	0	0.3
El Salvador	2007–2008	2 104 000	6 227 000	929 308	850 413				53 596	43 621	35 274			
Grenada	2012	34 000	105 000	9 542	5 204	4 965	972	3 993	238	3 540	799	0	0	0.0
Jamaica	2007	1 099 000	2 709 000	325 810	283 287	235 084			48 203	33 488	9 035	0.1	0.1	0.1
Mexico	2007	196 437 500	114 793 000	68 535 298	52 345 970	30 878 698			21 467 272	2 097 416	14 091 913	0	0	0.5
Nicaragua	2011	13 037 000	5 870 000	6 054 869	5 070 439	4 116 607	3 756 966	359 641	953 832	803 504	180 927	0.6	0.7	0.9
Panama	2011	7 532 000	3 571 000	2 698 841	2 266 062	728 734	540 215	1 885 519	1 537 328	367 780	64 999	0	0	0.6
Paraguay	2008	40 675 200	6 568 000	31 086 894	21 674 935	3 837 346			17 837 589	7 477 454	1 934 506			
Peru	2012	128 522 000	29 400 000	38 742 465	25 143 802	7 125 007	4 924 324	2 200 683	18 018 795	10 939 274	2 659 388	0	0	0.9

¹ For Egypt, land under permanent nurseries and protected crops were added to 'Arable land'.

² For Seychelles, land under mixed trees and temporary crops is included in 'Land under permanent crops' and land used for livestock is added to 'Other land'.

³ For Chile, cultivated area with forest species also used for crops and grazing animals were added to 'Arable land'. Only land area used by agricultural holdings was broken down according to land use. Total area also included land area used by forestry holdings.

⁴ For Colombia, land under stubble were added to 'Arable land' and land under agricultural infrastructures were added to 'Other land'.

Table A2.11. Land use on agricultural holdings

Countries by region	Census year	Country area (ha)	Country population (persons)	Total area of holdings (ha)	Agricultural land					Forests and other wooded land (ha)	Other land (ha)	Arable land per person (ha)	Cropland per person (ha)	Agricultural land per person (ha)					
					Total (ha)	Cropland		Permanent meadows and pastures							11	12	13 (=col.8/ col.4)	14 (=col.7/ col.4)	15 (=col.6/ col.4)
						6 (=col.7+ col.10)	7 (=col.8+ col.9)	8	9										
1	2	3	4	5	6 (=col.7+ col.10)	7 (=col.8+ col.9)	8	9	10	11	12	13 (=col.8/ col.4)	14 (=col.7/ col.4)	15 (=col.6/ col.4)					
Puerto Rico	2012	887 000	3 707 000	236 736	202 631	175 457	120 640	54 817	27 175	17 285	16 820	0.0	0.0	0.1					
Saint Lucia	2007	62 000	176 000	12 223	9 927	9 558	2 677	6 881	368	1 503	794	0	0	0.1					
Suriname	2008	16 382 000	529 000	63 989	43 114	29 101	23 171	5 930	14 013	14 757	6 119	0.0	0.1	0.1					
United States of America	2012	983 151 000	311 592 000	370 096 212	325 771 818	157 702 115	127 461 651	30 240 464	168 069 703	31 166 018	13 158 377	0	1	1.0					
United States Virgin Islands	2007	35 000	110 000	2 376	2 303	199		2 104	38										
Uruguay	2011	17 622 000	3 369 000	16 357 298	14 527 901	2 286 997	2 245 578	41 419	12 240 904	1 634 610	194 787	1	1	4.3					
Venezuela (Bolivarian Republic of)	2008	91 205 000	29 278 000	27 073 879	17 147 022	3 358 795	2 327 889	1 030 906	13 788 227	8 443 658	1 483 199	0.1	0.1	0.6					
ASIA (18)																			
Azerbaijan	2015	8 660 000	9 168 000	2 362 024	2 288 120	1 806 827	1 653 530	153 297	481 293	20 219	53 685	0.2	0.2	0.2					
Cambodia ⁵	2013	18 104 000	14 305 000	3 286 713	3 069 221	3 068 920	2 721 936	346 984	301	2 162	2 162	0	0	0.2					
Cyprus	2010	925 100	1 117 000	137 760	118 390	116 250	84 910	31 340	2 140	870	18 500	0.1	0.1	0.1					
Georgia	2014	6 970 000	4 486 000	842 289	778 908	475 274	365 707	109 567	303 634	63 381	4 742 000	0	0	0.2					
India	2010-2011	328 725 900	1 241 492 000	159 592 000	152 793 000	152 793 000	152 793 000		2 056 000	4 742 000	0.1								
Jordan ⁶	2007	8 932 000	6 181 000	261 508	225 348	224 263	142 958	81 305	1 085	1 241	34 919	0	0	0.0					
Kazakhstan	2006-2007	272 490 200	16 558 000	79 725 500	76 490 300	27 619 500	27 575 800	43 700	48 870 800	3 235 300	1.7	1.7	1.7	4.6					
Lao People's Democratic Republic	2010-2011	23 680 000	6 288 000	1 870 200	1 623 100	1 596 700	1 428 200	168 500	26 400	122 300	124 800	0.2	0.3	0.3					
Lebanon	2010	1 045 000	4 259 000	230 994		125 928			18 823	3 071		0	0						
Myanmar	2010	67 659 000	48 337 000	13 328 844	12 712 136	974 197	11 737 939		71 241	0.2	0.3								
Nepal	2011-2012	14 718 000	30 486 000	2 525 639	2 360 518	2 331 208	2 162 751	168 457	29 310	54 890	110 231	0	0	0.1					
Pakistan	2010	79 610 000	176 745 000	21 412 545		187 316	3 976 153		345	906									
Palestine	2010	602 000	4 019 000	120 706		50	16 125												
Philippines ⁷	2010	30 000 000	94 852 000	7 271 446	6 913 189	6 862 793	3 505 307	3 357 486	50 396	44 514	313 743	0.0	0.1	0.1					
Republic of Korea	2015	10 036 000	49 779 000	1 309 787	1 270 998	1 104 310	1 104 310	166 688				0	0						
Sri Lanka ⁸	2013-2014	6 561 000	20 869 000	2 283 753	1 992 382	1 890 156	885 810	1 004 346	102 226	42 275	152 062	0	0	0.1					

⁵ For Cambodia, holdings' number and area are provided only for holdings with separate agricultural land excluding homelots.

⁶ For Jordan, nurseries were reported as 'Other Land'.

⁷ For Philippines, land under livestock, aquaculture, homelot and other land were reported as 'Other land'.

Table A2.11. Land use on agricultural holdings

Countries by region	Census year	Country area (ha)	Country population (persons)	Total area of holdings (ha)	Agricultural land							Forests and other wooded land (ha)	Other land (ha)	Arable land per person (ha)	Cropland per person (ha)	Agricultural land per person (ha)			
					Total (ha)	Cropland		Permanent meadows and pastures (ha)	10	11	12						13 (=col.8/ col.4)	14 (=col.7/ col.4)	15 (=col.6/ col.4)
						Total (ha)	7 (=col.7+ col.9)												
1	2	3	4	5	6 (=col.7+ col.10)	7	8	9	10	11	12	13	14	15					
Tajikistan ⁸	2013	14 138 000	6 977 000	5 002 738	4 703 064	829 515	660 273	169 242	3 873 549	6 089	0.1	0.1	0.1	0.7					
Viet Nam ⁹	2011	33 123 000	87 840 000	11 880 117	7 034 697	7 034 697	4 703 648	2 331 049	4 230 228	615 192	0	0	0	0					
EUROPE (36)																			
Albania	2012	2 875 000	3 216 000	371 609	333 593	262 462	220 606	41 856	71 131	17 246	20 771	0.1	0.1	0.1					
Austria	2010	8 387 900	8 419 000	5 847 850	2 878 160	1 438 690	1 373 490	65 200	1 439 470	2 269 850	699 840	0	0	0.3					
Belgium	2010	3 053 000	11 008 000	1 384 880	1 358 020	858 330	836 800	21 530	499 690	4 870	21 990	0.1	0.1	0.1					
Bulgaria	2010	11 100 000	7 476 000	5 260 520	4 475 530	3 234 940	3 135 290	99 650	1 240 590	701 610	83 380	0	0	0.6					
Croatia	2010	8 807 300	4 407 000	1 512 410	1 316 010	976 740	898 440	78 300	339 270	103 960	92 440	0.2	0.2	0.3					
Czechia	2010	7 887 000	10 546 000	5 065 270	3 483 500	2 554 680	2 517 730	36 950	928 820	1 546 950	34 820	0	0	0.3					
Denmark	2010	4 292 000	5 574 000	3 001 380	2 646 870	2 447 010	2 419 290	27 720	199 860	211 870	142 640	0.4	0.4	0.5					
Estonia	2010	4 534 000	1 340 000	1 241 850	940 930	644 870	641 750	3 120	296 060	223 970	76 950	1	1	0.7					
Finland	2010	33 845 000	5 387 000	6 250 610	2 290 980	2 258 030	2 253 450	4 580	32 950	3 118 570	841 060	0.4	0.4	0.4					
France	2010	54 908 700	65 437 000	29 546 440	27 837 290	19 418 410	18 400 080	1 018 330	8 418 880	1 003 370	705 780	0	0	0.4					
Germany	2010	35 758 000	81 726 000	18 387 080	16 704 050	12 049 360	11 850 600	198 760	4 654 690	1 369 760	313 270	0.1	0.1	0.2					
Greece	2010	13 196 000	11 304 000	5 461 290	5 177 520	2 727 280	1 777 010	950 270	2 450 240	50 470	233 300	0	0	0.5					
Hungary	2010	9 303 000	9 971 000	7 102 970	4 686 330	3 965 430	3 813 710	151 720	720 900	1 723 630	693 010	0.4	0.4	0.5					
Iceland	2010	10 300 000	319 000	2 560 050	1 595 680	34 060	34 000	60	1 561 620	25 100	939 270	0	0	5.0					
Ireland	2010	7 028 000	4 487 000	5 317 860	4 991 350	1 012 820	1 011 850	970	3 978 530	149 850	176 660	0.2	0.2	1.1					
Italy	2010	30 134 000	60 770 000	17 080 850	12 856 050	9 421 980	7 041 210	2 380 770	3 434 070	3 002 670	1 222 130	0	0	0.2					
Latvia	2010	6 457 000	2 220 000	2 879 170	1 796 280	1 145 230	1 136 720	8 510	651 050	714 160	368 730	0.5	0.5	0.8					
Lithuania	2010	6 528 600	3 203 000	3 003 620	2 742 550	2 136 680	2 115 130	21 550	605 870	151 250	109 820	1	1	0.9					
Luxembourg	2010	259 000	517 000	137 910	131 100	63 510	62 010	1 500	67 590	6 030	780	0.1	0.1	0.3					
Malta	2010	32 000	419 000	12 940	11 450	10 200	10 200	1 250	0	1 490	0	0	0	0					
Montenegro	2010	1 381 000	632 000	309 220	221 290	11 110	6 460	4 650	210 180	43 220	44 700	0	0	0.4					

⁸ For Sri Lanka, data item disaggregated by land use classes refers to holdings with land above 0.1 ha.

⁹ For Tajikistan, data item disaggregated by land use classes refers to holdings with land.

¹⁰ For Viet Nam, land under aquaculture were added to 'Other land'.

Table A2.11. Land use on agricultural holdings

Countries by region	Census year	Country area (ha)	Country population (persons)	Total area of holdings (ha)	Agricultural land										Agricultural land per person				
					Total					Forests and other wooded land						Other land (ha)	Arable land per person	Cropland per person	Agricultural land per person
					Total (ha)	6 (=col.7+ col.10)	7 (=col.8+ col.9)	Total (ha)	8	9	10	11	12	13 (=col.8/ col.4)					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15					
Netherlands	2010	4 154 000	16 696 000	2 018 620	1 872 340	1 059 030	1 022 070	36 960	813 310	11 570	134 710	0.1	0.1	0.1					
North Macedonia ¹¹	2007	2 571 000	2 064 000	398 221	334 225	276 945	241 096	35 849	57 280	48 607	15 389	0	0	0.2					
Norway	2010	62 522 200	4 952 000	4 015 620	1 005 940	830 100	827 050	3 050	175 840	1 951 760	1 057 920	0.2	0.2	0.2					
Poland	2010	31 268 000	38 216 000	16 922 340	14 447 300	11 218 100	10 828 430	389 670	3 229 200	1 162 820	1 372 230	0	0	0.4					
Portugal	2009	9 222 560	10 637 000	4 709 130	3 668 150	1 883 550	1 192 820	690 730	1 784 600	842 210	198 780	0.1	0.2	0.3					
Republic of Moldova ¹²	2011	3 385 000	3 559 000	2 253 371	1 940 135	1 615 833	1 416 672	199 161	324 302	6 116	297 288	0.4	0.5	0.5					
Romania	2010	23 840 000	21 390 000	15 695 030	13 306 130	8 799 880	8 488 450	311 430	4 506 250	1 493 820	895 080	0	0	0.6					
Russian Federation ¹³	2006	1 709 825 000	141 930 000	450 599 500	152 048 900	102 918 200	102 140 000	778 200	49 130 700	288 550 600	288 550 600	0.7	0.7	1.1					
Serbia ¹⁴	2012	8 836 000	9 055 000	5 346 597	3 437 422	2 724 180	2 536 881	187 299	713 242	1 023 036	886 139	0	0	0.4					
Slovakia	2010	4 903 000	5 440 000	3 063 000	1 895 500	1 364 230	1 344 590	19 640	531 270	1 086 500	69 000	0.2	0.3	0.3					
Slovenia	2010	2 048 000	2 052 000	905 990	482 650	196 940	170 140	26 800	285 710	373 630	49 710	0	0	0.2					
Spain	2009	50 593 523	46 235 000	30 614 170	23 752 690	15 375 300	11 289 060	4 086 240	8 377 390	4 643 410	2 218 070	0.2	0.3	0.5					
Sweden	2010	44 743 000	9 453 000	6 759 760	3 066 320	2 614 410	2 611 470	2 940	451 910	3 687 550	0	0	0	0.3					
Switzerland	2010	4 129 039	7 907 000	1 163 190	1 047 800	428 150	405 520	22 630	619 650	114 820	570	0.1	0.1	0.1					
United Kingdom of Great Britain and Northern Ireland	2010	24 361 000	62 641 000	18 009 980	16 881 680	5 981 710	5 945 510	36 200	10 899 970	691 180	437 110	0	0	0.3					
OCEANIA (9)																			
American Samoa	2008	20 000	70 000	7 690	5 406	5 378		28	1 321	964									
Australia ¹⁵	2011	774 122 000	22 621 000	409 672 625	396 260 537	32 218 021		364 042 516	448 322	15 827 769									
Cook Islands	2011	24 000	602	602	417	415	339	76	2	185									
Fiji	2009	1 827 000	868 000	251 859	191 130	144 637	59 441	85 196	46 493	44 645	16 083	0.1	0.2	0.2					
Guam	2007	54 000	182 000	405	359	336		23	21	24									

¹¹ For North Macedonia, land used for nurseries were added to 'Arable land'.

¹² For Republic of Moldova, data disaggregated excludes small-size agricultural units (civil persons) and the land use category 'woodland' is separated from the category 'Other land'.

¹³ For Russian Federation, other land (Lode) included in 'All other land' category.

¹⁴ For Serbia, unutilized agricultural area was added to 'Other land'.

¹⁵ For Australia, the breakdown of 'Total area of holdings' according to main land use types is for the period 1 July 2010 to 30 June 2011.

▶ **Table A2.11. Land use on agricultural holdings**

Countries by region	Census year	Country area (ha)	Country population (persons)	Total area of holdings (ha)	Agricultural land				Forests and other wooded land (ha)	Other land (ha)	Arable land per person (ha)	Cropland per person (ha)	Agricultural land per person (ha)			
					Total (ha)	Cropland		Permanent meadows and pastures (ha)						13 (=col.8/ col.4)	14 (=col.7/ col.4)	15 (=col.6/ col.4)
						7 (=col.8+ col.9)	Arable land (ha)									
1	2	3	4	5	6 (=col.7+ col.10)	7	8	9	10	11	12	13	14	15		
New Zealand	2012	26 771 000	4 405 000	14 393 802	11 225 086	595 853	524 367	71 486	10 629 233	2 758 757	409 958	0.1	0.1	2.5		
Northern Mariana Islands	2007	46 000	61 000	1 624	1 509	313			1 196	78	38		0	0.0		
Samoa	2009	284 000	184 000	37 357	34 707	29 643	5 569	24 074	5 064		2 650					
Tonga	2015	75 000	105 000	26 874	23 314	21 348	20 050	1 288	1 966	3 560	0	0	0	0.2		

Notes:

- The gap between total area and the sum of breakdown according to land use type is due to lack of information on the area of some types of land use (agricultural land, crop land, pasture, forest or other land).

Table A2.12. Holding area and its distribution by land use categories

Countries by region	Census year	Country area (/ha)	Total area of holdings (/ha)	Share of holding area in country area (%)	Total area of holdings (%)	Shares in total area of holdings						
						Agricultural land (%)	Cropland (%)	Arable land (%)	Permanent crops (%)	Permanent meadows and pastures (%)	Forests and other wooded land (%)	Other land (%)
1	2	3	4	5 (=col.4/col.3)	6	7 (=col.8+col.11)	8 (=col.9+col.10)	9	10	11	12	13
WORLD TOTAL (82)	2006-2015											
AFRICA (4)				4	100	86.1	83.1	42.1	41.0	3.0		
Cabo Verde	2015	403 000	36 456	9.1	100	93.5	92.0	88.4	3.5	1.6	3.0	3.5
Egypt	2009-2010	100 145 000	4 086 930	4	100	93.2	93.3	77.2	16.0		0.1	
Mauritius	2014	204 000	66 449	32.6	100	82.1	78.3	16.7	61.6	3.7	7.7	10.2
Seychelles	2011	46 000	466	1	100	73.2	89.7	16.5	73.2			
AMERICAS (18)				31.2	100	78	32	27	5	46		
Bolivia (Plurinational State of)	2013	109 858 000	34 654 984	31.5	100	53.8	15.8	15.2	0.6	38.0	40.0	6.2
Brazil	2006	851 577 000	333 680 037	39	100	68.6	20.6	17.1	3.5	48.0	27.5	3.9
Canada	2011	987 975 000	64 812 723	6.6	100	89.0	57.8	57.5	0.3	31.2		11.0
Chile	2006-2007	75 670 000	36 439 533	48	100					33.6	17.6	
Colombia	2013	114 174 900	108 993 335	95.5	100			16.6		22.8	58.0	2.6
Costa Rica	2014	5 110 000	2 406 418	47	100	66.0	22.6	6.9	15.7	43.4	30.6	3.4
Grenada	2012	34 000	9 542	28.1	100	54.5	52.0	10.2	41.9	2.5	37.1	8.4
Jamaica	2007	1 099 000	325 810	30	100					14.8	10.3	2.8
Nicaragua	2011	13 037 000	6 054 869	46.4	100	83.7	68.0	62.0	5.9	15.8	13.3	3.0
Panama	2011	7 532 000	2 698 841	36	100	84.0	27.0	20.0	7.0	57.0	13.6	2.4
Paraguay	2008	40 675 200	31 086 894	76.4	100					57.4	24.1	6.2
Peru	2012	128 522 000	38 742 465	30	100	64.9	18.4	12.7	5.7	46.5	28.2	6.9
Puerto Rico	2012	887 000	236 736	26.7	100	85.6	74.1	51.0	23.2	11.5	7.3	7.1
Saint Lucia	2007	62 000	12 223	20	100	81.2	78.2	21.9	56.3	3.0	12.3	6.5
Suriname	2008	16 382 000	63 989	0.4	100	67.4	45.5	36.2	9.3	21.9	23.1	9.6
United States of America	2012	983 151 000	370 096 212	38	100	88.0	42.6	34.4	8.2	45.4	8.4	3.6
Uruguay	2011	17 622 000	16 357 298	92.8	100	88.8	14.0	13.7	0.3	74.8	10.0	
Venezuela (Bolivarian Republic of)	2008	91 205 000	27 073 879	30	100	63.3	12.4	8.6	3.8	50.9	31.2	5.5
ASIA (17)				34.5	100	95	44	39	5	51		
Azerbaijan	2015	8 660 000	2 362 024	27.3	100	96.9	76.5	70.0	6.5	20.4	0.9	2.3
Cambodia	2013	18 104 000	3 286 713	18	100	93.4	93.4	82.8	10.6	0.0		

Table A2.12. Holding area and its distribution by land use categories

Countries by region	Census year	Country area (/ha)	Total area of holdings (/ha)	Share of holding area in country area (%)	Total area of holdings (%)	Shares in total area of holdings						
						7 (=col.8+col.11)	8 (=col.9+col.10)	9	10	11	12	13
1	2	3	4	5 (=col.4/col.3)	6	7 (=col.8+col.11)	8 (=col.9+col.10)	9	10	11	12	13
Cyprus	2010	925 100	137 760	14.9	100	85.9	84.4	61.6	22.7	1.6	0.6	13.4
Georgia	2014	6 970 000	842 289	12	100	92.5	56.4	43.4	13.0	36.0		
India	2010-2011	328 725 900	159 592 000	48.5	100	95.7					1.3	
Jordan	2017	8 932 000	261 508	3	100	86.2	85.8	54.7	31.1	0.4	0.5	13.4
Kazakhstan	2006-2007	272 490 200	79 725 500	29.3	100	95.9	34.6	34.6	0.1	61.3		4.1
Lao People's Democratic Republic	2010-2011	23 680 000	1 870 200	8	100	86.8	85.4	76.4	9.0	1.4	6.5	6.7
Lebanon	2010	1 045 000	230 994	22.1	100	74.9	20.4	20.4	54.5		8.1	1.3
Myanmar	2010	67 659 000	13 328 844	20	100	95.4	88.1	7.3				0.5
Nepal	2011-2012	14 718 000	2 525 639	17.2	100	93.5	92.3	85.6	6.7	1.2	2.2	4.4
Palestine	2010	602 000	120 706	20	100				0.0	13.4	0.3	0.8
Philippines	2010	30 000 000	7 271 446	24.2	100	95.1	94.4	48.2	46.2	0.7	0.6	4.3
Republic of Korea	2015	10 036 000	1 309 787	13	100	97.0	84.3		12.7			
Sri Lanka	2013-2014	6 561 000	2 283 753	34.8	100	87.2	82.8	38.8	44.0	4.5	1.9	6.7
Tajikistan	2013	14 138 000	5 002 738	35	100	94.0	16.6	13.2	3.4	77.4		0.1
Viet Nam	2011	33 123 000	11 880 117	35.9	100	59.2	39.6		19.6		35.6	
EUROPE (36)				30.5	100	49	33	31	2	17		
Albania	2012	2 875 000	371 609	12.9	100	89.8	70.6	59.4	11.3	19.1	4.6	5.6
Austria	2010	8 387 900	5 847 850	70	100	49.2	24.6	23.5	1.1	24.6	38.8	12.0
Belgium	2010	3 053 000	1 384 880	45.4	100	98.1	62.0	60.4	1.6	36.1	0.4	1.6
Bulgaria	2010	11 100 000	5 260 520	47	100	85.1	61.5	59.6	1.9	23.6	13.3	1.6
Croatia	2010	8 807 300	1 512 410	17.2	100	87.0	64.6	59.4	5.2	22.4	6.9	6.1
Czechia	2010	7 887 000	5 065 270	64	100	68.8	50.4	49.7	0.7	18.3	30.5	0.7
Denmark	2010	4 292 000	3 001 380	69.9	100	88.2	81.5	80.6	0.9	6.7	7.1	4.8
Estonia	2010	4 534 000	1 241 850	27	100	75.8	51.9	51.7	0.3	23.8	18.0	6.2
Finland	2010	33 845 000	6 250 610	18.5	100	36.7	36.1	36.1	0.1	0.5	49.9	13.5
France	2010	54 908 700	29 546 440	54	100	94.2	65.7	62.3	3.4	28.5	3.4	2.4
Germany	2010	35 758 000	18 387 080	51.4	100	90.8	65.5	64.5	1.1	25.3	7.4	1.7
Greece	2010	13 196 000	5 461 290	41	100	94.8	49.9	32.5	17.4	44.9	0.9	4.3

Table A2.12. Holding area and its distribution by land use categories

Countries by region	Census year	Country area (/ha)	Total area of holdings (/ha)	Share of holding area in country area (%)	Total area of holdings (%)	Shares in total area of holdings						
						5 (=col.4/col.3)	6	7 (=col.8+col.11)	8 (=col.9+col.10)	9	10	11
	2	3	4	5	6	Agricultural land (%)	Cropland (%)	Arable land (%)	Permanent crops (%)	Permanent meadows and pastures (%)	Forests and other wooded land (%)	Other land (%)
Hungary	2010	9 303 000	7 102 970	76.4	100	66.0	55.8	53.7	2.1	10.1	24.3	9.8
Iceland	2010	10 300 000	2 560 050	25	100	62.3	1.3	1.3	0.0	61.0	1.0	36.7
Ireland	2010	7 028 000	5 317 860	75.7	100	93.9	19.0	19.0	0.0	74.8	2.8	3.3
Italy	2010	30 134 000	17 080 850	57	100	75.3	55.2	41.2	13.9	20.1	17.6	7.2
Latvia	2010	6 457 000	2 879 170	44.6	100	62.4	39.8	39.5	0.3	22.6	24.8	12.8
Lithuania	2010	6 528 600	3 003 620	46	100	91.3	71.1	70.4	0.7	20.2	5.0	3.7
Luxembourg	2010	259 000	137 910	53.2	100	95.1	46.1	45.0	1.1	49.0	4.4	0.6
Malta	2010	32 000	12 940	40	100	88.5	88.5	78.8	9.7			11.5
Montenegro	2010	1 381 000	309 220	22	100	71.6	3.6	2.1	1.5	68.0	14.0	14.5
Netherlands	2010	4 154 000	2 018 620	48.6	100	92.8	52.5	50.6	1.8	40.3	0.6	6.7
North Macedonia	2007	2 571 000	398 221	15	100	83.9	69.5	60.5	9.0	14.4	12.2	3.9
Norway	2010	62 522 200	4 015 620	6.4	100	25.1	20.7	20.6	0.1	4.4	48.6	26.3
Poland	2010	31 268 000	16 982 340	54	100	85.1	66.1	63.8	2.3	19.0	6.8	8.1
Portugal	2009	9 222 560	4 709 130	51.1	100	77.9	40.0	25.3	14.7	37.9	17.9	4.2
Republic of Moldova	2011	3 385 000	2 253 371	66.6	100	86.1	71.7	62.9	8.8	14.4	0.3	13.2
Romania	2010	23 840 000	15 695 030	66	100	84.8	56.1	54.1	2.0	28.7	9.5	5.7
Russian Federation	2006	1 709 825 000	450 599 500	26.4	100	33.7	22.8	22.7	0.2	10.9		66.3
Serbia	2012	8 836 000	5 346 597	60.5	100	64.3	51.0	47.4	3.5	13.3	19.1	16.6
Slovakia	2010	4 903 000	3 063 000	62	100	61.9	44.5	43.9	0.6	17.3	35.9	2.3
Slovenia	2010	2 048 000	905 990	44.2	100	53.3	21.7	18.8	3.0	31.5	41.2	5.5
Spain	2009	50 583 523	30 614 170	61	100	77.6	50.2	36.9	13.3	27.4	15.2	7.2
Sweden	2010	44 743 000	6 759 760	15.1	100	45.4	38.7	38.6	0.0	6.7	54.6	0.0
Switzerland	2010	4 129 039	1 163 190	28	100	90.1	36.8	34.9	1.9	53.3	9.9	0.0
United Kingdom of Great Britain and Northern Ireland	2010	24 361 000	18 009 980	73.9	100	93.7	33.2	33.0	0.2	60.5	3.8	2.4
OCEANIA (7)				52.8	100	78	5	4	1	73		
Australia	2011	774 122 000	409 672 625	52.9	100					88.9	0.1	3.9
Cook Islands	2011	24 000	602	3	100	69.3	68.9	56.3	12.6	0.3		30.7

Table A2.12. Holding area and its distribution by land use categories

Countries by region	Census year	Country area (/ha)	Total area of holdings (/ha)	Share of holding area in country area (%)	Total area of holdings (%)	Shares in total area of holdings						
						Agricultural land (%)	Cropland (%)	Arable land (%)	Permanent crops (%)	Permanent meadows and pastures (%)	Forests and other wooded land (%)	Other land (%)
1	2	3	4	5 (=col.4/col.3)	6	7 (=col.8+col.11)	8 (=col.9+col.10)	9	10	11	12	13
Fiji	2009	1 827 000	251 859	13.8	100	75.9	57.4	23.6	33.8	18.5		
Guam	2007	54 000	405	1	100					5.8	5.1	6.0
New Zealand	2012	26 771 000	14 393 802	53.8	100	78.0	4.1	3.6	0.5	73.8		2.8
Samoa	2009	284 000	37 357	13	100				64.4	13.6		7.1
Tonga	2015	75 000	26 874	35.8	100	86.8	79.4	74.6	4.8	7.3		13.2

Notes:

- The percentage (% agricultural land) at regional level is provided for countries with complete information and without missing data for all three indicators (% Arable land, % Permanent crops, % Permanent meadows and pastures).
- This table is based on table A2.11. Seven countries (Côte d'Ivoire, El Salvador, Mexico, United States Virgin Islands, Pakistan, American Samoa and Northern Mariana Islands) with missing data in TA2.11 are not reported here.
- Total area of holdings (col.6) = arable land (col.9) + permanent crops (col.10) + permanent meadows and pastures (col.11) + forest and other wooded land (col.12) + all other land (col.13).

Table A2.13. Selected machinery: number of holdings reporting and number of units

Countries by region	Census year	Total number of holdings (units)	Total area of holdings (ha)	4-wheel tractors		Track-laying tractors		Tractors of all kinds ¹		Tractors per holding ² (units)
				Holdings reporting (units)	Number (units)	Holdings reporting (units)	Number (units)	Holdings reporting (units)	Number (units)	
				5	6	7	8	9	10	
1	2	3	4	5	6	7	8	9	10	11
WORLD TOTAL (69)	2006-2015									
AFRICA (6)										
Burkina Faso	2006-2010	1 330 015	5 553 026						4 336	0.00
Lesotho	2009-2010	381 731	520 423						16 724	0.04
Mozambique	2009-2010	3 827 797	5 633 850					59 467		
Namibia	2013-2014	162 821	9 811 517					890	1 463	0.01
Uganda	2007-2008	3 945 753						27 828	32 806	0.01
United Republic of Tanzania	2008-2009	5 839 529	15 756 174					171 183	67 123	0.01
AMERICAS (17)										
Bolivia (Plurinational State of)	2013	871 927	34 654 984							
Brazil	2006	5 175 636	333 680 037					530 346	820 718	0.16
Canada	2011	205 730	64 812 723					190 162	685 914	3.33
Costa Rica	2014	93 017	2 406 418					10 743	11 512	0.12
Grenada	2012	9 345	9 542					23	23	
Mexico	2007	4 067 618	68 535 298					1 561 279	238 248	0.06
Panama	2011	248 560	2 698 841	2 354	3 900	263	389			
Paraguay	2008	289 649	31 086 894					17 733	25 823	0.09
Peru	2012	2 260 973	38 742 465					503 158	1 710 348	0.76
Puerto Rico	2012	13 159	236 736	1 941	4 110					0.31
Saint Lucia	2007	9 972	12 223					11	14	
Suriname	2008	10 234	63 989		1 334		355			0.17
United States of America	2012	2 109 303	370 096 212					1 670 342	4 178 300	1.98
United States Virgin Islands	2007	219	2 376					82	119	0.54
Uruguay	2011	44 781	16 357 298					20 988	33 741	0.75
Venezuela (Bolivarian Republic of)	2008	502 676	27 073 879					7 928	7 867	
ASIA (23)										
Armenia	2014	361 064	534 399	8 027	8 704	2 277	2 421			
Azerbaijan	2015	1 352 121	2 362 024	11 079	13 029	1 090	1 394			
Bangladesh	2008	15 183 183	9 026 516							
Bhutan	2009		94 903							
Cambodia	2013	2 129 149	3 286 713						113 862	0.05
China	2006	200 554 307							26 584 019	0.13
Cyprus	2010	38 860	137 760					10 098	12 564	0.32
Georgia	2014	642 209	842 289					11 042		
India	2010-2011	138 348 000	159 592 000					61 133 000		
Indonesia	2013	26 135 469								
Iran (Islamic Republic of)	2014	4 032 467	16 476 609							
Japan	2015	1 377 266	3 451 444					1 323 226	1 677 641	1.22
Jordan	2007	80 152	261 508						2 956	
Kazakhstan	2006-2007	2 956 306	79 725 500					70 764	146 569	
Lebanon	2010	169 512	230 994					8 838	12 938	0.08
Mongolia	2011		802 169					15 113		

¹ 'Tractors of all kinds' is presented for countries that did not report four-wheel tractors and/or track-laying tractors. 'Tractors of all kinds' used on the holding are in normal print while those belonging to the holding are in bold.

² Tractors per holding are calculated as the sum of 'four-wheel tractors', 'track-laying tractors' and 'tractors of all kinds' divided by the total number of holdings.

 **Table A2.13. Selected machinery: number of holdings reporting and number of units**

Countries by region	Census year	Total number of holdings (units)	Total area of holdings (ha)	4-wheel tractors		Track-laying tractors		Tractors of all kinds ¹		Tractors per holding ² (units)
				Holdings reporting (units)	Number (units)	Holdings reporting (units)	Number (units)	Holdings reporting (units)	Number (units)	
				5	6	7	8	9	10	
1	2	3	4	5	6	7	8	9	10	11
Myanmar	2010	5 426 083	13 328 844					120 039		
Nepal	2011–2012	3 831 093	2 525 639					844 700		
Oman	2012–2013	166 610	149 105			1 581	1 823			
Palestine	2010	111 310	120 706	5 798		24		737 202		
Republic of Korea	2015	1 088 518	1 309 787					250 495	271 431	0.25
Thailand	2013	5 911 567	18 659 786	2 427 001	370 484					0.06
Viet Nam	2011	10 376 981	11 880 117					474 279	497 269	
EUROPE (18)										
Albania	2012	321 492	371 609	16 474	21 052					0.07
Bulgaria	2010	370 490	5 260 520	33	52	1	1			
Croatia	2010	233 280	1 512 410		246 725		185 010			1.85
Iceland	2010	2 590	2 560 050	6 936	6 936					2.68
Latvia	2010	83 390	2 879 170	33 414	52 513					0.63
Lithuania	2010	199 910	3 003 620						122 807	0.61
Luxembourg	2010	2 200	137 910					2 102	6 616	3.01
Malta	2010	12 530	12 940					1 474	2 020	0.16
Montenegro	2010	48 870	309 220	5 265	5 690					0.12
North Macedonia	2007	192 675	398 221		53 606					0.28
Poland	2010	1 506 620	16 982 340					9 397 010		
Portugal	2009	305 270	4 709 130					120 761	184 471	0.60
Republic of Moldova	2011	902 214	2 253 371					16 064	24 695	
Romania	2010	3 859 040	15 695 030					154 970	194 338	0.05
Russian Federation	2006	23 283 305	450 599 500						1 045 800	
Serbia	2012	631 552	5 346 597	329 120	404 512					0.64
Slovenia	2010	74 650	905 990			51 265	76381			
Switzerland	2010	59 070	1 163 190					48 698	106 504	1.80
OCEANIA (5)										
American Samoa	2008	5 840	7 690						16	
Fiji	2009	65 037	251 859	6 384	10 529					0.16
Guam	2007	104	405					44	84	0.81
Northern Mariana Islands	2007	256	1 624					88	99	0.39
Samoa	2009	15 793	37 357					37	63	

Table A2.14. Irrigation: Holdings reporting and area irrigated

Countries by region	Census year	Total number of holdings (units)	Total area of holdings (ha)	Holdings reporting irrigation		Reported irrigated area	
				Number	Share	Area	Share
				(units)	(%)	(ha)	(%)
1	2	3	4	5	6	7	8
WORLD TOTAL (54)	2006-2015						
AFRICA (4)							
Burkina Faso	2006-2010	1 330 015	5 553 026	42 190	3.2	10 180	0.2
Namibia	2013-2014	162 821	9 811 517	1 111	0.7	5 068	0.1
Uganda	2008-2009	3 945 753		31 357	0.8	6 925	
United Republic of Tanzania	2007-2008	5 839 529	15 756 174	318 625	5.5	280 528	1.8
AMERICAS (12)							
Bolivia (Plurinational State of)	2013	871 927	34 654 984			251 042	0.7
Chile	2006-2007	301 269	36 439 533	119 286	39.6	1 093 813	3.0
El Salvador	2007-2008	397 433	929 308			33 253	3.6
Haiti	2008-2009	1 018 951	991 287			97 015	9.8
Mexico	2007	4 067 618	68 535 298	630 313	15.5	5 310 622	7.7
Nicaragua	2011	262 546	6 054 869	11 598	4.4	100 097	1.7
Puerto Rico	2012	13 159	236 736	1 073	8.2	21 594	9.1
Saint Lucia	2007	9 972	12 223	1 463	14.7	3 321	27.2
United States of America	2012	2 109 303	370 096 212	296 303	14.0	22 590 455	6.1
United States Virgin Islands	2007	219	2 376	99	45.2	98	4.1
Uruguay	2011	44 781	16 357 298			250 980	1.5
Venezuela (Bolivarian Republic of)	2008	502 676	27 073 879	66 351	13.2	683 096	2.5
ASIA (10)							
Bangladesh	2008	15 183 183	9 026 516	10 323 934	68.0	4 848 044	53.7
Cyprus	2010	38 860	137 760	28 190	72.5	28 290	20.5
India	2010-2011	138 348 000	159 592 000	71 721 000	51.8	64 567 000	40.5
Iran (Islamic Republic of)	2014	4 032 467	16 476 609	2 668 979	66.2	7 619 219	46.2
Kazakhstan	2006-2007	2 956 306	79 725 500			1 392 100	1.7
Lebanon	2010	169 512	230 994	91 818	54.2	112 956	48.9
Mongolia	2011		802 169	27 984		49 600	6.2
Myanmar	2010	5 426 083	13 328 844			2 336 210	17.5
Oman	2012-2013	166 610	149 105	146 576	88.0	147 945	99.2
Saudi Arabia	2015	346 829	3 421 854	285 166	82.2	3 421 855	100.0
EUROPE (26)¹							
Austria	2010	150 170	2 878 170	2 920	1.9	26 480	0.9
Belgium	2010	42 850	1 358 020	920	2.1	4 260	0.3
Bulgaria	2010	370 490	4 475 530	88 340	23.8	90 400	2.0
Czechia	2010	22 860	3 483 500	910	4.0	19 200	0.6
Denmark	2010	41 360	2 646 860	5 710	13.8	320 180	12.1
Finland	2010	63 870	2 290 980	2 920	4.6	26 480	1.2
France	2010	516 100	27 837 290	75 160	14.6	1 583 610	5.7
Greece	2010	723 060	5 177 510	379 920	52.5	1 025 210	19.8
Hungary	2010	576 810	4 686 340	13 760	2.4	114 550	2.4
Italy	2010	1 620 880	12 856 050	398 490	24.6	2 408 350	18.7
Latvia	2010	83 390	1 796 290	230	0.3	710	0.0
Lithuania	2010	199 910	2 742 560	120	0.1	1 530	0.1

¹ For European countries, except Russian Federation, "Total area of holdings" correspond to Utilized Agricultural Area (UAA) reported in Table A2.3, in order to calculate share of irrigated area.

 **Table A2.14. Irrigation: Holdings reporting and area irrigated**

Countries by region	Census year	Total number of holdings	Total area of holdings	Holdings reporting irrigation		Reported irrigated area	
				Number	Share	Area	Share
				(units)	(%)	(ha)	(%)
1	2	3	4	5	6	7	8
Malta	2010	12 530	11 450	3 430	27.4	2 830	24.7
Montenegro	2010	48 870	221 300	8 470	17.3	5 050	2.3
North Macedonia	2007	192 675	334 226	131 334	68.2	79 638	23.8
Norway	2010	46 620	1 005 940	3 920	8.4	40 370	4.0
Poland	2010	1 506 620	14 447 290	12 550	0.8	45 530	0.3
Portugal	2009	305 270	3 668 150	156 270	51.2	466 330	12.7
Romania	2010	3 859 040	13 306 130	17 330	0.4	133 460	1.0
Russian Federation	2006	23 283 305	450 599 500			939 200	0.2
Serbia	2012	631 552	3 437 423	71 947	11.4	99 773	2.9
Slovakia	2010	24 460	1 895 500	370	1.5	14 840	0.8
Slovenia	2010	74 650	482 650	820	1.1	1 260	0.3
Spain	2009	989 800	23 752 690	386 440	39.0	3 044 710	12.8
Sweden	2010	71 090	3 066 320	1 970	2.8	63 250	2.1
Switzerland	2010	59 070	1 047 800	8 030	13.6	34 520	3.3
OCEANIA (2)							
Guam	2007	104	405	96	92.3	229	56.5
Northern Mariana Islands	2007	256	1 624	165	64.5	138	8.5

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Global Review of Agricultural Census Methodologies and Results (2006-2015)

Corrigendum

Updated on 13 Dec 2021

The following corrections were made to the PDF after it went to print:

Page	Location	Text in printed PDF			Text in corrected PDF				
157 – 160	Annex table 2.1 – World and regional totals	WORLD TOTAL (107) AMERICAS (29) ASIA (26)			WORLD TOTAL (119) AMERICAS (22) ASIA (29)				
197	Annex table 2.7 – Europe	EUROPE (34) Montenegro Netherlands Norway Poland Portugal Republic of Moldova			EUROPE (34) ² ² Eurostat reports gender breakdown only for managers, which include both holders (civil persons) that manage the holding themselves and managers that are not holders, including of legal units. Montenegro Netherlands Norway Poland Portugal Republic of Moldova				
207 – 208	Annex table 2.10 – world total and regional totals	World total:	<hr/> 37,3 17,7 13,6 <hr/>	World total:	<hr/> 37,0 16,7 14,5 <hr/>	Africa:	23.4 (for Male)	Africa:	23.0 (for Male)
		Asia:	<hr/> 57 17 13 <hr/>	Asia:	<hr/> 33 16 14 <hr/>				
95	Section 13.2.6 “legal status of the holder”	The available data on the legal status of the holders seem to confirm the hypothesis that corporations, cooperatives and government entities, although few, can manage large areas of land. In most countries, farms operated by juridical persons are fewer than 10 percent. Only 13 countries have more than 10 percent of the farms operated by juridical persons: Fiji (26 percent), France (22 percent), Saudi Arabia (20 percent), Uruguay (17 percent), Guam (16 percent), Czechia (14 percent), Iceland (14 percent), Costa Rica (13 percent), the United States of America (13 percent), Chile (11 percent) and Switzerland (10 percent). However, these persons control a significant part of the agricultural sector by operating a large proportion of the land: for instance, in Czechia and Chile, these farms managed 79 and 64 percent of the total holding area, respectively.			The available data on the legal status of the holders seem to confirm the hypothesis that corporations, cooperatives and government entities, although few, can manage large areas of land. In most countries, farms operated by juridical persons are fewer than 10 percent. Only 10 countries have more than 10 percent of the farms operated by juridical persons: France (22 percent), Uruguay (17 percent), Guam (16 percent), Czechia, Iceland, South Africa (14 percent each), Costa Rica, the United States of America (12 percent each), and Switzerland (10 percent). However, juridical persons control a significant part of the agricultural sector by operating a large proportion of the land: for instance, Namibia (95 percent of the total holding area), Slovakia (88 percent), Mauritius (80 percent), Czechia (79 percent), Bulgaria (66 percent), Peru (64 percent) and Hungary (62 percent).				

FAO coordinates the World Programme for the Census of Agriculture (WCA). At the end of each decennial census round, the FAO Statistics Division reviews and assesses national agricultural census practices, methodologies and results, and summarizes the findings in methodological publications under the Statistical Development Series (SDS). The SDS 18 is the second publication of the WCA 2010 round that presents the methodological review and international comparison of the results of the 127 national censuses conducted during the period 2006–2015. It is a methodological review of the national censuses and an international comparison of data on key variables characterizing the structure of agriculture.

The publication is a unique reference for understanding the evolution of strategies and methods seen in national agricultural censuses. It starts by reviewing the various methodologies and practices regarding census modalities, enumeration methods and techniques (including use of technology), census frames, geographical and holding type coverage, census scope, data processing and tabulation, data quality and dissemination, integration of agricultural censuses with other censuses, and surveys.

The second part of the publication portrays an international comparison of census results, including key structural variables that are not available elsewhere. These comprise number and area of holdings, land tenure and holder gender, legal status of holders, household sizes, source of farm labour, land use and operated land.

This publication offers a distinctive outlook of country census practices across the world and a cross-country comparison of the structural characteristics of national agricultural sectors. FAO hopes that this will be a useful reference for planning future censuses and understanding better agricultural sectors in individual countries vis-à-vis those in others.

