



الهيئة العامة للإحصاء
General Authority for Statistics

Methodology and Quality Report of Labor Market Statistics

V-3.1

Quality Management



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1. Contact

| | |
|--------------------------------|--|
| 1.1. Contact organization | General Authority of Statistics |
| 1.2. Contact organization unit | Labor Market Statistics Department |
| 1.3. Contact person function | Director of Labor Market Statistics Department |
| 1.4. Contact mail address | P.O. Box: 3735 Riyadh, 11481 Kingdom of Saudi Arabia |
| 1.5. Contact email address | info@stats.gov.sa |
| 1.6. Contact phone number | 199009 |

2. Methodology and Quality Update

| | |
|--|------------|
| 2.1. Methodology and Quality last update | 30/12/2024 |
|--|------------|

3. Statistical Presentation

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| 3.1. Data description |
| <p>The Labor market statistics publication is a quarterly publication that collects data from two sources:</p> <p>Source I: Labor Force Survey.</p> |

Source II: Data of administrative records of labor market stakeholders (Ministry of Human Resources and Social Development, Public Social Insurance Institution, and National Information Centre).

The publication provides comprehensive data on the labor market in Saudi Arabia and contributes to the construction of a statistical database on the labor market that can be used to prepare and plan future social and economic development programs in the Kingdom.

This publication provides data on the main characteristics as following:

- Work.
- Unemployment.
- Participation in the labor force.

The data is further used to estimate the:

- Unemployment rate.
- Labor force participation rate.
- Employment-to-population ratio.

3.2. Classification system

The following classifications are applied in the Labor Market Statistics:

National classification of economic activities (ISIC4):

The statistical classification based on the International Standard of Industrial Classification of All Economic Activities (ISIC4) is used to describe productive activities of an establishment.

Saudi Standard Classification of professions (ISCO_08):

A statistical classification based on the International Classification (ISCO_08) that provides a system for the classification and compilation of professional information obtained through censuses and statistical surveys, as well as administrative records. This classification is used in the the Labor Market Statistics in order to classify employees based on their professions.

Saudi classification of specializations and educational levels:

A statistical classification based on the International Standard Education Classification (ISCED_11) and (ISCED_13) for Education and Training Issued by United Nations Educational, Scientific and Cultural Organization (UNESCO) which is the reference classification for the organization of educational programs and related qualifications by education levels and fields. It is comprehensive for all educational programs, levels and methods, and covers all levels of

education from kindergarten to postgraduate levels. This classification is used in the the Labor Market Statistics to classify individuals 15 years and above according to their majors and education levels.

National Code of Countries and Nationalities (3166 ISO - codes Country):

A statistical classification based on the international standard (ISO 3166_Country codes), which is a standard issued by the International Organization for Standardization (ISO of the UN), and this classification gives numeric and literal codes for the world's (248) countries, based on the classification of countries. The classification is used in the the Labor Market Statistics to classify Saudi or non-Saudi individuals.

The classifications are available on the GASTAT's website: www.stats.gov.sa

3.3. Sector coverage

In the survey, workers' data are compiled according to economic activities (ISIC_4).

3.4. Statistical concepts and definitions

Terminologies and concepts of the Labor Market Statistics:

- Dwelling:

It is a building or part of a building originally intended for the residence of one or more households and has a separate door whether at the time of the visit it is occupied by one or more households or vacant. It may contain one or more establishments, and there may be one household and one establishment at the same time, and the dwelling may consist of one room or more. And according to the census, every real estate unit inhabited at the time of enumeration is considered a dwelling, even if it was not originally built for housing, such as shops.

- Household:

A person or a group of persons - with or without kinship binding them to one another who live within the sampled dwelling during the enumeration.

- Head of household:

It refers to the person regarded by the household members as its head. She/he is usually responsible for making decisions and his/her age must not be under (15) years old. If the household consists of children and their mother, and they are cared for by a relative who



does not live with them, such a relative shall not be deemed as the head of the household, nor shall she/he be registered as one of its members, since she/he shall be registered with his/her own household. In this case, the mother shall be deemed as the head of the household.

- **Work:**

Work includes any activity performed by individuals for the purpose of Producing goods or providing market-oriented services with the aim of obtaining wages or profit.

- **Employed Persons:**

Persons (15 years and over) who during the reference period (The reference week preceding the household interview):

- Worked for at least one hour in return for a salary or profit (in cash or in kind) as an employee, as an employer, or working for themselves.
- Or who assisted a household member for at least an hour, with or without pay, in any type of business or on a farm belonging to a household member.
- Or who were temporarily absent from their work for during the reference period (the previous 7 days) due to leave, sickness, or any other reason, and who will return to it again.
- Or individuals with seasonal jobs during the period that is considered off-season if they continue to perform some of the tasks and duties of the job.

The definition includes students, job seekers, retirees, housewives, etc. who worked during the seven days prior to the date of interview for at least one hour, noting that this does not include unpaid housework such as cooking and washing done by a housewife or household maintenance work performed by a household member.

- **Unemployed persons:**

All individuals of working age (15 years and older) who were:

- Without work during the reference week preceding the household interview.
- Seeking for work during the four reference weeks preceding the household interview (i.e. they have taken at least one method of searching for work or establishing their own business) or they will start a new job or start a special project that they own during the coming period.
- Are able to work and ready to join work during the past week or the next two weeks from the date of the household interview.



- Persons in the Labor force:

They are all individuals (15 years and over), who were, during the reference **week**, already working (employed), or looking for work and able to work (unemployed).

- Persons outside the Labor force:

They are all individuals (15 years and over), classified as neither employed nor unemployed, because they do not work, are not looking for work, are unable to work, or are unwilling to work during the survey reference period, such as: students and housewives.

- Unemployment rate:

It is an indicator that measures the participation of the population of working age (15 years and over) in the Labor force as unemployed. It is the ratio of the unemployed to the Labor force (expressed as a percentage).

- Labor force participation rate:

It is an indicator that measures the participation of the population of working age (15 years and over) in the Labor force as employed or unemployed. It is the ratio of the Labor force to the population aged 15 years and over (expressed as a percentage).

- Employment-to-population ratio:

An indicator that is calculated by expressing the number of persons in the Labor force as a percentage of the working-age population 15 years and over.

- Employment rate:

It is an indicator that measures the participation of the population of working age (15 years and over) in the Labor force as employed. It is the ratio of the employed to the Labor force.

- Average weekly working hours:

An indicator that measures the average weekly normal working hours for workers (15 years and over), and it is the sum of working hours to the total number of workers.

- Average monthly wage per paid employees:

An indicator that measures the average monthly salary of workers with paid jobs (15 years and above), i.e., total monthly salary of workers to the total number of workers. This measure is based on only those employees reporting their salary.

3.5. Statistical unit

The statistical unit in the Labor Market Statistics is:

- The Primary Sample Unit (PSU) is the enumeration area (EA) consisting of dwellings.
- The Final sampling unit is occupied and vacant dwellings.
- The observation unit is the households who reside in the dwellings.

3.6. Statistical population

The statistical population of the Labor Market Statistics publication is (Saudi and non-Saudi households who reside habitually) in the Kingdom of Saudi Arabia.

3.7. Reference area

The survey sample is a representative sample for Saudi Arabia's 13 administrative regions.

The stratified distribution of the sample depends on dividing the enumeration areas into (urban - other urban - rural).

3.8. Time coverage

Data is available from 1999 in an annual release, then a semi-annual release, and data began to be issued quarterly starting in 2016.

3.9. Base period

Not applicable.

4. Unit of measure

Results are measured in the following units:



- Individual: shown as absolute numbers (eg: number of workers, number of unemployed, number of working-age population).
- Rates, percentages, and percentage distribution (eg: the unemployment rate, the labor force participation rate, Employment-to-working-age-population ratio, the relative distribution of the employed according to the educational level).
- Saudi riyal: shown as averages (e.g.: average monthly wage).
- Hours: shown as averages (e.g. average weekly working hours).

5. Reference period

References period to the variables or dataset as following:

- Data on the number of household members and their population characteristics are based on the date of the household interview.
- Employees' data are based to the reference week preceding the household interview, meaning (the reference week) a full week before the interview starts from Sunday to Saturday
- Data on job seekers, education enrolment and training programmes are based on the four reference weeks that precede the household interview, meaning (the four reference weeks) the four full weeks that precede the date of the interview (from Sunday in the first week to Saturday in the last week).
- Work availability data are based on the reference week preceding the household interview, or the following two weeks, meaning the following two weeks (the following two weeks of a household interview, from Sunday in the following week to Saturday in the following week).
- Note that if the household is re-interviewed or that individuals' data are requested to be completed at another time, the data will be based on the reference period for the first household interview.

6. Confidentiality

6.1. Confidentiality - policy

According to the Royal Decree No. 23 dated 07-12-1397, data must always be kept confidential, and must be used by GASTAT only for statistical purposes.

Therefore, the data are protected in the data servers of the Authority.

6.2. Confidentiality - data treatment

Data were displayed in appropriate tables to facilitate its summarization, comprehension, and results extraction. Also, to compare data with other data and extract statistical meanings for the study community. It is also easier to check tables without the need to see the original questionnaire, which usually include data like names and addresses of individuals, names of data providers, which violates data confidentiality of statistical data.

"Anonymity of data" is one of the most important procedures. To keep data confidential, GASTAT removed information on individual persons, households, or business entities such a way that the respondent cannot be identified either directly (by name, address, contact number, identity number etc.) or indirectly (by combining different - especially rare - characteristics of respondents: age, occupation, education etc.).

7. Release policy

7.1. Release calendar

The Labor Market Statistics results are bound by a release calendar.

7.2. Release calendar access

Available on the: [Statistical Releases | General Authority for Statistics \(stats.gov.sa\)](https://stats.gov.sa)

7.3. User access

One of GASTAT's objectives is to meet better its clients' needs, so it immediately provides them with the publication's results once the Labor Market Statistics is published.

It also receives questions and inquiries of the clients about the Bulletin and its results through various communication channels, such as:

- GASTAT's official website: www.stats.gov.sa
- GASTAT's official e-mail address: info@stats.gov.sa
- Client Support's e-mail address: cs@stats.gov.sa
- Official visits to GASTAT's official head office in Riyadh or one of its branches in Saudi Arabia.
- Official letters.
- Statistical telephone (199009).

8. Frequency of dissemination

- 1999-2002 (annual).
- 2003-2005 (halted for census work).
- 2006-2015 (semi-annual).
- 2016-present (quarterly).

9. Accessibility and clarity

9.1. News release

The announcements for each publication are available on release calendar as mentioned in 7.2. Release calendar access. The news release can be viewed on the website of GASTAT in the link: <https://www.stats.gov.sa/en/news>

9.2. Publications

GASTAT issues the Labor Market Statistics publications and reports on a regular basis within a pre-prepared publishing plan and installed on the GASTAT's website. GASTAT is keen to publish its publications in a manner that serves all users of different types, including publications in different formats that contain (publication tables, data graphs, indicators, methodology and quality report, and used questionnaires) in both English and Arabic.

The Labor Market Statistics publications are available on the link:

[سوق العمل | General Authority for Statistics \(stats.gov.sa\)](http://www.stats.gov.sa)

9.3. On-line database

The data is published in the statistical database:

[GASTAT \(stats.gov.sa\)](https://stats.gov.sa)

9.4. Micro-data access

Microdata are unit-level datasets derived from surveys, censuses, and administrative records. These datasets provide detailed insights into individuals, households, businesses, and geographic areas, supporting the development of statistical indicators and in-depth research.

The different types of microdata files to meet different information needs:

- Public use:

It consists sets of records containing information on individual persons, households, or business entities anonymized in such a way that the respondent cannot be identified either directly (by name, address, contact number, identity number etc.) or indirectly (by combining different - especially rare - characteristics of respondents: age, occupation, education etc.).

- Scientific use:

These files established based on specific methodology asked by data requester to extract the datasets with specific characteristics used for strategic studies and decision making as well scientific research purposes on individuals, households and enterprises with no direct identifiers, which have been subject to control methods to protect confidentiality.

Access to Scientific Use Files (SUF) is restricted to authorized researchers who comply with ethical and confidentiality standards. Representative samples of SUF can be obtained through GASTAT's secure platform, "Etaha," while more sensitive datasets are accessible only through secure physical lab environments managed by GASTAT.

9.5. Other

Not available.

9.6. Documentation on methodology

The Labor Market Statistics Framework:

Concepts, definitions, issues and classifications are based on the ILO international standards.

The Labor Force Survey applies labor statistics standards and guidelines issued by the International Conference of Labor Statisticians (ICLS) and is updated periodically.

You can review the detailed methodology through the link:

<https://www.stats.gov.sa/documents/d/guest/methodology-of-labor-market-statistics-en>

9.7. Quality documentation

Quality documentation covers documentation on methods and standards for assessing, measuring, and monitoring the quality of statistical process and output. It is based on standard quality criteria such as relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, comparability, and coherence.

10. Quality management

10.1. Quality assurance

GASTAT declares that it considers the following principles: impartiality, user orientated, quality of processes and output, effectiveness of statistical processes, reducing the workload for respondents.

Quality controls and validation of data are actions carried out throughout the process in different stages such as the data input and data collection and other final controls.

10.2. Quality assessment

GASTAT performs all statistical activities according to a national model (Generic Statistical Business Process Model - GSBPM). According to the GSBPM, the final phase of statistical activities is overall evaluation using information gathered in each phase or sub-process. This information is used to prepare the evaluation report which outlines all the quality issues related to the specific statistical activity and serves as input for improvement actions.

11. Relevance

11.1. User needs

Internal GASTAT's users, which make use of the Labor Market Statistics data, include:

- Departments of the General Department of Social Statistics
- Departments of the General Department of Economic Statistics
- Departments of the General Department of Spatial and Resources Statistics
- Strategic Partnerships and Customer Support Department
- Statistical Database

External users who make significant use of Labor Market Statistics data include, but is not limited to:

- Governmental entities concerned with the labor market (MEP, HRSD, GOSI, and NIC).
- Regional and International Organizations.
- Research institutions and researchers.
- Media.
- Individuals.

The disseminated key variables that are mostly used by external users:

| | |
|--|--|
| Ministry of Economy and Planning | Participation rate in labor force and workers by economic activity. |
| Ministry of Human Resources and Social Development | Unemployment rate and workers by a number of variables. |
| International Labor Organization | Unemployment and participation rate, workers, unemployed persons, and persons outside the labor force. |

11.2. User satisfaction

Not available.

11.3. Completeness

The Labor Market Statistics data are based on two mains:

Source I: Labor force survey.

Source II: Administrative records of entities concerned with the labor market (MHSD, GOSI, NIC) in order to provide comprehensive information on workers and job seekers statistics.

12. Accuracy and reliability

12.1. Overall accuracy

Work is done to achieve data accuracy and ensure its reliability through:

- Use updated statistical frameworks.
- Training and qualifying data collectors and raising their efficiency.
- Applying quality control and error detection rules during the data collection process on the electronic questionnaire.
- Examine the correlation between variables and consistency of data.
- Compare data with previous years and identify important changes in the data.
- Check the internal consistency of the outputs before publishing them.

13. Timeliness and punctuality

13.1. Timeliness

GASTAT uses the Special Data Dissemination Standard (SDDS) issued by the International Monetary Fund. According to this Standard, all statistics agencies are required to publish data on a quarterly basis, and with a delay of not more than one quarter (90 days) after the end of the reference period. If the data are from different source, they may be published in a different frequency.

13.2. Punctuality

Publication takes place in accordance with published release dates for the Labor Market Statistics in the GASTAT webpage. The data are available at the expected time, as scheduled the release calendar, If the publication delayed the reasons would be provided.

14. Coherence and comparability

14.1. Comparability - geographical

Data are geographically comparable.

14.2. Comparability - over time

Since the beginning of the labor force survey in 1999, the survey has undergone continuous improvements and development in terms of periodicity of survey, questionnaire and methodology updating. Adjustments and revisions are made to the survey questionnaire to be in line with the latest ILO recommendations and international best practices of the statistical offices of the leading countries, taking into account the preservation of comparability with previous data. Therefore, continuous data from the beginning of the survey are comparable over time.

The main changes in recent years are as follows:

- 1999-2006:

the implementation of the survey on an annual basis, except for the years 2004, 2005 and 2010: the survey was not carried out due to the conduct of the census in 2004 and 2010.

- 2007-2015:

the implementation of the survey as a semi-annual activity, except for 2009 and 2011, it was implemented annually due to the 2010 census.

- 2011:

Redesign the survey questionnaire and add detailed questions to measure the employed and unemployed.

- 2013:

Introduction of Computer Assisted Personal Interview (CAPI) method as the main and only collection method.

- 2016M - Q2:

The survey period is now implemented on a quarterly basis.

- 2018:

Redesign the survey questionnaire and add detailed questions to measure workers, unemployed persons and persons outside the workforce using criteria and guiding principles in Resolution No. 1 of the International Conference on Labor Statistics (19th ICLS) in October 2013.

- 2020 Q2:

The transition to computer-assisted telephone interviews (CATI) due to the coronavirus pandemic (COVID-19).

- Q2/ 2022:

Personal and computer-assisted telephone interviews (CAPI&CATI).

- Q1/ 2023:

The use of the weekly sample style and the data collection became continuous and covers all weeks in the quarter, in addition to using the sampling rotation method.

14.3. Coherence- cross domain

Not applicable.

14.3.1 Coherence - sub annual and annual statistics

Not applicable.

14.3.2 Coherence- National Accounts

Workers estimates of labor force survey by economic activity and by average wages have uses in national accounts data.

14.4. Coherence - internal

The Labor market statistics estimates for a given reference period have full internal coherence, as they are all based on the same corpus of microdata, and they are calculated using the same estimation methods.

15. Resources used

| Description | Total |
|---|-------|
| Total staff (GASTAT's staff, researchers). | 1261 |
| Number of unites surveyed. | 96014 |
| Total days of data collection period (end date - start date). | 87 |
| Average conducted interviewer per day (during data collection). | 17 |

16. Data revision

16.1. Data revision - policy

Not applicable, only final results will be published.

16.2. Data revision - practice

Not applicable, only final results will be published.

17. Statistical processing

17.1. Source data

Source I: Of Labor Market Statistics: Labor Force Survey.

A household survey in which information is collected by communicating with a representative sample of residents of all administrative regions of Saudi Arabia from dwellings occupied by households and unoccupied dwellings, and updating an electronic questionnaire containing a number of questions, through which estimates and indicators on the workforce are provided to the working-age population of the age group (15 years and more) residing in Saudi Arabia, population assessment (population in labor force and population outside the labor force), It also calculates the labor market's most important indicators, such as unemployment rates, participation rates, employed people of working age and others.

The main published variables of the survey data are:

Unemployment, employment and labor force participation rates according to the following variables:

- Nationality.
- Sex.
- Age groups.
- Educational level.
- Administrative areas.

Source II: Of labor market statistics: administrative records:

Data and information recorded and updated by the relevant government entities in the labor market resulting from the registration and electronic official documentation of the following government entities:

- General Organization for Social Insurance.
- Ministry of Human Resources and Social Development.
- National Information Centre.

These entities provide the Authority with the data registered with it periodically, as these entities are a major source of data for employees subject to the civil service system and the employment system in the public and private sectors of the Kingdom of Saudi Arabia.

The main variables of administrative data are:

Workers subject to the civil service law, the labor law, social insurance laws and regulations, and domestic workers according to the following variables.

- Nationality.
- Sex.
- Age groups.
- Administrative areas.
- Occupations.
- Economic activities.

17.2. Frequency of data collection

Weekly sample whose data is collected continuously during the quarter.

17.3. Data collection

Data collection from survey:

The Labor Market data collection is carried out through Computer-assisted telephone interviewing (CATI) and Computer-Assisted Personal Interviews (CAPI).

Data collection from administrative records:

In coordination with GASTAT's departments related to the implementation of the survey and the data acquisition department, the (Labor Market) publication data were obtained from the General Organization for Social Insurance, the Ministry of Commerce and the Ministry of Human Resources and Social Development and the National Information Center, which include data on the number of employees by a number of variables.

The data were saved on GASTAT's databases, data have been audited and reviewed according to the statistical method and recognized quality standards, in case of defect quality issues or errors in the data we refer back to data source.

17.4. Data validation

Data are reviewed and matched to ensure their accuracy and precision in a way that suits their nature with the aim of giving the presented statistics quality and accuracy.

The data of the publication's current year are compared with the data of the previous year to ensure their integrity and consistency in preparation for processing data and extracting and reviewing results.

In addition to the data processing and tabulation to check their accuracy, all the outputs are stored and uploaded to the database after being calculated by GASTAT to be reviewed and processed by specialists in the Labor Market Statistics through modern technologies and software designed for this purpose.

17.5. Data compilation

Data Coding:

In the Labor Market Statistics, interviewers collect from respondents, a detailed description of each field. This information is then coded in-house by an automated process, which is reviewed by a small-dedicated team of coding experts using a series of consistency checks.

Data Editing:

Specialists of (Statistical dept. name) Department have processed and analyzed data in this stage, and this step was based on the following measures:

- Sort and arrange data in groups or different categories in a serial order.

- Summarize detailed data into main points or main data.
- Link between many parts of data and make them connected.
- Process incomplete or missing data.
- Process illogical data.
- Convert data into statistically significant data.
- Organize, display and interpret data.

Imputation (for Non-Response or Incomplete Data Sets):

In cases of household non-response, Imputation is made by adjusting the weight by using a weighting coefficient, and that is what is applied in the primary sampling units in the labor force survey. The non-response adjustment factor is calculated according to the following equation:

Non-response adjustment coefficient = (number of households in the PSU) / (number of responding households in the PSU).

In cases of incomplete data set, data imputation is made by using the data of the previous rotation sample of the group according to certain conditions and controls. In the absence of data from the previous rotation sample, Imputation is done for some cases in minimal limits and according to strict conditions and controls using the statistical model (hot deck), which means choosing a random analogue for the group based on a set of variables.

Extrapolation and weighting:

After processing the data collected from the responding households, survey weights were generated to produce indicator tables by following two main steps in creating survey weights:

- Adjustment of non-response.
- Calibration weight.

Applied statistical estimation:

GASTAT has relied on the formulas approved by the international standards in calculating (Labor Market Statistics) indicators, as follows:

- Labor force = (number of employed + number of unemployed)
- Unemployment rate = (Number of unemployed ÷ Total labor force) x 100
- Male unemployment rate = (Number of unemployed males ÷ Total male labor force) x 100
- Female unemployment rate = (Number of unemployed females ÷ Total female labor force) x 100
- Labor force participation rate = (total labor force ÷ total population of working age (15 years and over)) x 100
- Male labor force participation rate = (total male labor force ÷ total male population of working age (15 years and over)) x 100



- Female labor force participation rate = $(\text{total female labor force} \div \text{total female population of working age (15 years and over)}) \times 100$
- Employed population rate = $(\text{Total employed} \div \text{Total population of working age (15 years and over)}) \times 100$
- The rate of male workers out of the male population = $(\text{total male workers} \div \text{total male population of working age (15 years and over)}) \times 100$
- The rate of female workers out of the female population = $(\text{total number of female workers} \div \text{total number of female populations of working age (15 years and over)}) \times 100$
- Employment rate = $(\text{number of employees} \div \text{total labor force}) \times 100$
- Employment rate for males = $(\text{number of male employees} \div \text{total male labor force}) \times 100$
- Female employment rate = $(\text{number of female workers} \div \text{total female labor force}) \times 100$

17.6. Adjustment

Not applicable, only final results will be published.

18. Comment

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