Employment indicators
2000–2019
Global and regional trends
HIGHLIGHTS

→ Employment in agriculture* declined globally from 1 billion people in 2000 to 883 million in 2019. Yet, agriculture remains the second highest source of employment worldwide after the services sector with 26.7 percent of total employment.

→ In 2019, 324 million women were employed in the agricultural sector, corresponding to 36.7 percent of all agricultural workers and 25 percent of women in employment.

→ Agriculture constitutes the main sector of employment in most of the countries in Africa. On average, five workers out of ten in the region were employed in the agricultural sector (48.9 percent) in 2019.

→ In most countries, the majority of men and women working in agriculture are engaged as self-employed workers and the share of those working as employees remains low.

→ The workers engaged in “crop and animal production, hunting and other related service activities” compose the biggest share of employment in agriculture.

* The term “agriculture” includes forestry and fishing.

FAOSTAT EMPLOYMENT INDICATORS

BACKGROUND

FAOSTAT updates the employment indicators yearly, using data from the International Labour Organization (ILO) database that contains a rich set of indicators from a wide range of topics related to labour statistics.¹

The main difference in this year’s employment indicators release is the updated list of indicators that aim to enrich the domain with elements of particular interest to FAOSTAT users. The indicators in FAOSTAT that ILOSTAT makes available can be grouped in two main areas: 1) Indicators related to agriculture and 2) Indicators related to rural areas. The extended list of indicators is now making available key indicators by age groups and sex, as well as showing employment statistics on divisions of agriculture using the International Standards for Industrial Classification (ISIC) 2-digit level: (i) crop and animal production, hunting and related service activities, (ii) forestry and logging, and (iii) fishing and aquaculture.

Moreover, unlike previous data releases, the indicators are derived not only from labour force surveys, but also from other databases to include the countries that use other sources of data to disseminate indicators related to the labour market. In addition to the ILO modelled estimates and projections that provides data at country, regional and global level, the Labour Force Statistics (LFS) and the Rural and

¹ For more information on ILOSTAT, please visit: https://ilostat.ilo.org/
urban labour markets (RURURB) databases provide annual labour statistics compiled from various sources such as labour force surveys, establishment surveys and administrative records or microdata using representative household surveys. Agricultural employment statistics for more than 100 countries are available on a yearly basis for the past five years (2015–2019).

This brief also presents some highlights of the new data using some key indicators from the FAOSTAT employment domain for 2019 which is the year with most data available.

GLOBAL AND REGIONAL RESULTS

According to the ILO modelled estimates, employment in agriculture, forestry and fishing declined globally from 1 billion people in 2000 to 883 million in 2019 as shown in Figure 1. Yet, the agricultural sector remains the second highest source of employment worldwide after the services sector with 26.7 percent of total employment in 2019 (ILO, 2020a). The decline in the share of the agricultural sector in total employment is due to the structural shift in economic production from agriculture to manufacturing and services and the increased productivity of agricultural workers, which has therefore reduced labour demand in agriculture (ILO and UNCTAD, 2013).

![Figure 1: Employment in agriculture, forestry and fishing by region, 2000–2019](image)


In 2019, 324 million women were employed in the agricultural sector, corresponding to 36.7 percent of all agricultural workers and 25 percent of women in employment. Looking at the distribution of employment in agriculture by gender and region, Figure 2 shows that the greatest gender difference is observed in the Americas where the share of males employed in agriculture (78.1 percent) is nearly four times that of females (21.8 percent). The gap is smaller, yet still significant, in Asia and Europe, where almost two men are employed in the sector for each woman. In Africa and Oceania, women represent almost 45 percent of the overall number of people employed, almost at parity with men.
While agricultural employment rates vary across countries, agriculture constitutes the main sector of employment in most of the countries in sub-Saharan Africa, as shown on Figure 3. On average, four workers out of ten were employed in the agricultural sector (48.9 percent) in Africa in 2019. Burundi had highest share of workers in agriculture with almost nine out of ten workers having their main job in agriculture (86.2 percent).

COUNTRY RESULTS

The results shown in this section refer to annual labour statistics for a subset of countries with available household surveys; therefore the data does not allow to present regional or global aggregates. Following the adoption of new Resolution by the 19th International Conference of Labour Statisticians (ICLS, 2013), some countries have already implemented these new standards of measurement of employment that excludes own-use production workers from the employment definition. This new definition of employment is expected to contribute to a decrease in the number of people employed in agriculture in countries where subsistence foodstuff producers are widespread. The degree of implementation of these new standards varies by country and will increase over time with upcoming surveys. Among the 109 countries that had data on employment in agriculture in 2019, 27 countries had implemented these new standards in the measurement of employment excluding own-use production workers.2

Employment in divisions of agriculture, forestry, and fishing – ISIC level 2

Employment in agriculture, forestry and fishing is measured using the structure proposed by the International Standard Industrial Classification of All Economic Activities (ISIC) that classifies the economic activities into classes (4 digits), groups (3 digits), divisions (2 digits) and sections (1 digit) (United Nations, 2008). The ILOSTAT database disseminates employment figures at the 2-digit level that are further disaggregated by sex. The data are currently available with at least one data point in more than 120 countries for 2000–2020. Agriculture, forestry and fishing has the following 2-digit level divisions: 01 “Crop and animal production, hunting and related service activities”; 02 “Forestry and logging”, and 03 “Fishing and aquaculture”.

In all countries with available data for 2019, the biggest share of employment in agriculture is composed by workers who are engaged in crop and animal production, hunting and other related service activities, with levels close to 100 percent in countries such as Jordan, Palestine and Georgia. In Czechia, Croatia and Lesotho, the forestry and logging sector represented more than 10 percent of agricultural employment in 2019. The highest share of fishery and aquaculture employment in total agricultural employment was recorded in Maldives, Marshall Islands and Seychelles, all of them Small Island Developing States. In Maldives in particular, more than 80 percent of those working in agriculture were working in fishing and aquaculture.

2 In 2019, the list of countries (27 in total) that excluded own-use production workers from the measurement of employment are: Armenia, Azerbaijan, Belarus, Botswana, Chile, the Cook Islands, Costa Rica, the Dominican Republic, Honduras, Jordan, Kiribati, Lebanon, Lesotho, Malaysia, Maldives, the Marshall Islands, Mongolia, Myanmar, Qatar, Rwanda, South Africa, Uruguay, Uzbekistan, Vanuatu, Viet Nam, Zambia and Zimbabwe. The users can find this information in the notes after selecting their indicators of interest.
**Figure 4: Share of employment in divisions of agriculture, forestry and fishing – ISIC level 2, top ranking countries in 2019**

<table>
<thead>
<tr>
<th>Country</th>
<th>Crop and animal production, hunting and related service activities</th>
<th>Forestry and logging</th>
<th>Fishing and aquaculture</th>
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**Source:** FAO, 2021.

**Status in employment in agriculture, forestry and fishing**

The new FAOSTAT employment indicators break down the status in employment of the people working in agriculture using the 1993 International Classification of Status in Employment (ICSE-93), which classifies agricultural workers in two main types of jobs: employees and self-employed workers. A third category is used for agricultural workers not classifiable by status. Employees are all workers holding paid employment jobs, which are those where the incumbents hold employment contracts that give them a basic remuneration not directly dependent upon the revenue of the unit for which they work. Self-employed workers are those workers who, working on their own account or with one or a few partners or in cooperative, hold jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced.

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3 Using the ICSE-93 classification, the ILOSTAT database classifies jobs into five main categories, which can be grouped under two main types of jobs: paid employment jobs (employees) and self-employment jobs (employers, own-account workers, contributing family workers and members of producers’ cooperatives). A sixth category is reserved for workers not classifiable by status.
In most countries, the majority of men and women employed in agriculture as their main activity are engaged as self-employed workers\(^4\) and the share of employees in agriculture remains generally low. In fact, only 20 countries have a share of employees (or wage workers) above 10 percent in 2019. As seen in Figure 5, that share is the highest in Rwanda with 44.8 percent. In all other countries, employees are mostly engaged in non-agricultural sector.

**Figure 5: Share of employees in agriculture, forestry and fishing among the total employees by sex in 2019, top countries**

![Figure 5: Share of employees in agriculture, forestry and fishing among the total employees by sex in 2019, top countries](image)

**Source:** FAO, 2021.

Figure 6 shows that in the United Arab Emirates, Palestine, Jordan, Egypt, and Brunei Darussalam, a very low percentage of agricultural employees were females, which can be linked to the overall low representation of females in the labour force in those countries. Rwanda remains the only country where the majority of employees in agriculture were females.

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\(^4\) A recent study based on the RuLIS database shows that nearly all rural men and women employed in agriculture are either own-account workers or contributing family labourers, which are considered vulnerable forms of work, usually informal and therefore not providing access to social security. Further, in most of the countries included in the analysis, the data showed that rural women employed in agriculture were more likely to be engaged in contributing family labour as unpaid whereas rural men employed in agriculture were more likely to be engaged in own-account work as the main employment activity generating some sort of income. Further information can be found at: [https://www.fao.org/3/cb5589en/cb5589en.pdf](https://www.fao.org/3/cb5589en/cb5589en.pdf)
Figure 6: Share of female employees in total employees in agriculture, forestry and fishing in 2019, top and bottom ranking countries


Hours worked of people working in agriculture, forestry and fishing

The FAOSTAT indicators now include statistics on mean weekly hours actually worked per employed person and per employee by sex for the people working in agriculture. While the hours of work in agriculture tend to be extremely long during the planting and harvesting season, they are shorter during off-peak times. As minimum wages tend to be low or non-existent for agricultural workers in general, and many casual, temporary or seasonal workers are paid at least in part on a piece work basis – i.e. per kilo of crop picked, row weeded, or hectare sprayed, there is a strong financial incentive for them to extend their working time to the maximum so as to enhance their earnings (ILO, 2007).

According to ILO, workers are considered to have excessive working time if their average hours worked are above 48 hours per week (ILO, n.d.). Among the countries where the employees in agriculture worked more than 48 hours in 2019 and for which disaggregation by sex is available, shown in Figure 7, the employees in agriculture worked on average more than 55 hours per week in Botswana and India. In all the countries with excessive working hours, the data shows that males were working longer hours than females.
Figure 7: Mean weekly hours actually worked per employee in agriculture, forestry and fishing in 2019, countries with excessive working hours


REFERENCES


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