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FAOSTAT ANALYTICAL BRIEF 53

Employment indicators 2000–2021

HIGHLIGHTS

- The agricultural sector* employed 866 million people worldwide in 2021, down from 1 billion in 2000. The lowest number of people employed in agriculture during the past 20 years was 856 million people in 2020, reflecting the impact of the COVID-19 pandemic on the labour markets.
- The share of employment in agriculture in 2021 was highest in Africa (close to 50 percent) and lowest in Europe (5 percent).
- In most countries, the share of men and women working in agriculture as employees remained low, and below 10 percent in 2020.
- Overall, people aged 25 to 54 years make most of the labour force in rural areas. In addition, a significant gender disparity persists, with fewer women than men in work or looking for work.
- In 2020 on average, women in agriculture work 33 hours per week, compared to 40.6 hours per week for men.

* Agriculture includes forestry and fishing.

FAOSTAT EMPLOYMENT INDICATORS

BACKGROUND

The Food and Agriculture Organization of the United Nations (FAO) updates the employment indicators each year, using data from the International Labour Organization (ILO) [ILOSTAT](#) database that contains a rich set of indicators from a wide range of topics related to labour statistics. The indicators published in FAOSTAT are derived from the labour force statistics (LFS), rural and urban labour markets (RURURB) databases, which provide annual labour statistics compiled from various sources such as labour force surveys, establishment surveys and administrative records or microdata using representative household surveys. In addition, the ILO modelled estimates and projections (ILOEST) are used to provide information on employment in agriculture and the employment ratio in rural areas at the global level.

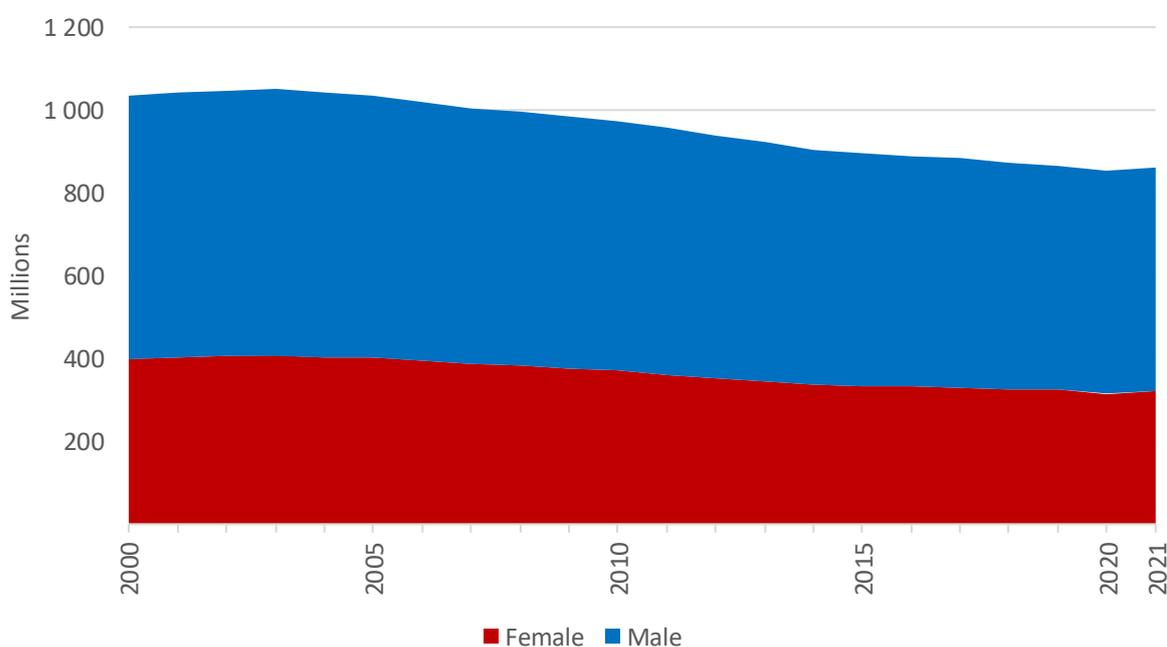
The indicators in FAOSTAT are grouped in two main areas: 1) indicators related to agriculture, forestry and fishing and 2) indicators related to rural areas. Key indicators are broken down by age groups, sex and divisions of agriculture using the International Standards for Industrial Classification (ISIC) 2-digit level: (i) crop and animal production, hunting and related service activities, (ii) forestry and logging, and (iii) fishing and aquaculture.

GLOBAL AND REGIONAL RESULTS BASED ON ILO MODELLED ESTIMATES

The ILO modelled estimates provide a balanced panel data set, which includes both nationally reported observed and imputed data for countries with missing data, allowing for the computation of regional and global estimates of labour market indicators.

Employment in agriculture, forestry and fishing declined globally from 1 billion people in 2000 to 866 million people in 2021. The lowest number of people employed in agriculture during the past 20 years was 856 million people in 2020. This reflects the impact of the COVID-19 pandemic on the labour markets, as the decline between 2019 and 2020 was larger than the average of the five previous years due to the movement restrictions and the drop in activity due experienced in 2020. In addition, a slight recovery occurred in 2021, as the number of people employed in agriculture increased by about 10 million. Between 2019 and 2021, the drop in employment affected men and women differently: the number of women employed in the sector in 2021 (317 million) is lower than in 2019 (327 million), while the number of men employed in 2021 (544 million) slightly exceeded the pre-pandemic one (543 million), resulting in a decline of the share of women in the sector to 37 percent in 2021 (Figure 1).

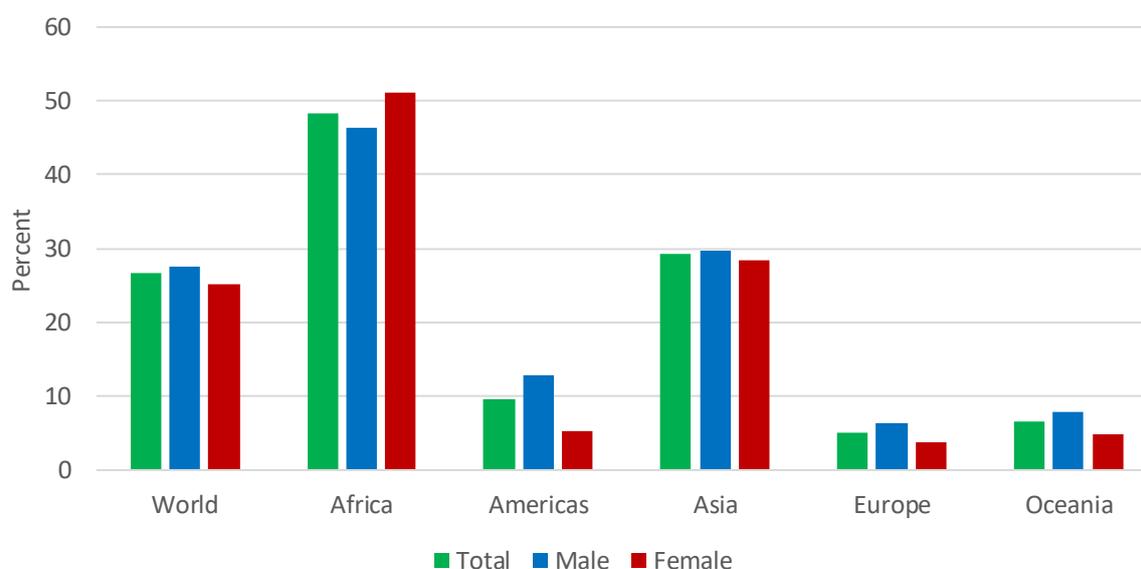
Figure 1: World employment in agriculture, forestry and fishing by sex



Source: FAO. 2022. FAOSTAT: Employment Indicators: Agriculture. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OEA>

The global share of employment in agriculture reached 26.6 percent in 2021, but this average masks great heterogeneity between regions (Figure 2). The share of employment in agriculture in 2021 was highest in Africa (48.8 percent) and Asia (29.6 percent), followed by the Americas (9.6 percent), Oceania (6.5 percent) and Europe (5.1 percent). Africa stands out as the only region where women are more likely to work in agriculture compared to men (51.1 percent vs 46.4 percent). The gap between men and women is largest in the Americas, where 12.8 percent of men work in agriculture compared to 5.3 of women.

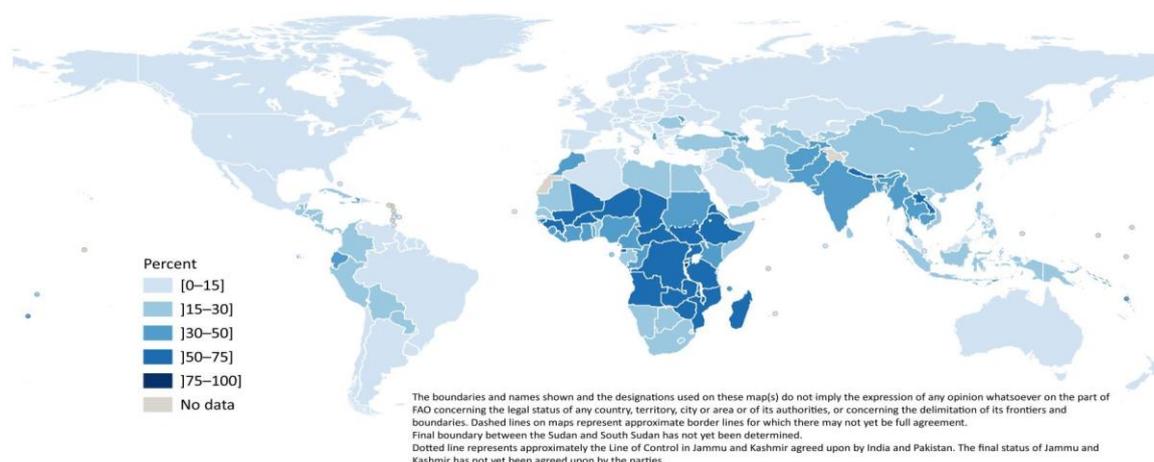
Figure 2: Share of employment in agriculture, forestry and fishing in total employment, by sex and region, 2021



Source: FAO. 2022. FAOSTAT: Employment Indicators: Agriculture. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OEA>

While Africa as a whole has the highest share of employment in agriculture among all regions, Figure 3 shows that it is in sub-Saharan Africa that agriculture constitutes the main sector of employment. Burundi had the highest share of employment in agriculture (85.9 percent), followed by Madagascar, Burkina Faso, the Niger and Mozambique, where the share of employment in agriculture exceeded 70 percent. Nepal and the Lao People’s Democratic Republic are the only countries outside Africa that have a share of employment in agriculture above 50 percent.

Figure 3: Share of employment in agriculture, forestry and fishing in total employment, 2021



Source: FAO. 2022. FAOSTAT: Employment Indicators: Agriculture. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OEA> based on UN Geospatial. 2020. Map geodata [shapefiles]. New York, USA, UN.

COUNTRY RESULTS (2020)

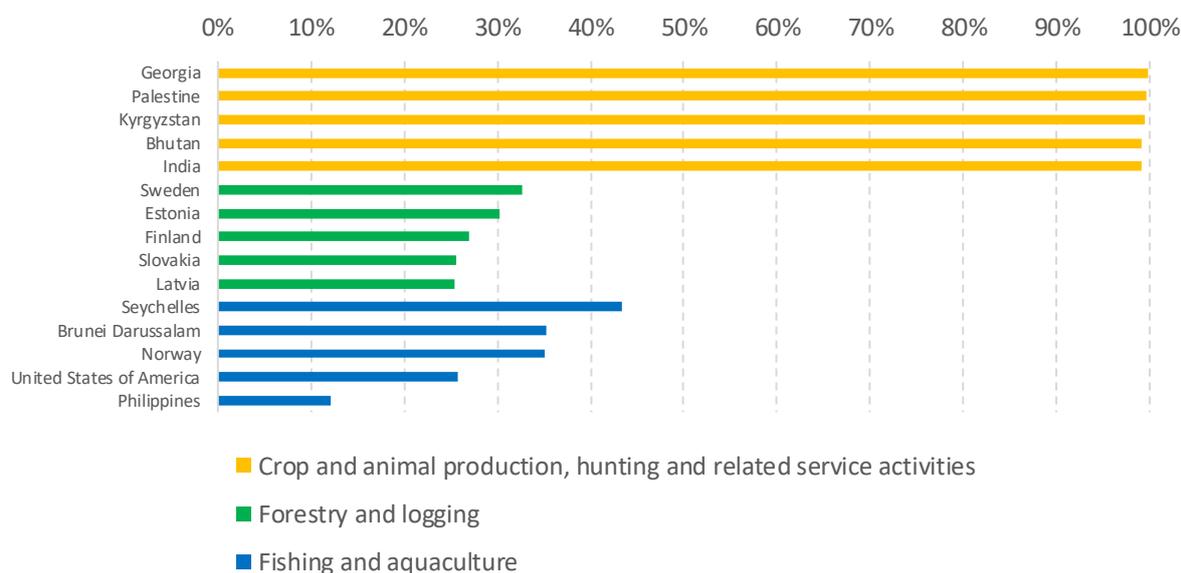
The results shown in this section refer to annual data derived mostly from available household-based surveys and do not allow to present regional or global aggregates. Depending on the implementation of the 19th International Conference of Labour Statisticians (ICLS) standards by the countries, the employment figures may refer to the latest resolution.^{1, 2}

Employment in agriculture, forestry and fishing by sub-sectors (two-digits ISIC divisions)

According to the International Standard Industrial Classification of all Economic Activities (ISIC), the broad agricultural sector comprises the following two-digit level divisions: 01 “Crop and animal production, hunting and related service activities”; 02 “Forestry and logging”, and 03 “Fishing and aquaculture”.

The crop, animal production, hunting and related service activities was the biggest sector of employment within agricultural employment in 2020 for each of the 66 countries with data available, with shares between 49.5 percent in Seychelles and 99.7 percent in Georgia. Out of 180 million people working in agriculture in India, 99 percent was working in crop, animal production and hunting. In Seychelles, the fishing and aquaculture sector represented more than 40 percent of agricultural employment in 2020. The highest share of forestry and logging employment in total agricultural employment was recorded in Sweden and Estonia with more than 30 percent.

Figure 4: Share of employment in agriculture, forestry and fishing in 2020 by sub-sectors (two-digits ISIC divisions), top countries



Source: FAO. 2022. FAOSTAT: Employment Indicators: Agriculture. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OEA>

¹ The degree of implementation of these new standards varies by country and is increasing over time with recent surveys.

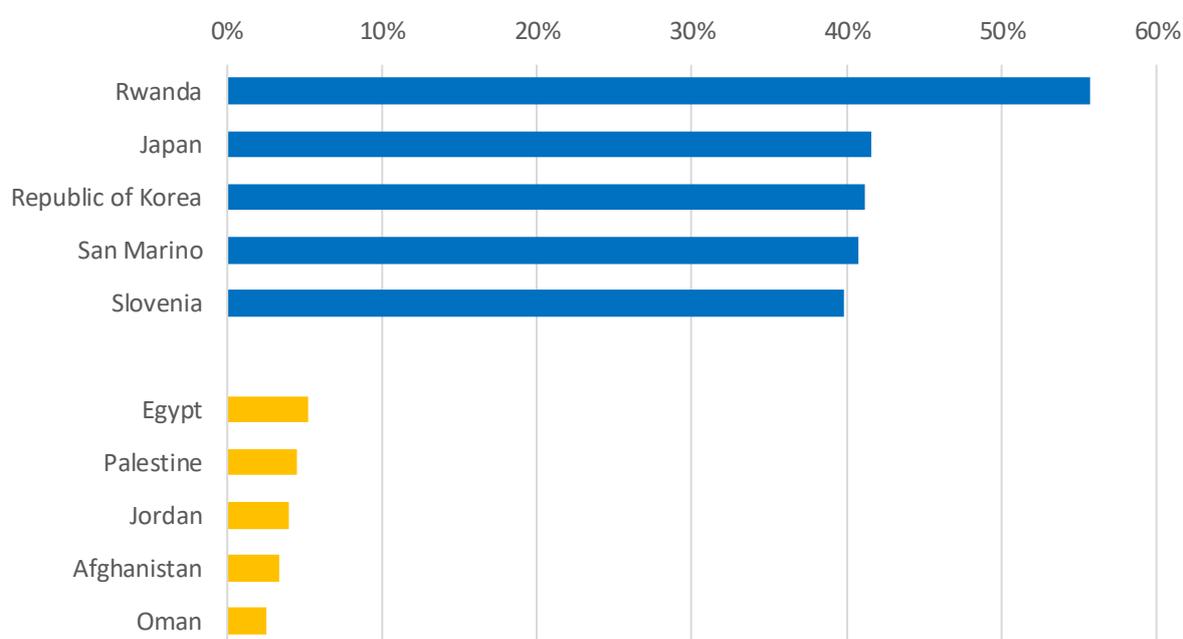
² This section is using 2020 as the reference year due to better data availability as of the time of writing.

Status in employment in agriculture, forestry and fishing

The FAOSTAT employment indicators break down the status in employment of the people working in agricultural sector using the 1993 International Classification of Status in Employment (ICSE-93),³ which classifies agricultural workers in two main types of jobs: employees⁴ and self-employed workers.⁵ A third category is used for agricultural workers not classifiable by status.

Overall, the data show that most workers in agriculture are self-employed workers. The share of employees in agriculture is generally low and exceeds 15 percent only in five countries for which data are available in 2020: Peru (15.9 percent), Ecuador (22 percent), Honduras (23.6 percent), Myanmar (27.4 percent) and Rwanda (46.1 percent). In addition, the share of female employees is always lower than male employees in all countries except Rwanda (Figure 5). In Oman, Afghanistan, Jordan, Palestine and Egypt, the share of female agricultural employees is around or below 5 percent, which could also be related to the low employment rate of women in these countries.

Figure 5: Share of female employees in total employees in agriculture, forestry and fishing in 2020, top and bottom countries



Source: FAO. 2022. FAOSTAT: Employment Indicators: Agriculture. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OEA>

³ Using the ICSE-93 classification, the ILOSTAT database classifies jobs into five main categories, which are then 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.

⁴ Employees are all workers who hold 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.

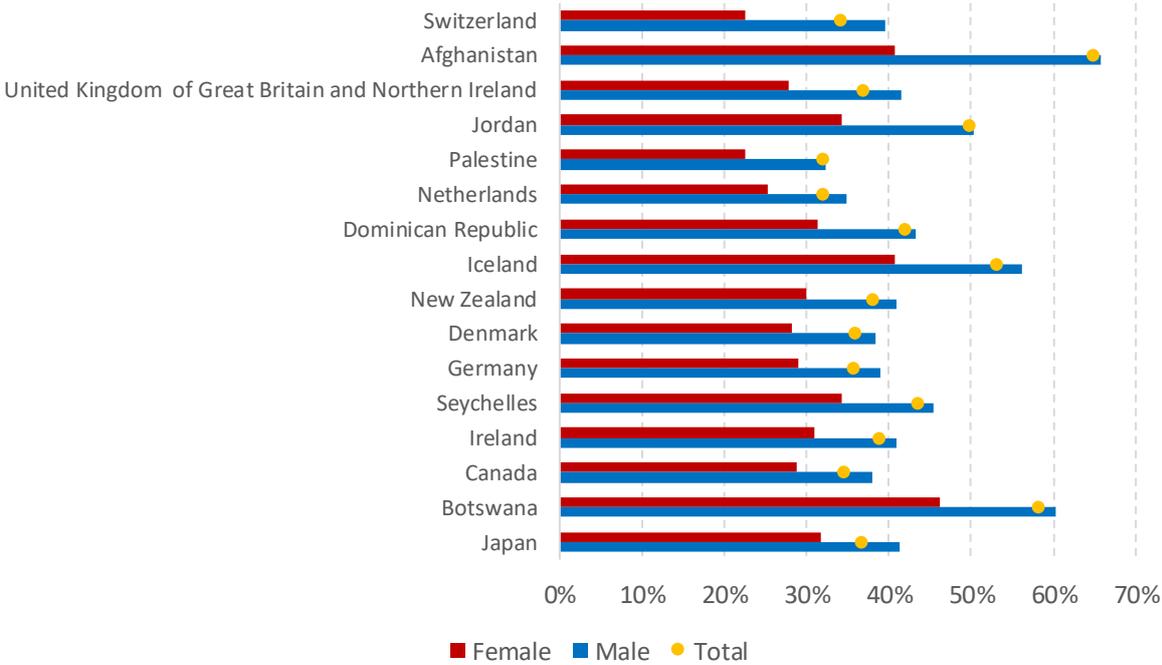
⁵ Self-employed workers are those workers who, working on their own account or with one or a few partners or in cooperative, hold jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced.

Hours worked of people working in agriculture, forestry and fishing

Data on mean weekly hours actually worked per employed person and per employee by sex for the people working in agriculture offer a useful complement of information to data on the number of employed people. 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. Based on 90 countries for which data are available, the average number of hours worked in agriculture, forestry and fishing was around 39 hours per week in 2020 for all agricultural workers. Moreover, the data show a gap in hours worked in agricultural employment by sex, with women working an average of 33 hours per week, compared to 41 hours per week for men. This difference in hours worked reflects only the time spent at the main job and does not reflect the additional hours spent on food processing and preparation for the household, child and elderly care, water and fuel collection, and other unpaid household duties, which are tasks more frequently performed by women than by men.

Moreover, the data show that in 2020, Switzerland was the country with the highest difference between male and female employees in agriculture (Figure 6). While women worked around 23 hours, men worked 39 hours, in other words 75 percent more than females. Switzerland was followed by Afghanistan, where there was a 60 percent difference between the time spent by males and females paid workers in agriculture. It should be noted that looking at the hours spent on a given job alone may hide the variety of labour markets existing across the world such as the part-time jobs that can facilitate the life of women, or the lack of full-time jobs for certain groups, the segregation existing in certain sectors as well as the absence of equal pay for equal work.

Figure 6: Countries with largest hours gap between male and female employees (>=30 percent) working in agriculture, 2020

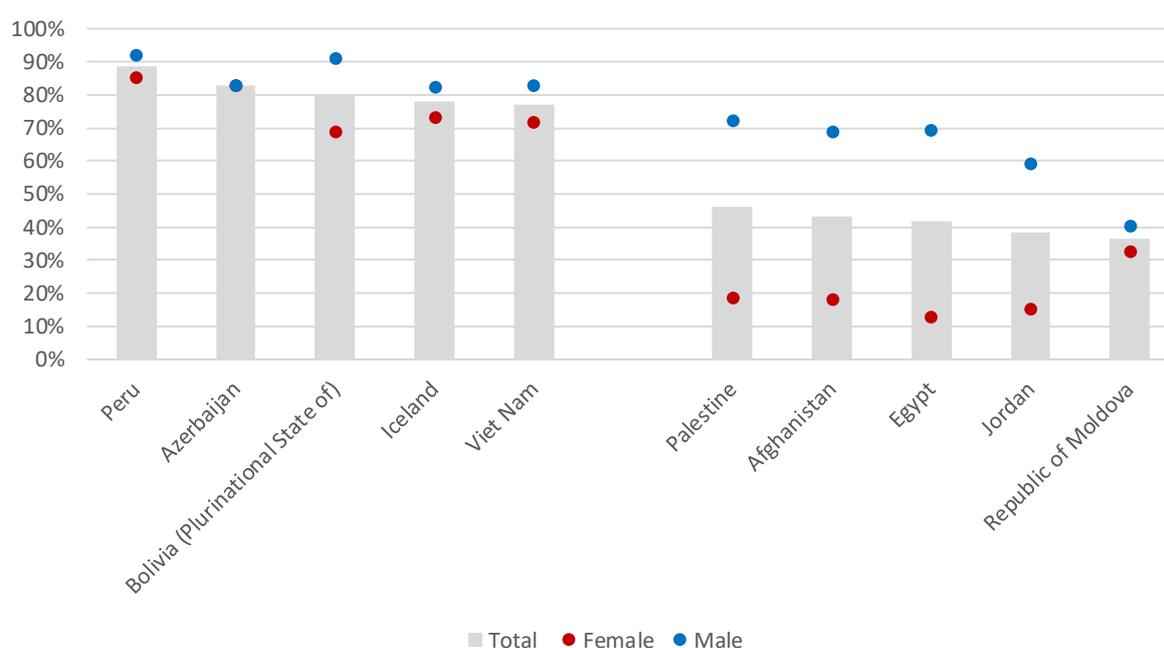


Source: FAO. 2022. FAOSTAT: Employment Indicators: Agriculture. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OEA>

Labour force participation rate by age and sex in rural areas

The labour force participation rate in rural areas is calculated as the ratio of the number of persons in the labour force (i.e. the people employed and the people seeking work) as a percentage of the working-age population. Among the countries for which data are available in 2020, Peru has the highest labour force participation rate, with almost nine people of working age out of ten employed or looking for a job in rural areas (Figure 7). It is followed by Azerbaijan, the Plurinational State of Bolivia, Iceland and Viet Nam, where approximately 80 percent of the population living in rural areas were in the labour force in 2020. On the other hand, in the Republic of Moldova, Jordan, Egypt, Afghanistan and Palestine, the labour force participation rate stayed below 50 percent of the rural population. The gender differences are striking in the Near East countries and Afghanistan: in Egypt, for example, 12 percent of the rural women was in the labour force compared to 42 percent of rural men.

Figure 7: Labour force participation rate by gender in rural areas in 2020, top and bottom ranking countries



Source: FAO. 2022. FAOSTAT: Employment Indicators: Rural. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OER>

The indicator on labour force participation rate in rural areas is further disaggregated by age groups.⁶ Among the bottom and top-ranking countries, the persons aged between 25 and 54 years old are, on average, more likely to be engaged in the labour market than the rest of the population.

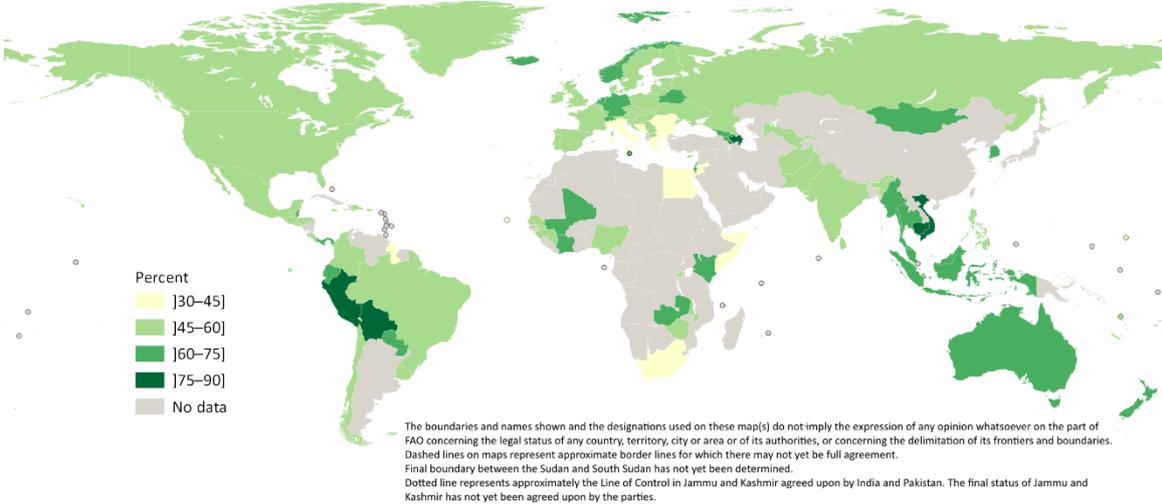
In terms of gender gap, women are less likely to participate in the labour market than men of the same age cohort. The data suggest that young women are less actively engaged in the labour market compared to older women; however, the gender gap seems to increase with age.

⁶ The age groups correspond to individuals between 15 and 24 years old, 25 and 54 years old, 55 and 64 years old, and over 65 years old.

Employment-to-population ratio

In rural areas, the employment-to-population ratio (defined as the proportion of a country's working-age population that is employed), is very heterogeneous across the countries for which the data are available, ranging between 31 percent in Jordan and 88 percent in Peru (Figure 8). While low employment rates could indicate a lack of jobs on the labour market, the exclusion of own-use production workers (comprising the production of goods and services for own final use) from the employment definition may also affect the employment rate in rural areas where subsistence food production is widespread. This is particularly visible in sub-Saharan Africa countries where the latest ICLS resolution concerning statistics of the economically active population, employment, unemployment and underemployment is implemented.

Figure 8: Employment-to-population ratio in rural areas, 2020



Source: FAO. 2022. FAOSTAT: Employment Indicators: Rural. In: FAO. Rome. Cited November 2022. <http://www.fao.org/faostat/en/#data/OER> based on UN Geospatial. 2020. Map geodata [shapefiles]. New York, USA, UN.

EXPLANATORY NOTES

FAOSTAT disseminates 18 indicators on employment in agriculture and in rural areas:

Employment in agriculture:

- > Employment in agriculture, forestry and fishing by age
- > Employment in agriculture, forestry and fishing status in employment
- > Employment in agriculture, forestry and fishing by sub-sectors
- > Mean weekly hours actually worked per employed person in agriculture, forestry and fishing
- > Mean weekly hours actually worked per employee in agriculture, forestry and fishing
- > Share of employment in agriculture, forestry and fishing in total employment
- > Share of females in total employment in agriculture, forestry and fishing
- > Share of employment agriculture, forestry and fishing by sub-sectors
- > Share of employees in agriculture, forestry and fishing in total employees
- > Share of female employees in total employees in agriculture, forestry and fishing
- > Agriculture value added per worker (constant 2015 USD)
- > Employment in agriculture, forestry and fishing ILO modelled estimates
- > Share of employment in agriculture, forestry and fishing in total employment - ILO modelled estimates.

Employment in rural areas:

- > Employment by age in rural areas
- > Employment by status in employment in rural areas
- > Labour force participation rate by age in rural areas
- > Employment-to-population ratio by age in rural areas
- > Share of employment by status in employment in rural areas

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