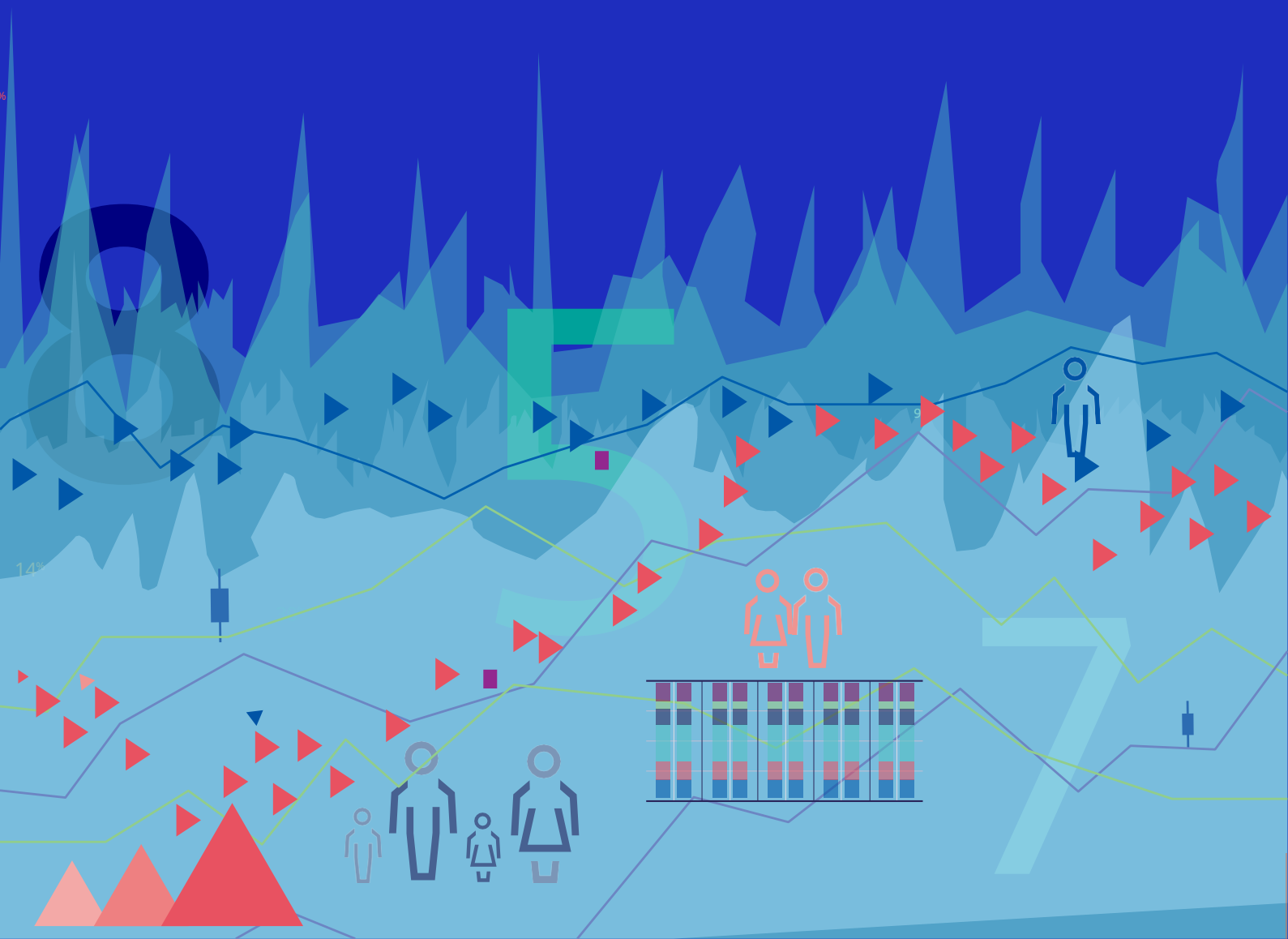




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► **Quick guide**  
**to understanding the impact**  
**of the new statistical standards**  
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# ► **Quick guide to understanding the impact of the new statistical standards on ILOSTAT databases**

**Marie-Claire Sodergren and Mabelin Villarreal-Fuentes**

**Department of Statistics**

September 2022

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## ▶ Contents

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	<b>Page</b>
<b>Contents</b>	<b>3</b>
<b>Acknowledgements</b>	<b>4</b>
<b>Introduction</b>	<b>5</b>
<b>Concepts and definitions</b>	<b>6</b>
Labour force statistics	7
Own-use production work	9
How the 19 <sup>th</sup> ICLS standards differ	9
<b>ILOSTAT databases</b>	<b>10</b>
<b>Data sources</b>	<b>11</b>
Microdata processing	12
ILO model LFS questionnaires	12
Limitations	14
<b>Impact of the 19<sup>th</sup> ICLS on key indicators</b>	<b>14</b>
Implementation approaches	16
Full implementation	17
Standard implementation	18
Simplified implementation	19
Impact on gender gaps	19
<b>Concluding remarks</b>	<b>21</b>

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## ► Introduction

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Featuring databases on a wide range of labour topics, ILOSTAT is widely used by journalists, researchers, academia and the general public, particularly for international comparisons. Needless to say, these databases are most useful when the data contained therein are internationally comparable – i.e., based on the same set of statistical standards. However, changes in the world of work, methodological advances and new insights from experience make it necessary to revise or develop new statistical standards. In fact, as occurs in all domains of statistics over time, recent changes in statistical standards have had a major impact on data comparability over time and across countries. This Quick Guide aims to explain these changes and how they are addressed on ILOSTAT.

As part of its remit for setting international standards, the ILO supports the development of standards covering different areas of labour statistics. They are introduced through the adoption of resolutions and guidelines at the [International Conference of Labour Statisticians](#) (ICLS) and include definitions of relevant concepts, operational definitions, and guidance on implementation. Their purpose is to guide countries wishing to develop or revise their national labour statistics programmes, as well as to enhance international comparability. However, the latter can also be jeopardized when countries have different implementation schedules of such standards.

For labour force statistics, major changes occurred between the standards adopted at the 13<sup>th</sup> ICLS in 1982 and those adopted three decades later at the 19<sup>th</sup> ICLS in 2013. Most notably, [Resolution I of the 19<sup>th</sup> ICLS](#) expanded the scope of labour statistics by recognizing the need to collect data on different forms of work, both paid and unpaid. To this end, employment was defined more narrowly as work done for pay or profit, while activities not done mainly in exchange for remuneration (i.e., own-use production work, volunteer work and unpaid trainee work) were recognized as other forms of work.

Although essential for improving labour market and gender analysis (see Box 1), the revisions to definitions introduced by the 19<sup>th</sup> ICLS created major breaks in some countries' time series, thus hindering trend analysis. Moreover, when indicator definitions differ across countries (due to differing implementation schedules of new standards, for example), data users are cautioned against making international comparisons. This has important ramifications for users of international databases since it may not be evident if countries are applying different approaches.

Mitigating comparability issues on ILOSTAT due to evolving statistical standards is not a simple task. The dissemination strategy for ILOSTAT had to be revamped, as well as underlying data production processes, so users could continue relying on ILOSTAT for internationally comparable statistics. Data users should be aware of these important changes, which will continue to have an impact on labour statistics for some time. This Guide was developed to assist ILOSTAT users through the use and analysis of indicators impacted by the latest standards.

The Guide begins with an overview of concepts and definitions of work statistics, including a comparison of the two sets of standards. The next section explains the new organization and contents of ILOSTAT databases. The third section gives an overview of data sources, including an explanation of the data processing undertaken to produce internationally comparable statistics and its limitations. The fourth section analyses the impact of the 19<sup>th</sup> ICLS on key indicators, followed by concluding remarks.

### ▶ Box 1. Why revised standards?

The statistical standards adopted by the 13<sup>th</sup> ICLS in 1982 played an important role in enabling the expansion of labour market statistics, in particular statistics on employment and unemployment. However, limitations within the framework emerged over time, such as a lack of separate recognition of various types of unpaid work, an inconsistent application of concepts across countries, and an insufficient range of indicators to describe the labour market and its evolution. The revised standards adopted by the 19<sup>th</sup> ICLS sought to address all these limitations, while retaining and supplementing core indicators on employment and unemployment.

Among other objectives, an important goal is to address [significant gender data gaps](#), such as a deficit of information on unpaid work, predominantly performed by women.

Reflecting the important benefits promised by the application of the latest standards, it is the ILO's objective to promote and support their implementation across all countries. Their take-up is expected to increase continuously over the coming years.

## ▶ Concepts and definitions

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The latest reference standards on work statistics are in the [Resolution concerning statistics of work, employment and labour underutilization](#), adopted by the 19<sup>th</sup> ICLS in 2013. This resolution defines the statistical concept of *work* for reference purposes and provides operational concepts, definitions, and guidelines for forms of work and related classifications. It also provides several measures of labour underutilization.

In the new framework for work statistics (see Figure 1), **work** comprises any activity performed by persons of any sex and age to produce goods or to provide services for use by others or for their own use. It includes five mutually exclusive **forms of work**:

1. **own-use production work**, comprising production of goods and services for own final use;
2. **employment**, comprising work performed for others in exchange for pay or profit;
3. **unpaid trainee work**, comprising work performed for others without pay to acquire workplace experience or skills;
4. **volunteer work**, comprising non-compulsory work performed for others without pay; and
5. other work activities.

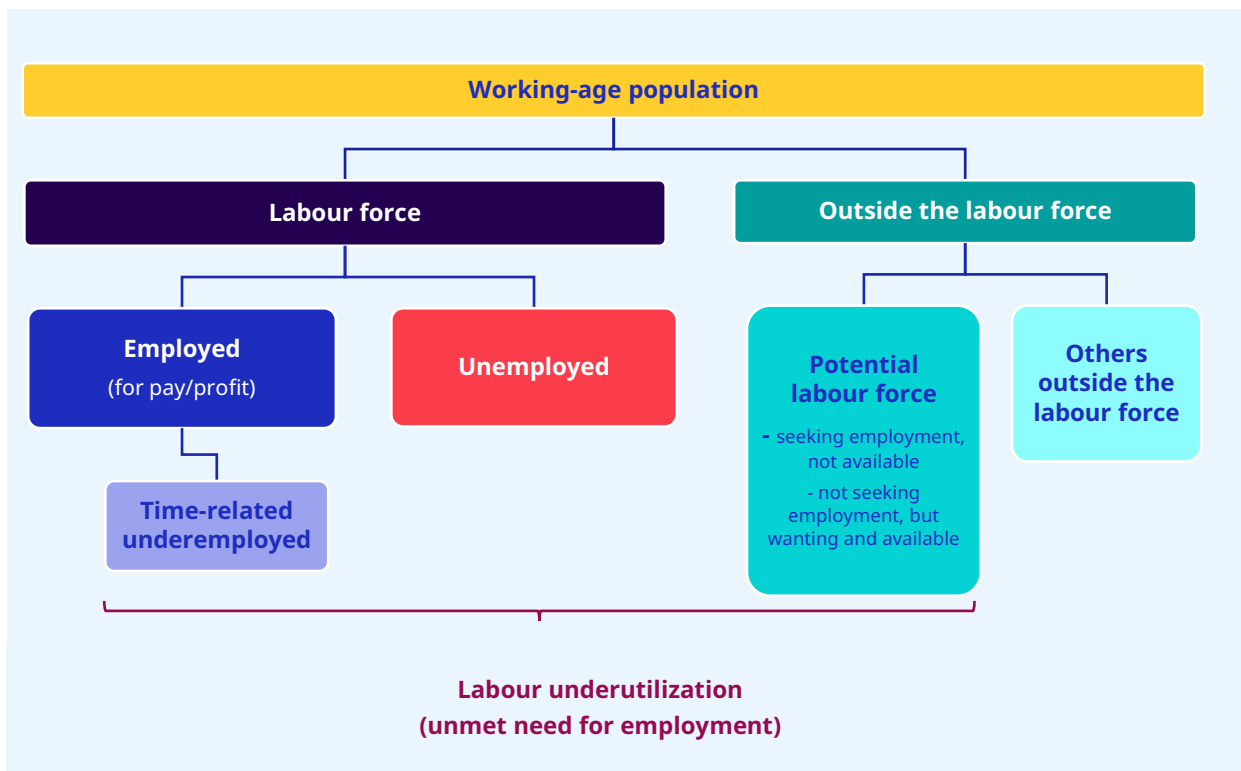
► **Figure 1. Forms of work framework and the System of National Accounts (SNA) 2008**

Intended destination of production	For own final use		For use by others					
	Forms of work	Own-use production work		Employment (work for pay or profit)	Unpaid trainee work	Other work activities	Volunteer work	
of services		of goods	organization-based				direct	
				of goods	of services			
Relation to SNA 2008	within SNA production boundary							
	inside SNA general production boundary							

## Labour force statistics

In the framework for labour force statistics (see Figure 2), employment is the reference scope of activities for labour force statistics. More precisely, the working-age population is categorized into mutually exclusive labour force groups – employed, unemployed, or outside the labour force – as shown in figure 2 below.

► **Figure 2. Labour force statistics framework**





The following are definitions for key indicators used in labour force statistics:

**Working-age population:** refers to persons of working age, which is commonly defined as those aged 15 years and older, although the age limits can vary.

**Employment:** defined as all those of working age who, during a short reference period, were engaged in any activity to produce goods or provide services *for pay or profit*. They comprise employed persons “at work”, i.e., who worked in a job for at least one hour and employed persons “not at work” due to temporary absence from a job or because of working-time arrangements (such as shift work, flexitime, and compensatory leave for overtime).

**Employment-to-population ratio:** the share of the working-age population that is employed. It is calculated as:

$$\text{Employment to population ratio} = 100 \times \frac{\text{employed}}{\text{working age population}}$$

**Unemployment:** includes all working-age persons who were not in employment, carried out activities to seek employment during a specified recent period and were currently available to take up employment given a job opportunity.

**Unemployment rate (LU1):** the share of the labour force that is unemployed. It is calculated as:

$$\text{LU1} = 100 \times \frac{\text{unemployed}}{\text{labour force}}$$

**Labour force:** comprises all persons of working age who furnish the supply of labour for the production of goods and services during a specified time-reference period. It refers to the sum of all persons of working age who are employed and those who are unemployed.

**Labour force participation rate:** the share of the working-age population that is in the labour force. It is calculated as:

$$\text{Labour force participation rate} = 100 \times \frac{\text{labour force}}{\text{working age population}}$$

**Outside the labour force:** includes working-age persons neither in employment nor in unemployment.

**Labour underutilization:** refers to mismatches between labour supply and demand, which translate into an unmet need for employment among the population. There are several measures of labour underutilization including unemployment, time-related underemployment, the potential labour force, and the LU1-LU4 rates.

**Time-related underemployment:** defined as all persons in employment who wanted to work additional hours, whose working time in all jobs was less than a specified hours threshold, and who were available to work additional hours given an opportunity for more work.

**Potential labour force:** a subset of persons outside the labour force, which aims to measure the potential supply of labour, or in other words, it quantifies all persons with an unmet need for income-generating work and provides a measure of their degree of labour market integration. It includes persons who are either looking for a job but not currently available to work, or who are available to work but are not actively looking for a job.

**Extended labour force:** defined as the sum of the potential labour force and the labour force. It includes persons of working age who, during the short reference period, were neither in employment nor in unemployment and: (a) carried out activities to “seek employment”, were not “currently available” but would become available within a short subsequent period established in the light of national circumstances (i.e. unavailable jobseekers); or (b) did not carry out activities to “seek employment”, but wanted employment and were “currently available” (i.e. available potential jobseekers).

**Combined rate of time-related underemployment and unemployment (LU2):** represents the share of the labour force that are either in unemployment or time-related underemployment. It is calculated as:

$$\text{LU2} = 100 \times \frac{(\text{time related underemployed} + \text{unemployed})}{\text{labour force}}$$

**Combined rate of unemployment and potential labour force (LU3):** represents the share of the extended labour force that are in unemployment or the potential labour force. It is calculated as:

$$LU3 = 100 \times \frac{(\text{unemployed} + \text{potential labour force})}{\text{extended labour force}}$$

**Composite measure of labour underutilization (LU4):** represents the share of the extended labour force that is in unemployment, time-related underemployment, or the potential labour force. It is calculated as:

$$LU4 = 100 \times \frac{(\text{time related underemployed} + \text{unemployed} + \text{potential labour force})}{\text{extended labour force}}$$

Additional concepts and definitions are available on the [concepts and definitions](#) page of ILOSTAT.

## Own-use production work

Own-use production work refers to the production of goods and provision of services for own final use. It distinguishes own-use from market-oriented production based on the intended destination of output. Persons in own-use production work are therefore defined as all those who performed any activity for at least one hour to produce goods or provide services for their own final use in the form of capital accumulation or for final consumption by household members.

The production of goods includes:

- ▶ Producing or collecting goods from agriculture (cultivated crops), forestry (firewood, uncultivated crops, wild berries, nuts, herbs, mushrooms, roots), or animal products (fishing, aquaculture, livestock, bushmeat)
- ▶ Processing goods, such as manufactured products (furniture, pottery, baskets, clothing, charcoal, mats or other durables, including boats and canoes) or food and drink (flour, dried fish, meat, butter, cheese, marmalade, spirits, alcoholic beverages)
- ▶ Building or effecting major repairs to one's own dwelling, farm buildings, etc.
- ▶ Fetching water from natural or public sources

A subset of own-use producers of goods are *subsistence foodstuff producers*, which are people producing and/or processing goods from agriculture, fishing, hunting and gathering, as foodstuff that contribute to the livelihood of the household or family. It excludes persons engaged in such production as recreational or leisure activities. The headline indicator used to capture the share of working-age persons involved in this activity is calculated as:

$$\text{Subsistence foodstuff production rate} = 100 \times \frac{\text{subsistence foodstuff producers}}{\text{working age population}}$$

The provision of services includes:

- ▶ Household accounting and management, purchasing or transporting goods
- ▶ Cleaning, decorating, and maintaining the dwelling occupied by the household, durables and other goods, and gardening
- ▶ Preparing and serving meals, household waste disposal, and recycling
- ▶ Childcare and instruction, transporting and caring for the elderly, sick, infirm, dependent or other household members and domestic animals or pets

## How the 19<sup>th</sup> ICLS standards differ

There are several key differences between the standards introduced by the 19<sup>th</sup> ICLS and those adopted in 1982 by the 13<sup>th</sup> ICLS, which are described in the [Resolution concerning statistics of the economically active population, employment, unemployment and underemployment](#). The most obvious impact arises from the change in the

employment definition. The 1982 definition included all activities within the SNA production boundary, creating a broad concept with a combined range of paid and unpaid activities. With the introduction of the 19th ICLS standards, fewer persons producing goods for their own use are considered employed. More precisely, employment excludes producers of goods who mainly produce for their own consumption (but includes those who mainly sell what they produce even if they consume a small part of their own production). As such, the application of the latest standards typically results in substantially lower employment in countries with high levels of subsistence farming.

Another difference stems from the recognition that people can perform different forms of work in the same period, in contrast to the 13<sup>th</sup> ICLS standards where people were assigned to one of three mutually exclusive categories: employed, unemployed and not economically active. For example, in the new framework, someone can be classified as both employed and a volunteer. Similarly, a person can be unemployed but also produce goods for their own use. These are just a couple examples of how the application of the latest standards creates a more nuanced and in-depth understanding of both work and labour market engagement.

In the case of unemployment, the underlying definition was not changed. With that said, some persons previously considered employed according to the 13<sup>th</sup> ICLS standards (e.g., subsistence foodstuff producers without employment) will be identified as unemployed *if* seeking and available for work. This would increase unemployment levels. This change addresses long-standing concerns that in high subsistence contexts, in particular, unemployment rates were typically very low due to the combination of high levels of subsistence activity and the lack of paid job opportunities, limiting active job-search.

Finally, the 19<sup>th</sup> ICLS standards placed the measurement of unemployment within a broader context of labour underutilization. The new measures – the potential labour force and LU2 through LU4 – are defined in the previous section. Given the new context, the operational criteria for unemployment became stricter in practice. That is, all three criteria – being without a job, seeking a job, and being available – must be met for a person to be considered unemployed. The 13<sup>th</sup> ICLS resolution was more flexible and allowed countries to adjust the definition according to national circumstances. This means that some countries following the 13<sup>th</sup> ICLS standards used only two criteria (without a job and either seeking or available) to classify persons in unemployment.

It should be noted that the introduction of a framework on forms of work also has implications on terminology. Although used interchangeably in common language, [work and employment are not synonyms](#) when it comes to labour statistics. On ILOSTAT, including in publications and blogs, the use of “work” and “workers” is intentional and refers to persons in paid and unpaid work, not just persons who are employed.

## ► ILOSTAT databases

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To address the challenges posed by evolving statistical standards, the databases on ILOSTAT are now separated based on concepts and definitions, among other factors. A separate database called “Work Statistics – 19<sup>th</sup> ICLS” (WORK) provides time series for countries that have applied the revised statistical standards. The database includes the following indicators:

- Labour force levels and participation rates
- Employment levels and employment-to-population ratios
- Unemployment levels and unemployment rates
- LU2-LU4 rates
- Levels of youth not in employment, education or training (NEET) and NEET rates
- Average hours actually worked per employed person and per employee

- ▶ Monthly and hourly earnings of employees
- ▶ Levels of subsistence foodstuff producers and subsistence foodstuff production rates

Data on own-use production work will not be made available given differences in national definitions. Data on the own-use provision of services also are not available at this time.

The indicators are disaggregated by one or more of the following classifications:

- ▶ Sex
- ▶ Age: according to various age bands including 5- and 10-year age bands
- ▶ Economic activity: according to broad sector and the [International Standard Industrial Classification of All Economic Activities \(ISIC\) rev. 4](#)
- ▶ Occupation: according to skill level and the [International Standard Classification of Occupations \(ISCO\) 2008](#)

Forthcoming classifications will be status in employment using [Status in Employment according to type of authority \(ICSE-18-A\)](#) and [Status in Employment according to type of economic risk \(ICSE-18R\)](#) and status at work using the International Classification of Status at Work (ICSaW) 2018 and derived aggregates based on form of work.

The other ILOSTAT databases with labour force statistics contain time series based on the prior standards (i.e., from the 13<sup>th</sup> ICLS). This currently includes the following databases:

- ▶ Labour force statistics (LFS)
- ▶ Short-term labour force statistics (STLFS)
- ▶ Rural and urban labour market statistics (RURBAN)
- ▶ Youth labour market indicators (YouthSTATS)
- ▶ Gender equality statistics (GEND)
- ▶ Disability labour market indicators (DLMI)
- ▶ Education and skills mismatch (SKILLS)

To the extent possible, country-level data according to both sets of standards are produced and disseminated. This is further explained in the next section on data sources, as it relates to the production of statistics by the ILO.

## ▶ Data sources

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In general, household surveys are best suited for collecting statistics on work and the labour force covering the resident population, their participation in all jobs and in all forms of work – in particular, work in the informal economy, own-use production work, unpaid trainee work and volunteer work.

Labour force surveys (LFS) are the main type of household surveys used to derive labour statistics since they are designed specifically for that purpose. The LFS questionnaires allow for properly investigating the desired labour-related topics with enough probing questions to ensure the accuracy of the results.

Other household surveys, such as household income and expenditure surveys or time-use surveys, can be used as well, provided they include a corresponding labour module. However, a pilot study in Sri Lanka revealed that [different types of surveys do not give the same results](#). The size of measurement gaps can be surprisingly large and countries should take steps to minimize the impact of using other household surveys (i.e., non-LFS) to measure work activities.

For more information on data sources used for labour statistics, refer to the [Quick Guide on Sources and Uses of Labour Statistics](#).

Data in the WORK database are solely derived from household surveys, usually LFS, and are mainly produced by the ILO through microdata processing.

## Microdata processing

In 2016, the ILO began systematically processing microdata from household surveys, mainly labour force surveys (LFS). The overarching aim was to increase the coverage and improve the quality and international comparability of data published on ILOSTAT. This exercise was initially conceived to fill data gaps by using estimates derived from anonymized and openly shared microdata sets. The significant improvements achieved in ILOSTAT in terms of data quality (consistency and comparability) and quantity (increased country coverage, and more indicators and disaggregations available) led to further investments in microdata collection and processing. Microdata processing is now a major source of labour market statistics published by the ILO on ILOSTAT and in ILO flagship publications.

The main principles and methods underlying the ILO's processing of microdata are provided in the [ILOSTAT Microdata Processing Quick Guide](#). Among the many benefits, microdata processing allows the ILO to ensure a higher level of compliance with internationally agreed concepts, standards, definitions, and classifications, favouring the harmonization and comparability of data across countries and over time. This has been particularly crucial following the changes in statistical standards with the 19<sup>th</sup> ICLS.

To provide databases based on different sets of standards, the ILO creates two separate micro datasets with harmonized ILO variables for each country whenever possible. The main difference between the datasets for a given country is the operational criteria used to define employment, which affects all variables related to employment characteristics. The ability to produce these two datasets during the microdata processing depends on the availability of survey questions that capture subsistence foodstuff producers, which are a subset of workers producing agricultural goods for their own use. The availability of such questions depends on each country's assessment of the need to measure own-use production work given national socio-economic circumstances. In cases where survey questions exist to identify persons in subsistence foodstuff production (as their main activity), this group is coded as employed in the 13<sup>th</sup> ICLS dataset, whereas it is excluded from employment in the 19<sup>th</sup> ICLS dataset.<sup>1</sup> While the working-age population remains the same in both datasets, changes in the definition of employment imply changes in the identification of the unemployed and persons outside the labour force.

## ILO model LFS questionnaires

To assist countries with implementing the 19<sup>th</sup> ICLS standards, the ILO sought to develop a model LFS survey questionnaire with a modular approach to facilitate national adaptations. The [comprehensive testing process](#) during its development revealed that different survey question sequences could be used to capture key indicators following the internationally agreed concepts and definitions. These generated comparable estimates. As such, alternative model LFS questionnaires were developed, which differ in flow, question-wording and overall length.

Each model questionnaire uses different sets of modules to capture paid and unpaid work. With the modular approach, countries can choose which modules to include based on national circumstances and cover some topics on a less frequent basis. In all ILO model questionnaires, the own-use production of goods is captured by using multiple modules. Own-use production in agriculture (for example, farming, livestock, fishing, or forestry) is captured in its own module, while own-use production of other goods (for example, fetching water or firewood) is

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<sup>1</sup> Although all own-use producers of goods are to be excluded from employment according to the latest standards, it is assumed that mainly the subset of subsistence foodstuff producers were previously captured as employed, and as such, only this group is added back into employment in the data based on the 13<sup>th</sup> ICLS standards.

captured elsewhere. Subsistence foodstuff production is identified by distinguishing whether any work in agriculture is intended mainly for sale or for own consumption. Although the ILO model questionnaires cover the own-use production of goods, they do not yet capture the own-use provision of services. These activities are especially important from a gender perspective, but additional methodological work is needed to operationalize their measurement. The ILO is currently testing potential modules.

► **Box 2. What is the ILO strategy to support implementation of the 19<sup>th</sup> ICLS standards?**

At the 19th ICLS, countries asked the ILO to provide guidance and support implementation of the new standards, in particular through labour force surveys and other household surveys. The ILO is responding to this demand through three types of activities:

1. The provision of technical assistance to countries.
2. The development and delivery of capacity building programmes at national, regional and global levels. The main programme is the annual Labour Market Statistics and Analysis Academy, hosted by the International Training Centre of the ILO in Turin.
3. The development of guidance and tools to support implementation. A wide range of materials were already developed, including:
  - Model LFS questionnaires and supporting guidance covering core questionnaire content and additional content, for example, to measure skills mismatch and volunteer work;
  - Guidance for the implementation of the latest standards through the Population Census; and
  - A range of online tutorials, including a self-learning course and measurement guide on volunteer work.

A key focus of the ILO strategy is to support the development and implementation of labour force surveys reflecting the latest standards and good measurement practices. The ILO has been extensively engaged in pilot studies in collaboration with different countries since 2015. Studies cover a range of topics, including the measurement of employment, labour underutilization, volunteer work, own-use production of goods, unpaid care and domestic work and informality.

The accumulated experiences are reflected in the ILO model LFS questionnaires and inform training and technical assistance activities. The ILO will continue to update the published guidance, questionnaires and tools based on further studies and country experiences.

One important objective of this strategy is to maintain a coherent set of measurement guidance that allows countries to measure various topics through their labour force surveys, which are closely aligned with national priorities while making the best use of good measurement practices.

## Limitations

Producing and disseminating data according to both sets of standards presents some challenges. Assumptions must be made to derive indicators based on the 13<sup>th</sup> ICLS definitions when the 19<sup>th</sup> ICLS standards have already been implemented. With the 19<sup>th</sup> ICLS standards applied, the main characteristics of the employed – such as their occupation, economic activity, and status in employment – are collected only for persons working for pay or profit. Therefore, this information is missing for subsistence foodstuff producers who would have been considered employed according to the 13<sup>th</sup> ICLS standards. To address this issue, the following proxies are used:

- ▶ **Status in employment:** subsistence foodstuff producers are assigned to ICSE-93 “own-account workers”, with a note indicating the inclusion of own-use producers in subsistence farming.
- ▶ **Occupation:** subsistence foodstuff producers are assigned to ISCO-08 category “6310 or 631 – Subsistence Crop Farmers”, at the 4 or 3-digit level respectively, or category “63 – Subsistence farmers, fishers, hunters and gatherers” at the 2-digit level.
- ▶ **Economic activity:** subsistence foodstuff producers are assigned to ISIC rev. 3.1 category “01 - Agriculture, hunting and related service activities” or to category “A - Agriculture, hunting and forestry” at the 2 or 1-digit level respectively, or to ISIC rev. 4 category “01 - Crop and animal production, hunting and related service activities”, or to category “A - Agriculture, forestry and fishing” at the 2 or 1-digit level respectively.

In theory, using such proxies could lead to breaks in series in the years in which they are applied. The magnitude of these potential breaks is undoubtedly less significant than the switch to the latest standards. Moreover, a review of the impacted data series shows that so far these are negligible, and therefore, these are not indicated as breaks in ILOSTAT databases.

One should also keep in mind that it is national statistical offices (NSOs) which are responsible for carrying out national household surveys. This includes a wide range of activities, from survey design to data collection in the field. Although the ILO issues guidance (through the resolutions and guidelines adopted at the ICLS, for example) and regularly provides technical guidance to NSOs, ultimately it is still the responsibility of the NSO carrying out the survey to ensure that it is well conducted throughout the process. In cases where the ILO deems that a survey’s microdata is not useable, these results are not disseminated on ILOSTAT.

Lastly, estimates produced by the ILO through microdata processing may differ from those derived and published at the national level. ILOSTAT data users can identify figures published from ILO microdata processing in the notes accompanying the data. The thresholds established by the ILO to evaluate the reliability of estimates may differ from those that are set at the national level. In most cases, thresholds used by the ILO are stricter than the national ones, and therefore the dissemination of information is more limited.

## ▶ Impact of the 19<sup>th</sup> ICLS on key indicators

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The overall effect of the 19<sup>th</sup> ICLS implementation on headline indicators is consistent across countries, and more importantly, it is as expected given the changes in definitions. Generally, the employment-to-population ratio decreases and the unemployment rate and supplementary measures of labour underutilization increase.<sup>2</sup> The table below provides summary statistics of the impact for countries that have implemented the latest standards and for which the ILO has obtained microdata to process data based on both sets of standards. Only the latest survey for each country is used, although longer time series are usually available on ILOSTAT.

<sup>2</sup> During pilot testing in Sri Lanka, it appeared that the employment-to-population ratio increased because of the new questionnaire rather than the 19<sup>th</sup> ICLS standards. The new questionnaire was more comprehensive in its identification of employment. As such, the 19<sup>th</sup> ICLS standards will produce equal or lower estimates of employment *ceteris paribus* but this is not a guaranteed outcome of a questionnaire change.



► **Table 1. Impact of the 19<sup>th</sup> ICLS on headline indicators by income group**

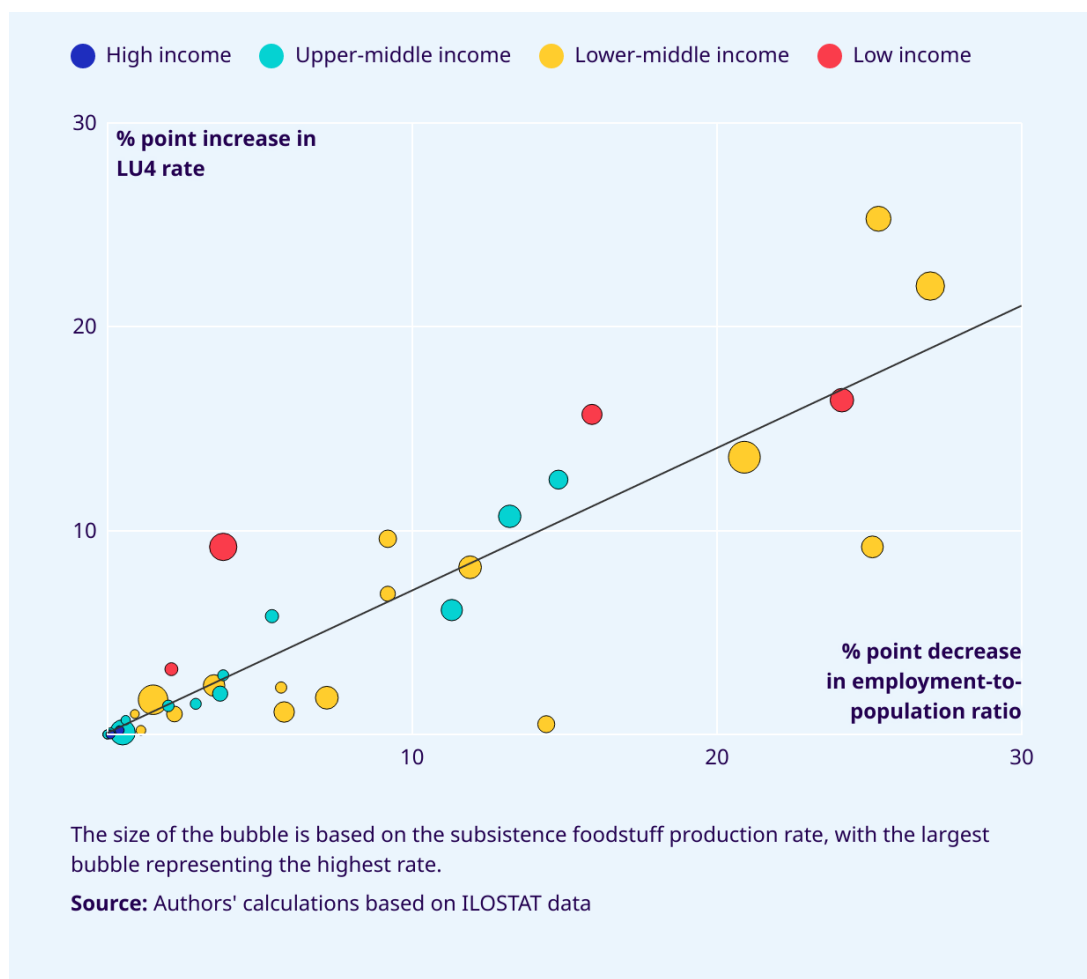
Indicator		Low income	Lower-middle income	Upper-middle income	High income	Un-weighted average
Number of countries		5	14	19	1	<b>39</b>
13th ICLS	Share of employment in agriculture (%)	44.4	36.2	18.1	8.0	<b>30.0</b>
	Employment-to-population ratio (%)	50.1	56.9	48.6	54.9	<b>53.0</b>
	Unemployment rate (%)	9.0	6.0	13.2	10.3	<b>9.1</b>
	LU4 rate (%)	27.2	19.2	20.3	22.1	<b>20.6</b>
19th ICLS	Share of employment in agriculture (%)	26.3	24.8	8.1	8.0	<b>18.6</b>
	Subsistence foodstuff production rate (%)	24.7	23.4	10.8	0.2	<b>18.3</b>
	Employment-to-population ratio (%)	35.9	46.2	43.9	54.6	<b>44.3</b>
	Unemployment rate (%)	14.3	8.8	15.2	10.5	<b>11.9</b>
	LU4 rate (%)	38.3	25.8	23.9	22.3	<b>26.6</b>
Difference from 13th to 19 <sup>th</sup> ICLS	Share of employment in agriculture (%)	-18.1	-9.4	-8.4	0.0	<b>-9.9</b>
	Employment-to-population ratio (pp)	-14.2	-10.6	-4.7	-0.4	<b>-8.7</b>
	Unemployment rate (pp)	5.2	2.9	2.1	0.1	<b>2.8</b>
	LU4 rate (pp)	11.1	6.7	3.7	0.2	<b>5.9</b>

Based on the 13<sup>th</sup> ICLS standards, the (unweighted) average employment-to-population ratio for 39 countries was 53.0 per cent. After the application of the 19<sup>th</sup> ICLS standards, the average declined by 8.7 percentage points to 44.3 per cent. The impact was greatest in low- and lower-middle-income countries where agriculture and subsistence foodstuff production are most common. Naturally, the share of employment in agriculture also declined significantly following the revision of standards. As for the unemployment rate, the 39-country average was 9.1 per cent based on the 13<sup>th</sup> ICLS and increased by 2.8 percentage points to 11.9 per cent based on the 19<sup>th</sup> ICLS. Likewise, the LU4 rate increased by an average of 5.9 percentage points after the application of the 19<sup>th</sup> ICLS standards.

These averages, however, mask wide-ranging country-level impacts, as shown in Figure 1Figure 3 below. The effect of the 19<sup>th</sup> ICLS implementation on the employment-to-population ratio ranged from negligible to a decrease of at least 20 percentage points in seven countries. Similarly, the LU4 rate remained unchanged in some countries and increased in others by as much as 25 percentage points. The largest impacts on both indicators were often seen in countries where the prevalence of subsistence foodstuff production was highest, as illustrated by the largest bubbles in the top right of the figure.



► **Figure 3. Country-level impact of the 19<sup>th</sup> ICLS implementation on employment-to-population ratios and LU4 rates**

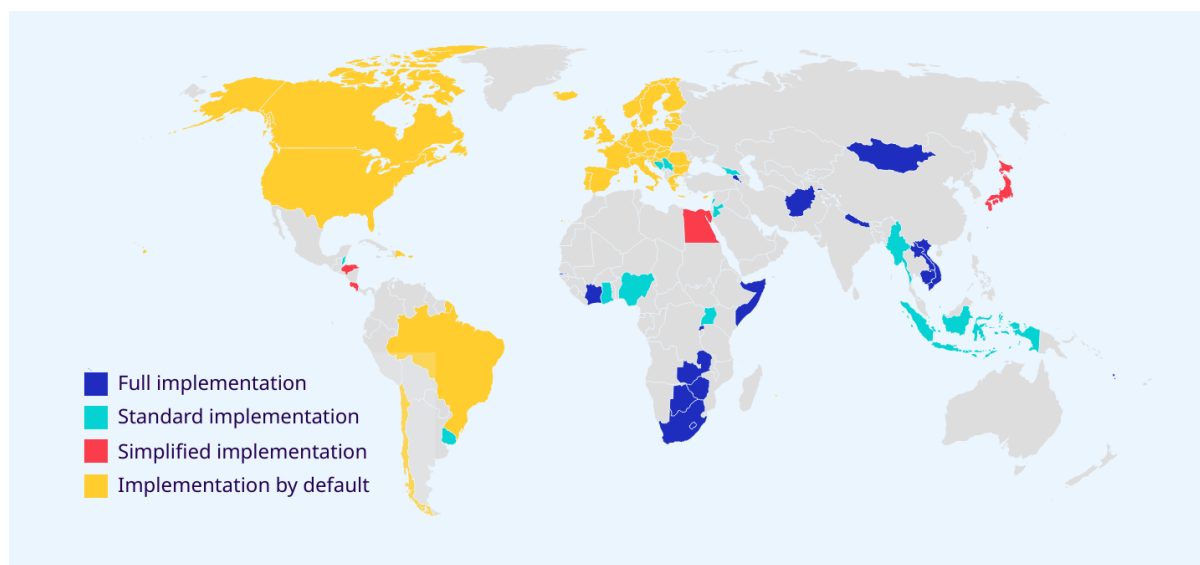


## Implementation approaches

The implementation of the 19<sup>th</sup> ICLS standards in national LFS varies. When revised, the questionnaires are typically based on ILO model LFS questionnaires ILO model LFS questionnaire, with each country including modules based on national circumstances. As such, the inclusion of relevant modules to capture workers engaged in own-use production differs across countries. The implementation approaches can be broadly categorized as follows:

- **Full implementation:** this approach includes questions to identify work done for pay or profit and own-use production work of agricultural and other goods;
- **Standard implementation:** this approach includes questions to identify work done for pay or profit and own-use production work of agricultural goods (i.e., compared to the full implementation, it lacks questions to capture own-use production work of non-agricultural goods); and
- **Simplified implementation:** this approach includes questions to identify work done for pay or profit and own-use production work to some extent (i.e., compared to the full implementation, there are no separate comprehensive modules for own-use production work of agricultural goods and other goods).

The next subsections describe the impact of each of these approaches on headline indicators. The map provides an overview of the current implementation approaches used across the globe, including the three listed above and an additional approach labelled “by default”, which is explained below the map.

► **Figure 4. Implementation of the 19<sup>th</sup> ICLS standards**

High-income countries presume that own-use production work is negligible and does not need to be measured. These countries are considered as following the 19<sup>th</sup> ICLS standards by default (as labelled on the map), that is, despite not having made any changes to their questionnaires with regards to the measurement of own-use production work. They already identified employment as work done for pay or profit and there is no need to exclude subsistence foodstuff producers. Although they are not analysed in the sections that follow given the lack of changes, these countries are featured on the map to show the extent to which the revised statistical standards are in place.

It should also be noted that questions to identify employment as work done “for pay or profit” already existed in about half of the countries which revised their questionnaire to adopt the 19<sup>th</sup> ICLS standards. The pre-existence of these questions did not necessarily mitigate the impact of implementing the latest standards more comprehensively.

## Full implementation

To incorporate the 19<sup>th</sup> ICLS standards, 21 countries revamped their LFS questionnaire to fully capture own-use production work of goods. The countries in this group are: Afghanistan, Armenia, Botswana, Cambodia, Côte d'Ivoire, Gambia, Lao People's Democratic Republic, Lesotho, Maldives, Marshall Islands, Mongolia, Nepal, Rwanda, Samoa, Somalia, South Africa, Tonga, Vanuatu, Viet Nam, Zambia, and Zimbabwe.

Most of the countries which selected this implementation approach are low- and lower-middle income and have a substantial share of subsistence foodstuff producers. More than half of the working-age population carried out this form of work in three countries, while the average for the group was around 25 per cent.

Unsurprisingly, this comprehensive approach to implementing the latest standards had the largest impact on headline indicators. On average, the employment-to-population decreased by 10.1 percentage points after the 19<sup>th</sup> ICLS implementation. Some countries even saw declines above 20 points: Gambia, Lao People's Democratic Republic, Zambia, and Zimbabwe. Meanwhile, the unemployment rate increased by an average of 3.6 percentage points and the LU4 rate by 7.7 points.

► **Table 2. Impact of the 19<sup>th</sup> ICLS full implementation on headline indicators**

Indicator		Range	Unweighted average (15 countries)
13th ICLS	Share of employment in agriculture (%)	16.6 to 62.4	37.0
	Employment-to-population ratio (%)	27.6 to 75.7	53.3
	Unemployment rate (%)	0.5 to 28.8	8.9
	LU4 rate (%)	2.0 to 42.2	21.8
19th ICLS	Share of employment in agriculture (%)	3.3 to 68.0	23.9
	Subsistence foodstuff production rate (%)	0.6 to 64.8	25.3
	Employment-to-population ratio (%)	25.5 to 68.5	43.2
	Unemployment rate (%)	1.2 to 34.0	12.6
	LU4 rate (%)	3.8 to 57.3	29.5
Difference from 13th to 19th ICLS	Share of employment in agriculture (%)	5.3 to -40.2	-14.0
	Employment-to-population ratio (pp)	-0.6 to -27.0	-10.1
	Unemployment rate (pp)	0.1 to 9.5	3.6
	LU4 rate (pp)	0.7 to 25.3	7.7

## Standard implementation

Compared to the previous group, the 15 countries following the “standard” implementation opted for fewer modules to capture own-use production work. More precisely, they focused on capturing own-use production work of agricultural goods. These are mainly middle-income countries, with varying degrees of subsistence foodstuff production. The countries in this group are: Bosnia and Herzegovina, Cook Islands, Georgia, Ghana, Indonesia, Jordan, Kiribati, Kosovo, Lebanon, Myanmar, Nigeria, Serbia, Timor-Leste, Uganda, and Uruguay.

Like the full implementation, this approach also had a noticeable impact on headline indicators, particularly for countries with higher subsistence foodstuff production rates. The average decline in the employment-to-population ratio for 15 countries was 7.7 percentage points, accompanied by increases in the unemployment rate and LU4 rate of 2.0 and 3.8 percentage points, respectively.

► **Table 3. Impact of the 19<sup>th</sup> ICLS standard implementation on headline indicators**

Indicator		Range	Unweighted average (15 countries)
13th ICLS	Share of employment in agriculture (%)	3.3 to 68.0	27.2
	Employment-to-population ratio (%)	25.1 to 71.6	52.8
	Unemployment rate (%)	1.3 to 25.5	8.9
	LU4 rate (%)	2.8 to 23.7	15.7
19th ICLS	Share of employment in agriculture (%)	2.7 to 45.9	23.9
	Subsistence foodstuff production rate (%)	0.0 to 38.7	10.0
	Employment-to-population ratio (%)	24.3 to 69.5	45.1
	Unemployment rate (%)	1.3 to 26.3	10.9
	LU4 rate (%)	2.9 to 35.2	19.5
Difference from 13th to 19th ICLS	Share of employment in agriculture (%)	0.1 to -27.4	-8.2
	Employment-to-population ratio (pp)	0.0 to -25.1	-7.7
	Unemployment rate (pp)	0.0 to 6.9	2.0
	LU4 rate (pp)	0.0 to 16.4	3.8

## Simplified implementation

Compared to the two previous groups, countries following the “simplified” approach had fewer questions or a combined section to identify own-use production work. This approach was used by just three countries so far. These countries—Costa Rica, Honduras, and Egypt—are middle-income countries with small agricultural sectors and relatively fewer workers involved in producing goods mainly for their own consumption. Costa Rica and Egypt opted for a single section on own-use production of agricultural and other goods (that is, combining a subset of questions from separate comprehensive modules recommended through the ILO model questionnaires). Meanwhile, Honduras did not include a full section on own-use production work but simply asked if the main activity was for their own use as a follow-up question. Given the available survey questions in this case, it was not possible to extract data specifically on subsistence foodstuff producers. To continue the time series based on the 13<sup>th</sup> ICLS, any activity reported as being for own use was excluded from employment.

Of the three approaches, this one had the smallest impact on headline indicators, although this is based only on a few countries. The employment-to-population ratio decreased by between 0.9 and 10.0 percentage points and the unemployment rates and LU4 rates increased by between 0.3 and 2.0 points and between 1.0 and 1.4 points, respectively.

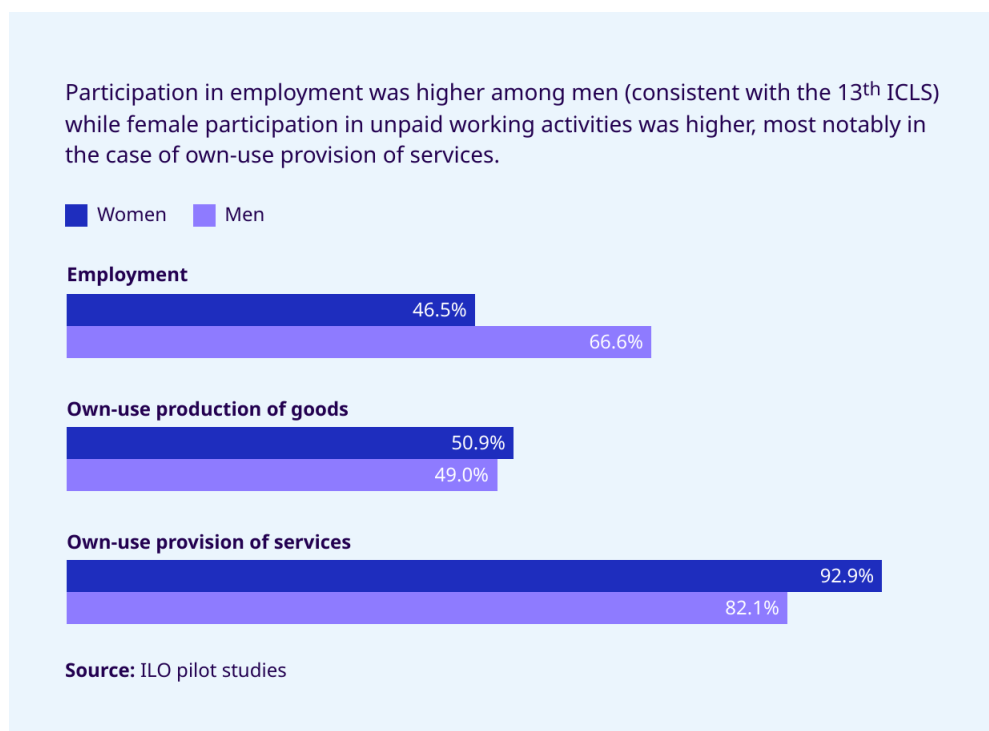
## Impact on gender gaps

A key motivator behind many of the changes introduced by the 19<sup>th</sup> ICLS standards was to improve the [gender relevance of statistics on work](#). The new standards were developed to address potential gender biases in statistics due to differences in paid and unpaid work activities between women and men.

Following the application of the 19<sup>th</sup> ICLS standards, the average gender gap in the employment-to-population ratio for 39 countries increased slightly (+0.6 percentage points). The gender gap was the largest and increased most in low-income countries, where men’s employment rate was 24.5 percentage points above that of women, compared to a difference of 20.5 points when using the 13<sup>th</sup> ICLS standards. The gender gap widened for unemployment and LU4 rates as well, by an average of +0.5 percentage points and +2.1 points, respectively.

More importantly, the 19<sup>th</sup> ICLS standards set forth new indicators on other forms of work. Although the ILO model questionnaires cover only the own-use production of goods, there is some evidence on the own-use provision of services based on pilot studies organized by the ILO between 2015 and 2017. According to these, women were more likely to engage in unpaid work, especially own-use provision of services, and spent substantially more time doing these activities than men on average. Figures 5 and 6 illustrate some of these findings based on eight countries involved in the pilot studies.

► **Figure 5. Participation rates of men and women in paid and unpaid work**



► **Figure 6. Hours worked per week in all jobs by employed men and women and additional hours worked in other activities**



The detailed report [Closing gender data gaps in the world of work - role of the 19th ICLS standards](#) discusses the findings and the range of gender relevant analysis that can be generated when the 19<sup>th</sup> ICLS standards are applied.

## ▶ Concluding remarks

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The 19<sup>th</sup> ICLS standards result in lower employment-to-population ratios and higher labour underutilization rates, especially in developing countries where many workers are engaged in own-use production work. As more countries adopt the latest standards, statistics on employment and labour force participation will continue to change, sometimes substantially.

Meanwhile, data users should bear in mind that labour force statistics for countries not using the same set of standards are not comparable. This Quick Guide presented the impact of the 19<sup>th</sup> ICLS standards on headline indicators to provide important context regarding why and how data were split into distinct databases on ILOSTAT. Each database contains only series comparable within and across countries, allowing data users to continue making meaningful time series analyses and international comparisons. Users of ILOSTAT data are advised not to use data across databases based on different concepts and definitions. That is, although the new WORK database based on the 19<sup>th</sup> ICLS standards provides new insights into labour markets, particularly from a gender perspective, it should not be used in combination with the LFS and related databases based on the 13<sup>th</sup> ICLS standards.

As more countries implement the 19<sup>th</sup> ICLS standards in their LFS questionnaires, ILOSTAT contents will be adjusted accordingly. In the short-term, additional indicators and classifications will be added to the WORK database. As more data becomes available based on the latest standards, additional databases based on these will be published on ILOSTAT. In the meantime, ILOSTAT users are encouraged to assess their data needs closely to determine which database best suits their purpose.

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