

Food and Agriculture Organization of the United Nations



FAOSTAT ANALYTICAL BRIEF 33

Structural data from agricultural censuses

Country trends 1990–2010

>> FAO Statistics Division

HIGHLIGHTS

- → FAOSTAT is launching a dedicated statistical domain disseminating the main results from agricultural censuses. It presents structural data such as the number and size of the holdings, land tenure, land use, gender and farm labour. Some of this holding-level data date from the 1930s.
- \rightarrow China, India and Indonesia reported the largest number of holdings in the 2010 agricultural census round.
- → In the 2010 census round, the largest average holdings' area was reported in Australia, with Iceland and Argentina distant second and third. Conversely, the smallest average holdings' area (less than 1 ha) was found in Palau, Bangladesh and Egypt.
- \rightarrow The share of female-headed holdings was at or above 40 percent in Lithuania, Latvia and Eswatini, but always less than 50 percent.
- → Corporations, cooperatives and other juridical holders controlled more than half of the holdings' land in Namibia, Slovakia, Mauritius, Czechia, Bulgaria, Peru and Hungary.
- → In the 2010 census round, land ownership was the most common form of land tenure in most countries except in Europe. Eight countries reported 60 percent or more of the land rented from others: Slovakia, Czechia, Malta, France, Northern Mariana Islands, Belgium, Bulgaria and Germany.
- → The countries where most of the household members in agricultural holdings were actually engaged in agriculture included Brazil, Viet Nam, Uruguay and the Republic of Korea.

FAOSTAT STRUCTURAL DATA FROM AGRICULTURAL CENSUSES

BACKGROUND

A census of agriculture is a large scale statistical operation for collecting, processing and disseminating data on the structure of agriculture of a country. The census of agriculture collects data on agricultural holdings¹ (often called farms) at the lowest geographical level. Typical structural data collected include the size and number of agricultural holdings, the holder's gender, the type of land tenure, the legal status of holders, as well as information on land use, crop area and farm labour. The Food and Agriculture

¹ An agricultural holding is "an economic unit of agricultural production under single management comprising all livestock kept and all land used wholly or partly for agricultural production purposes, without regard to title, legal form or size" (FAO, 2015). One household may have more than one agricultural holding (i.e. two household members managing each different agricultural activities), but normally there is only one agricultural holding in a household, i.e. one-to-one correspondence.

Organization of the United Nations' (FAO) World Programme for the Census of Agriculture (WCA) is the framework under which national censuses are conducted at least once every ten years according to common international guidelines. The ten-year frequency is used because censuses measure structural aspects of agriculture that do not change much within this time frame.

At the end of each decennial census round, FAO's Statistics Division reviews the national census practices and publishes countries' methodologies and data on the structure of agriculture under the Statistical Development Series (SDS). For the first time, a FAOSTAT domain has been set up to disseminate structural data gathered from the last three completed rounds (1990, 2000 and 2010) published in SDS 9/9a, 13 and 18, respectively (FAO, 1997, 2001, 2010 and 2021). Some of the data, such as the size² and number of agricultural holdings, are available over longer time series, starting as early as from the WCA 1930 round. The domain is a one-stop shop for agricultural structural data not available elsewhere.

In contrast to other FAOSTAT domains, for which data are available annually, census data are available decennially by virtue of the frequency of the WCA mentioned above. Table 1 below shows the data availability and the global and regional participation of countries and territories by WCA round. The table shows an upward trend in country participation since the WCA 1930. Few countries have participated in all rounds, and most countries have had an irregular participation. Furthermore, due to the varying scope and coverage of national censuses, not all countries report all the structural agricultural variables covered in the FAOSTAT domain.

Region	WCA round							
	1930	1950	1960	1970	1980	1990	2000	2010
Total	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

Table 1: Number of countries and territories participating in the WCA rounds

Note: The WCA 1940 round could not be completed due to the onset of the Second World War.

Source: FAO. 2022. Structural data from agricultural censuses. In: *FAO*. Rome. Cited May 2022 http://www.fao.org/faostat/en/#data/WCAD

The following sections present country trends for some structural agricultural variables with complete data. Global and regional comparisons are not presented here as the countries participating in each census round are not the same. In the next sections, data refer to the WCA 2010 unless otherwise specified.

COUNTRY

Six out of the eight countries with the largest number of holdings were in Asia in the WCA 2010 round (Figure 1). China³ (200.5 million), India (138.4 million), Indonesia (26.1 million), the Russian Federation

² The area of the holding is area managed by the holder and includes: land used for growing crops (temporary and permanent), meadows and pastures, and fallow land; unutilized agricultural land; forest and other wooded land; bodies of water; farmyards and land occupied by farm buildings; and land for which a holding does not have any rights to agricultural use, except for the products of the trees grown on it (FAO, 2015).

³ China conducted its first national census in 1997 (WCA 2000 round).

(23.3 million), Bangladesh (15.2 million), Ethiopia (10.8 million of holdings in the WCA 2000), Viet Nam (10.4 million), and Pakistan (8.3 million) accounted for the bulk of holdings reported in the WCA 2010 round. Furthermore, the number of holdings increased in China, India and Indonesia since the WCA 1990 round. For countries where the total holding's area has remained fairly stable, this suggests that holdings are becoming smaller in size.

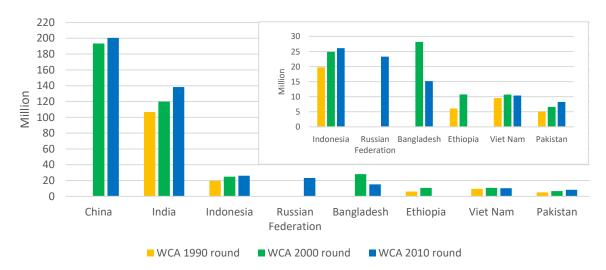


Figure 1: Countries with the largest number of holdings

Source: FAO. 2022. Structural data from agricultural censuses. In: *FAO*. Rome. Cited May 2022 <u>http://www.fao.org/faostat/en/#data/WCAD</u>

Figure 2 shows that by dividing the number of holdings of the above countries by their population, Russia takes the lead in number of holdings per 1 000 people (162 holdings), followed by China (147), Viet Nam (117) and India (111) in the 2010 census round.

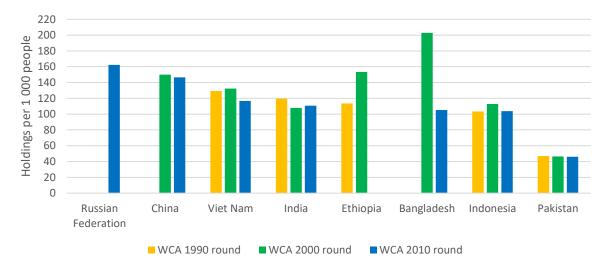


Figure 2: Countries with the largest number of holdings per 1 000 people

Source: FAO. 2022. Structural data from agricultural censuses. In: FAO. Rome. Cited May 2022 http://www.fao.org/faostat/en/#data/WCAD In terms of total holdings' area,⁴ WCA data show that the Russian Federation⁵ (450.6 million ha), Australia (409.7 million ha), the United States of America (370.1 million ha), Brazil (333.7 million ha), Argentina (172.1 million ha in the WCA 2000 round), China (130 million ha in the WCA 2000 round), India (159.6 million ha) and Colombia⁶ (109 million ha) reported the largest holdings' area in the WCA 2010 round (Figure 3). Argentina and China did not report holdings' area in the 2010 census round. In these countries, except Colombia, the total holdings' area has been declining since the WCA 1990 round.

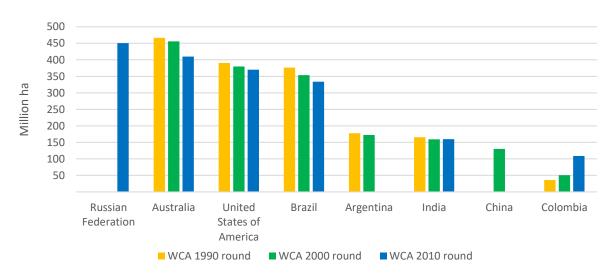


Figure 3: Countries with largest total holdings' area

Source: FAO. 2022. Structural data from agricultural censuses. In: *FAO*. Rome. Cited May 2022 <u>http://www.fao.org/faostat/en/#data/WCAD</u>

Furthermore, the WCA data show that the largest average holdings' area in the WCA 2010 round were observed in Australia (3 020 ha), Iceland (988 ha), Argentina (582 ha in the WCA 2000), Uruguay (365 ha), Canada (315 ha), New Zealand (248 ha), Czechia (222 ha), the United States of America (175 ha), Slovakia (125 ha), Chile (121 ha) and Paraguay (107 ha) (Figure 4 and Map 1). Argentina did not report area in the WCA 2010 round. While the average holding's area declined in Australia and the United States of America, it increased in Argentina, Uruguay, Canada, and Chile, suggesting for the latter group a consolidation of holdings. In South America, the leading meat-producing countries, such as Argentina and Uruguay, have big holdings and display a growing trend in their sizes.⁷

⁴ The agricultural holding's area is the area managed or operated by the holder. Therefore, a country's total holding's area differs from the land area reported in the FAOSTAT Land Use domain, which includes area not operated by agricultural holders, such as some forest area, community land and other area.

⁵ The Russian Federation conducted its first census in 2006 (WCA 2010 round).

⁶ Data reported by Colombia in the WCA 1990 and 2000 rounds were sourced from national agricultural surveys.

⁷ In these countries, the number of holdings declined steadily while holding's area remained relatively stable or increased since the WCA 1990 round. In fact, the number of holdings and holdings' area declined by 22 percent and 3 percent, respectively, in Argentina, declined by 18 percent and increased by 4 percent in Uruguay, and declined by 5 percent and increased by 37 percent in Chile over the same period.

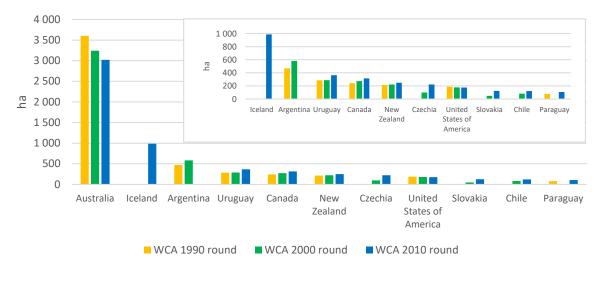
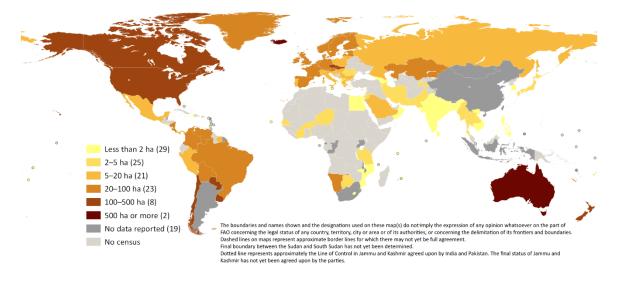


Figure 4: Countries with the largest average holdings' areas

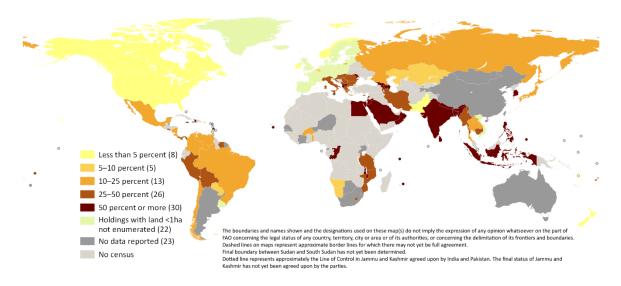
Source: FAO. 2022. Structural data from agricultural censuses. In: FAO. Rome. Cited May 2022 http://www.fao.org/faostat/en/#data/WCAD



Map 1. Average holding area (WCA 2010 round)

Source: FAO. 2022. Structural data from agricultural censuses. In: *FAO*. Rome. Cited May 2022 <u>http://www.fao.org/faostat/en/#data/WCAD</u> based on UN Geospatial, 2020.

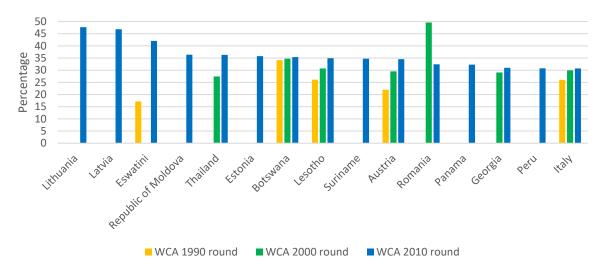
Map 2 shows that the highest proportion of small holdings (with less than 1 ha of land) in the WCA 2010 round is found in countries in Oceania, Asia and Africa. Countries in the Americas and Europe report larger holdings. The highest proportions of small farms (with less than 1 ha of land) were found in Palau (100 percent), Bangladesh (84 percent) and Egypt (81 percent) in the WCA 2010 round. In 20 Asian countries, 65 percent of agricultural holdings were smaller than 1 ha, while accounting for just 14 percent of the operated area. In six Pacific countries and territories (American Samoa, Cook Islands, Fiji, Guam, the Northern Marina Islands and Samoa), 28 percent of holdings with 1 ha and below accounted for only 5 percent of the total area. Uruguay and some European countries do not cover small holdings in their censuses because they are few and do not contribute significantly to the national agricultural output.



Map 2. Proportion of holdings with less than 1 ha of land (WCA 2010 round)

Source: FAO. 2022. Structural data from agricultural censuses. In: *FAO*. Rome. Cited May 2022 <u>http://www.fao.org/faostat/en/#data/WCAD</u> based on UN Geospatial, 2020.

While no country reached 50 percent of holdings operated by female holders in the WCA 2010 round, the higher shares are observed in Lithuania and Latvia in Europe; Eswatini, Botswana, and Lesotho in Africa; and Suriname, Panama, and Peru in the Americas (Figure 5). The share of female-headed holdings has been increasing over the last three census rounds in Thailand, Botswana, Lesotho, Austria, Georgia, and Italy.

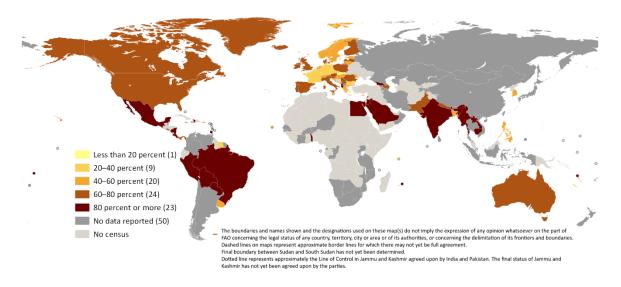




Source: FAO. 2022. Structural data from agricultural censuses. In: FAO. Rome. Cited May 2022 http://www.fao.org/faostat/en/#data/WCAD

The WCA classifies land tenure as "legal ownership or legal owner-like possession", "rented from others" and other types. Map 3 shows that ownership is the most common form of land tenure in the countries and territories that reported this variable in the WCA 2010.





Map 3. Proportion of holdings' operated area owned by holders (WCA 2010)

Source: FAO. 2022. Structural data from agricultural censuses. In: *FAO*. Rome. Cited May 2022 <u>http://www.fao.org/faostat/en/#data/WCAD</u> based on UN Geospatial, 2020.

Figure 6 shows countries and territories reporting 95 percent or more of the holdings' area owned by holders in the WCA 2010 round. Three are in the Americas (Haiti, Nicaragua and Brazil) and three in Asia (India, Myanmar and Cambodia). The American Samoa and Brazil, which reported this variable for the last three WCA rounds, show an increasing or stable trend in land ownership.

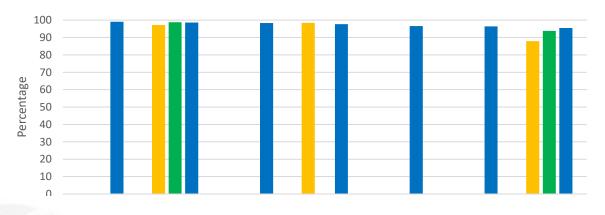


Figure 6: Countries and territories with the largest proportion of holdings' area owned by holders

预览已结束, 完整报告链接和二维码如下:



https://www.yunbaogao.cn/report/index/report?reportId=5_31190