



الهيئة العامة للإحصاء
General Authority for Statistics

Methodology and Quality Report for Population Projections and Estimates Statistics

V-3.2

Quality Management



Table of Contents

1. Contact	5
1.1. Contact organization	5
1.2. Contact organization unit	5
1.3. Contact person function	5
1.4. Contact mail address	5
1.5. Contact email address	5
1.6. Contact phone number.....	5
2. Methodology and Quality Update	5
2.1. Latest Update on Methodology and Quality	5
3. Statistical Presentation	5
3.1. Data description.....	5
3.2. Classification system.....	6
3.3. Sector coverage	6
3.4. Statistical concepts and definitions	6
3.5. Statistical unit.....	7
3.6. Statistical population	7
3.7. Reference area.....	7
3.8. Time coverage.....	7
3.9. Base period.....	7
2. Unit of measure	7
3. Reference period	8
4. Confidentiality	8
6.1. Confidentiality - policy	8
6.2. Confidentiality - data treatment.....	8
5. Release policy	8
7.1. Release calendar	8
7.2. Release calendar access	8
7.3. User access.....	9
6. Frequency of dissemination	9
7. Accessibility and clarity	9



9.1.	News release	9
9.2.	Publications	10
9.3.	On-line database	10
9.4.	Micro-data access	10
9.5.	Other	10
9.6.	Documentation on methodology	10
9.7.	Quality documentation.....	11
8.	Quality management.....	11
10.1.	Quality assurance.....	11
10.2.	Quality assessment	11
9.	Relevance	11
11.1.	User needs	11
11.2.	User satisfaction	12
11.3.	Completeness	12
10.	Accuracy and reliability	12
12.1.	Overall accuracy	12
11.	Timeliness and punctuality	13
13.1.	Timeliness	13
13.2.	Punctuality.....	13
12.	Coherence and comparability	13
14.1.	Comparability - geographical	13
14.2.	Comparability - over time	13
14.3.	Coherence- cross domain	14
14.3.1.	Coherence - sub annual and annual statistics	14
14.3.2.	Coherence- National Accounts	14
14.4.	Coherence - internal	14
13.	Data revision	14
15.1.	Data revision - policy	14
15.2.	Data revision - practice	14
14.	Statistical processing	15
16.1.	Source data	15
16.2.	Frequency of data collection	15



16.3.	Data collection.....	15
16.4.	Data validation	16
16.5.	Data compilation	16
16.6.	Adjustment	17
17.	Comment.....	17



1. Contact

1.1. Contact organization	General Authority for Statistics
1.2. Contact organization unit	Population, Gender, and Diversity Statistics
1.3. Contact person function	Director of Population, Gender, and Diversity 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. Latest Update on Methodology and Quality	31/12/2024
---	------------

3. Statistical Presentation

3.1. Data description
<p>The population projection and estimate present data on the total population of Saudi Arabia.</p> <p>Population projections and estimates are a prediction of population data to calculate the following:</p> <ul style="list-style-type: none">• Rates of growth.



- Number of populations.

Data is also used to estimates:

- Population by administrative regions.
- Population by sex.
- Population by nationality.
- Population by age groups.

3.2. Classification system

Not applicable.

3.3. Sector coverage

Not applicable.

3.4. Statistical concepts and definitions

Terms and concepts for population projections and estimates:

- Population projections and estimates:

Future estimations of the total population size and its age and gender distribution, based on the results of the population and housing census, and on certain assumptions regarding the future trends of fertility, mortality, and migration rates.

- General fertility rate:

It refers to the number of live births in a given year per 1,000 women of childbearing age (15-49 years) at the midpoint of the same year.

- Annual population growth rate:

The rate at which a population increases (or decreases) annually over a specific period, due to natural increase and net migration, expressed as a percentage of the initial population.

- Net migration rate:

The difference between the rate of immigration and the rate of emigration for a given country, relative to the total population of that country at the middle of the year



3.5. Statistical unit

Not applicable.

3.6. Statistical population

Not applicable.

3.7. Reference area

Population projection and estimate are made for 13 administrative regions in Saudi Arabia.

3.8. Time coverage

Annual.

3.9. Base period

Not applicable.

4. Unit of measure

- Most results are measured by numbers (such as: Population (in millions)).
- Some indicators are calculated as rates (e.g., The growth).
- Some results are calculated as percentages (e.g., Percentage of the male population).



5. Reference period

References period to the variables or dataset as following:

Mid-year on July 1.

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 are displayed in appropriate tables to facilitate its summarization, comprehension, results extraction, comparison with other data and producing statistical connotations for the study community. It is also easier to check tables without the need to see any sensitive or confidential data, which violates the confidentiality of statistical data.

7. Release policy

7.1. Release calendar

Population projections and estimates are included in the statistical calendar.

7.2. Release calendar access

Available on the: <https://www.stats.gov.sa/statistical-calendar-releases>



7.3. User access

One of GASTAT's objectives is to better meet its clients' needs, so it immediately provides them with the publication's results once the Population Projections and Estimates Publication is published.

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

- GASTAT official website: www.stats.gov.sa
- GASTAT official e-mail address: info@stats.gov.sa
- Client support e-mail: info@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

Annual.

9. Accessibility and clarity

9.1. News release

The announcements of 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 through the following link:

<https://stats.gov.sa/news>



9.2. Publications

GASTAT issues population projections and estimates, publications, and reports on a regular basis within a pre-prepared dissemination plan, which are published on GASTAT's website. GASTAT is keen to publish its publications in a way that serves all users of different types, including publications in different formats that contain (publication tables, data graphs, indicators, Methodology and Quality Report, and questionnaires) in both English and Arabic.

The results of population projections and estimates are available at:

<https://www.stats.gov.sa/statistics>

9.3. On-line database

The data is published on the statistical database:

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

9.4. Micro-data access

Not available.

9.5. Other

Not available.

9.6. Documentation on methodology

Framework of Population projections and estimates:

Concepts, definitions, issues, and classifications are based on international standards by the United Nations Department of Economic and Social Affairs, Population Division.

<https://population.un.org/wpp/Methodology/>



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 users at the General Authority for Statistics for Population Projections and Estimates data:

- All surveys conducted by the authority related to individuals.



- Estimating household and housing sizes.

Some several external users and beneficiaries who greatly rely on Population Projections and Estimates data, including:

- Government entities.
- Regional and international organizations.
- Research institutions.
- Media.
- Individuals.

The disseminated key variables used by external users:

Decision-makers and development plans	Annual visualization of population numbers and growth rate.
Government entities and the services provided	Developing short-term plans based on annual population projections and estimates.
Regional and State organizations	Comparisons of population numbers by age groups.

11.2. User satisfaction

Not available.

11.3. Completeness

Population Projections and Estimates data are based on two main sources in order to provide comprehensive information on changes in land cover and use, and the status of the data is complete.

12. Accuracy and reliability

12.1. Overall accuracy

- Data is checked with previous years to identify any significant changes in the data.
- The internal consistency of the data is checked before it is finalized.
- The links between variables are checked and coherence between different data series is confirmed.



13. Timeliness and punctuality

13.1. Timeliness

The General Authority for Statistics is committed to applying internationally recognized standards regarding the announcement, clarification of the time of publishing statistics on its official website, as outlined in the statistical calendar, as well as adhering to the announced time of publication. In the event of any delay, updates will be provided accordingly.

13.2. Punctuality

The publication takes place according to the published release dates on the statistical calendar for population projections and estimates on the website of the General Authority for Statistics.

The data are available at the expected time, as scheduled in the statistical release calendar, If the publication is delayed, reasons shall be provided.

14. Coherence and comparability

14.1. Comparability - geographical

The data is geographically comparable.

14.2. Comparability - over time

Population projections and estimates began in 1998, and the following are the major changes that have occurred in recent years:

- 2016:

It became an annual publication.

- 2022:

It was not implemented due to the census.



- 2023:

Use the data of administrative records to be made available more widely after the development of administrative records to ensure quality.

14.3. Coherence- cross domain

The outputs of population projections and estimates are used by statistical departments to work on surveys and publication.

14.3.1. Coherence - sub annual and annual statistics

The outputs of population projections and estimates are used by statistical departments to work on surveys and publication.

14.3.2. Coherence- National Accounts

Not applicable.

14.4. Coherence - internal

Population projections and estimates 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. Data revision

15.1. Data revision - policy

Not applicable, only final results will be published.

15.2. Data revision - practice

Not applicable, only final results will be published.



16. Statistical processing

16.1. Source data

Population projections and estimates data are based on two sources:

First source: Population projections and estimations statistics data are population censuses where forecasting models and hypotheses are built to project population numbers by sex, nationality, administrative region ,and age groups.

The disseminated key variables of Population projection and estimation data are :

- Sex.
- Nationality.
- Administrative region.
- Age groups.

Second source: From the administrative records of population projections and estimates statistics:

- Saudi Data & AI Authority (SDAIA):

The data framework for non-Saudis and mortality during the projection or estimation period in the Kingdom of Saudi Arabia is provided by the Saudi Data and Artificial Intelligence Authority (SDAIA).

16.2. Frequency of data collection

Administrative record data is collected on a monthly, quarterly, and annual basis.

16.3. Data collection

Data collection from administrative records:

In coordination with the relevant departments of the Authority, the record data for the Population projections and estimates publication are obtained from the Saudi Data & AI Authority (SDAIA), which includes the data of non-Saudis and deaths during the projection or estimate period.



The data is stored in the authority's databases after undergoing auditing and review processes following approved statistical methods and recognized quality standards. If errors or discrepancies are discovered, the data is cross-referenced with the data source for correction or clarification.

16.4. 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 current year publication 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 population, gender, and diversity statistics through modern technologies and software designed for this purpose.

16.5. Data compilation

Data editing:

Specialists in the Population, Gender, and Diversity Statistics Department have processed and analyzed data received from the National Information Center (NIC) and the Saudi Data and Artificial Intelligence Authority (SDAIA) at this stage. This step was based on the following measures:

- Sorting and arranging data in groups or different categories in a serial order.
- Summarizing detailed data into key points or data.
- Combining many data segments and ensuring their interconnection.
- Processing incomplete or missing data.
- Processing illogical data.
- Converting data into statistically significant data.
- Arranging, presenting and interpreting data.

Applied statistical estimation:

GASTAT has relied on the formulas approved by international standards in calculating the key indicators for population projection and estimate as follows:



- Estimated total population = total population for the last available census + (net migration + number of births - number of deaths) during the projection period.

16.6. Adjustment

Not applicable, only final results will be published.

17. Comment