Sustainable Development Goals (SDGs)
2025 Comprehensive Review – metadata template for additional or replacement\(^1\) indicator proposals

The purpose of this template is to submit reference metadata for SDG indicator proposals. It uses the standard format for SDG indicator metadata to monitor the Goals and targets in a consistent manner. In order to ensure the Inter-agency and Expert Group on SDG Indicators (IAEG-SDGs) thoroughly review the proposal, information is requested using this standard template. For reference, metadata for existing indicators can be found at https://unstats.un.org/sdgs/metadata/.

Please replace the instruction text shaded in yellow with the appropriate text describing the metadata concepts (i.e. definition and concepts, rationale, etc.). All fields must be filled. If the field is not applicable or still to be determined, please enter “not applicable” or “TBD”.

Please try to make your responses as concise as possible while making sure to include all relevant information. For more detailed methodological information, a link can be included in the reference section (7. References and Documentation).

Use only the metadata concepts/fields provided. Do not add additional fields. Use the detailed metadata concepts (preceded by a number and a letter e.g. “0.a”) where available and as feasible; otherwise use the main concepts (preceded by a number e.g. “0”). Descriptions of the fields are provided on page 7.

\(^1\) For indicator revision/adjustment proposals, please make the revisions/adjustments in track change to the current indicator’s metadata file located at the metadata repository, https://unstats.un.org/sdgs/metadata/.
### 0. Indicator information (SDG_INDICATOR_INFO)

#### 0.a. Goal (SDG_GOAL)
**Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture**

#### 0.b. Target (SDG_TARGET)
**Target 2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.**

#### 0.c. Indicator (SDG_INDICATOR)
**Exclusive Breastfeeding among infants 0-6 months old**

#### 0.d. Series (SDG_SERIES_DESCR)
**Not applicable**

#### 0.e. Metadata update (META_LAST_UPDATE)
**Not applicable**

#### 0.f. Related indicators (SDG_RELATED_INDICATORS)
**Contributes to SDG Target 3.2: Newborn and child mortality and 3.3: Infectious diseases**

#### 0.g. International organisations(s) responsible for global monitoring (SDG_CUSTODIAN_AGENCIES)
**United Nations Children’s Fund, World Health Organization**

### 1. Data reporter (CONTACT)

#### 1.a. Organisation (CONTACT_ORGANISATION)
**United Nations Children’s Fund (UNICEF)**

#### 1.b. Contact person(s) (CONTACT_NAME)

#### 1.c. Contact organisation unit (ORGANISATION_UNIT)
**Nutrition Data Unit**
1.d. Contact person function (CONTACT_FUNCT)
Senior Advisor, Monitoring and Statistics

1.e. Contact phone (CONTACT_PHONE)

1.f. Contact mail (CONTACT_MAIL)
United Nations Children’s Fund
3 UN Plaza, New York, NY 10017

1.g. Contact emails (CONTACT_EMAIL)

2. Definition, concepts, and classifications (IND_DEF_CON_CLASS)
2.a. Definition and concepts (STAT_CONC_DEF)
The 2021 UNICEF-WHO guide on “Indicators for assessing infant and young child feeding practices” defines exclusive breastfeeding as the “Percentage of infants 0-5 months of age who are fed exclusively with breast milk during the previous day”.

Exclusive breastfeeding is defined as breastfeeding with no other food or drink, not even water. Breastfeeding by a wet nurse, feeding of expressed breast milk, and feeding of donor human milk all count as being fed breast milk. Prescribed medicines, oral rehydration solution, vitamins, and minerals are not counted as fluids or foods. However, herbal fluids and similar traditional medicines are counted as fluids, and infants who consume these are not exclusively breastfed.

2.b. Unit of measure (UNIT_MEASURE)
The indicator covers the percentage of infants 0–5 months of age who were fed exclusively with breast milk during the previous day.

The indicator can be calculated as a simple percentage, as follows:

\[
\frac{\text{Infants 0-5 months of age who received only breastmilk during the previous day}}{\text{Infants 0-5 months of age}}
\]

2.c. Classifications (CLASS_SYSTEM)
Not applicable
3. Data source type and data collection method (SRC_TYPE_COLL_METHOD)
3.a. Data sources (SOURCE_TYPE)

**Data Sources**

**Description:**
Population-based nationally representative household surveys are the primary source of country level exclusive breastfeeding data. Surveys assess exclusive breastfeeding by collecting data on intake of breast milk and other foods and fluids for children under two years of age using a 24-hour recall of dietary intake.

**Collection process:**
UNICEF undertakes a wide consultative process of compiling and assessing data from national sources for the purposes of updating its global databases on the situation of children. Up until 2017, the consultative process UNICEF used to collate and review potential estimates to ensure adherence to standard definitions and data quality criteria was known as Country Data Reporting on the Indicators for the Goals (CRING).[1] As of 2018, UNICEF launched a new system called “Country Reporting and Validation Exercise” (CRAVE) which adheres to many of the same principles as CRING, and which will continue on an annual basis for future updates. The CRAVE process places strong emphasis on technical rigour, country ownership and use of official data and statistics. The consultative process is done in close collaboration with UNICEF country offices with the purpose of ensuring that UNICEF global databases contain updated and internationally comparable data. UNICEF country offices are invited to submit, through an online system, nationally representative data sources which contain key indicators on the well-being of women and children, including exclusive breastfeeding. The country office staff work with local counterparts to ensure the most relevant data are shared. Updates sent by the country offices are then reviewed by sector specialists at UNICEF headquarters to check for consistency and overall data quality of the submitted estimates. This review is based on a set of objective criteria to ensure that only the most reliable information is included in the databases. Re-analysis according to standard definitions is also undertaken where possible. Once reviewed, feedback is made available on whether or not specific data points are accepted, and if not, the reasons why. Feedback is also provided to explain differences between country reported and UNICEF reanalysed estimates.

**Data Availability**

**Description:**
Approximately 130 countries

**Time series:**
UNICEF has maintained global databases on infant and young child feeding indicators including exclusive breastfeeding since 1990s. Country level data for exclusive breastfeeding is available from 1987 onwards until 2023.
3.b. Data collection method (COLL_METHOD)

Methods and guidance available to countries for the compilation of the data at the national level:
To estimate exclusive breastfeeding at the national level, mothers of children under 2 years of age are asked whether their child was fed anything from a list of liquids and food groups in the 24 hours before the survey interview. As an indicator of current status, exclusive breastfeeding is based on recall of foods and fluids consumed by an infant on the previous day. It therefore does not represent the proportion of infants who are exclusively breastfed until just under 6 months of age and should not be interpreted as such.

The following global guidance provides tools for measurement and calculation of exclusive breastfeeding estimates. The guide also includes questions and a standard list of liquids and food groups that should be asked for determination of exclusive breastfeeding at the country level.


Quality assurance
For inclusion of estimates into the database, UNICEF reviews newly available data against a set of quality assessment criteria. These criteria include:
- National representativeness: Sufficient documentation should be available to assess sampling at various stages such as methodology to select primary sampling units, develop household listing and selection of households. The documents should allow for determination of household and individual response rate.
- Minimum sample size: A minimum unweighted sample size of 25 is required for inclusion of estimates into UNICEF global databases.
- Plausible time trends: Country level data are reviewed for plausible time trends. In case of outliers UNICEF country offices are contacted to get additional information to explain available exclusive breastfeeding data.
- Adherence to standard questions and calculations: Survey questionnaires are reviewed to confirm adherence to global guidance in terms of methods and questions used to assess exclusive breastfeeding. Only estimates based on 24-hour recall of a standard list of liquids and food groups are allowed.
- Infant feeding area graphs are reviewed to identify implausible feeding patterns and possible data quality issues.

A consultation process similar to that done for other SDGs UNICEF is custodian for (e.g. see metadata description for indicator 2a on stunting for SDG target 2.2) through the NSOs would be implemented if
exclusive breastfeeding were to become an SDG indicator. (Exclusive breastfeeding data is already reviewed through UNICEF country offices).

3.c. Data collection calendar (FREQ_COLL)

Nationally representative household surveys that include the data on exclusive breastfeeding are typically conducted every 3-5 years, although some countries conduct these surveys annually.

3.d. Data release calendar (REL_CAL_POLICY)

Data on exclusive breastfeeding are updated on an annual basis in the fourth quarter of the year, with the most recent release being November 2023.

3.e. Data providers (DATA_SOURCE)

Data providers vary and most commonly are ministries of health, national offices of statistics or national institutes of nutrition.

3.f. Data compilers (COMPILING_ORG)

UNICEF

3.g. Institutional mandate (INST_MANDATE)

Not applicable

4. Other methodological considerations (OTHER_METHOD)

4.a. Rationale (RATIONALE)

**Definition:**
The 2008 UNICEF-WHO guide on "Indicators for assessing infant and young child feeding practices" defines exclusive breastfeeding as the “Percentage of infants 0-5 months of age who are fed exclusively with breast milk during the previous day”.

**Rationale:**
Exclusive breastfeeding offers the best source of nutrition for young infants. Breastmilk is more than just food for babies, it is also a potent medicine for disease prevention that is tailored to the needs of each child; breast milk shapes the baby’s microbiome, strengthens the immune system, and reduces the risk of developing chronic diseases. There is overwhelming evidence that breastfeeding is a cornerstone of child survival; in low- and middle-income countries, infants who received foods and liquids in addition to breastmilk before 6 months were up to 2.8 times more likely to die than those who were exclusively breastfed (Sankar et al. 2017). It protects against pneumonia and diarrhoea, the two leading killers of children under five and the impact on childhood infections exists in rich and poor countries alike. The UK
Millennium Cohort Survey estimated that if all children in the United Kingdom were breastfed exclusively for six months, it could prevent 53 per cent of hospital admissions for diarrhoea, and 27 per cent of hospitalizations for lower respiratory infections each month (Quigley et al 2007). In addition to giving every child the same opportunity to thrive, breastfeeding is one of the smartest investments to boost human capital and stimulate economic growth; with low rates of breastfeeding being responsible for losses of more than $230 billion annually in high-income countries, and $70 billion annually in low- and middle-income countries (Rollins et al. 2016). Furthermore, monitoring of exclusive breastfeeding is not only technically feasible due to availability of a global database with estimates for approximately 130 countries, but politically feasible given commitment of all member states to regularly report on this indicator until at least 2030 through the World Health Assembly (WHA) Nutrition Targets. Additionally, it is a long standing standard indicator for which a time series is available for a large number of countries.

4.b. Comment and limitations (REC_USE_LIM)

Exclusive breastfeeding is a long standing standard indicator where time-series data already exist for a large number of countries. As household surveys are the primary source of data on exclusive breastfeeding, the estimates come with levels of uncertainty due to both sampling and non-sampling error (e.g. measurement technical error, recording error etc.). Also, as the indicator is based on a narrow age range, estimates from surveys with small sample sizes are likely to have wide confidence intervals. However, 64% of the country estimates in the UNICEF database have confidence intervals smaller than +/- 5 percentage points. The indicator does not represent the proportion of infants who are exclusively breastfed until just under 6 months of age and should not be interpreted as such.

4.c. Method of computation (DATA_COMP)

The indicator can be calculated as a simple percentage, as follows:

\[
\text{Infants 0-5 months of age who received only breastmilk during the previous day} / \text{Infants 0-5 months of age}
\]

4.d. Validation (DATA_VALIDATION)

For inclusion of estimates into the database, UNICEF reviews newly available data against a set of quality assessment criteria. These criteria include:

- National representativeness: Sufficient documentation should be available to assess sampling at various stages such as methodology to select primary sampling units, develop household...
listing and selection of households. The documents should allow for determination of household and individual response rate.

- Minimum sample size: A minimum unweighted sample size of 25 is required for inclusion of estimates into UNICEF global databases.
- Plausible time trends: Country level data are reviewed for plausible time trends. In case of outliers UNICEF country offices are contacted to get additional information to explain available exclusive breastfeeding data.
- Adherence to standard questions and calculations: Survey questionnaires are reviewed to confirm adherence to global guidance in terms of methods and questions used to assess exclusive breastfeeding. Only estimates based on 24-hour recall of a standard list of liquids and food groups are allowed.
- Infant feeding area graphs are reviewed to identify implausible feeding patterns and possible data quality issues.

A consultation process similar to that done for other SDGs UNICEF is custodian for (e.g. see metadata description for indicator 2a on stunting for SDG target 2.2) through the NSOs would be implemented if exclusive breastfeeding were to become an SDG indicator. (Exclusive breastfeeding data is already reviewed through UNICEF country offices).

4.e. Adjustments (ADJUSTMENT)

Not applicable

4.f. Treatment of missing values (i) at country level and (ii) at regional level (IMPUTATION)

- At country level
  There is no imputation for countries with no data on exclusive breastfeeding.

- At regional and global levels
  There is no imputation for individual countries with missing data. Global and regional aggregates for this indicator are based on countries with available data.

4.g. Regional aggregations (REG_AGG)

Regional aggregates are calculated as population weighted averages of the prevalence of exclusive breastfeeding in each country over a specific time-period, using the total number of births (age 0) from the United Nations Population Division World Population Prospects as weights.

Regional aggregates are available for the following classifications: UN, SDG, UNICEF, WHO, The World Bank income groups. As a rule, regional aggregates are only displayed if available data represents at least 50 percent of the region’s birth population.

4.h. Methods and guidance available to countries for the compilation of the data at the national level (DOC_METHOD)

(Harmonized metadata template - format version 1.1)
To estimate exclusive breastfeeding at the national level, mothers of children under 2 years of age are asked whether their child was fed anything from a list of liquids and food groups in the 24 hours before the survey interview. As an indicator of current status, exclusive breastfeeding is based on recall of foods and fluids consumed by an infant on the previous day. It therefore does not represent the proportion of infants who are exclusively breastfed until just under 6 months of age and should not be interpreted as such.

The following global guidance provides tools for measurement and calculation of exclusive breastfeeding estimates. The guide also includes questions and a standard list of liquids and food groups that should be asked for determination of exclusive breastfeeding at the country level.


4.i. Quality management (QUALITY_MGMNT)

Not applicable

4.j Quality assurance (QUALITY_ASSURE)

For inclusion of estimates into the database, UNICEF reviews newly available data against a set of quality assessment criteria. These criteria include:

- National representativeness: Sufficient documentation should be available to assess sampling at various stages such as methodology to select primary sampling units, develop household listing and selection of households. The documents should allow for determination of household and individual response rate.
- Minimum sample size: A minimum unweighted sample size of 25 is required for inclusion of estimates into UNICEF global databases.
- Plausible time trends: Country level data are reviewed for plausible time trends. In case of outliers UNICEF country offices are contacted to get additional information to explain available exclusive breastfeeding data.
- Adherence to standard questions and calculations: Survey questionnaires are reviewed to confirm adherence to global guidance in terms of methods and questions used to assess exclusive breastfeeding. Only estimates based on 24-hour recall of a standard list of liquids and food groups are allowed.
- Infant feeding area graphs are reviewed to identify implausible feeding patterns and possible data quality issues.

A consultation process similar to that done for other SDGs UNICEF is custodian for (e.g. see metadata description for indicator 2a on stunting for SDG target 2.2) through the NSOs would be implemented if exclusive breastfeeding were to become an SDG indicator. (Exclusive breastfeeding data is already reviewed through UNICEF country offices).

4.k Quality assessment (QUALITY_ASSMNT)

See text on quality assurance.
5. Data availability and disaggregation (COVERAGE)

Data are available for 133 countries, representing approximately 92% of annual births globally. 76 of these countries have collected data in the past 5 years, although this number is somewhat lower than usual because of the suspension of households surveys during the global pandemic.

Disaggregated country-level data are available in the global database by sex of child, place of residence (urban, rural), wealth status of household, age of child (0-1, 2-3 and 4-5 months), maternal education and administrative/geographic regions.

6. Comparability / deviation from international standards (COMPARABILITY)

Country produced data are used in the global database.

7. References and Documentation (OTHER_DOC)


https://www.who.int/publications/i/item/9789240018389


Definitions of Metadata Concepts

0.a. Goal: SDG Goal number and name.

0.b. Target: SDG Target number and name.

0.c. Indicator: SDG Indicator number and name.

0.d. Series: Codes and descriptions of all series to which the metadata set applies.

0.e. Metadata update: The date when this metadata report was last updated.

0.f. Related indicators: Linkages with any other Goals and Targets.

0.g. International organisation(s) responsible for global monitoring: (also known as custodian agency(ies)) Global reporting: International organizations (departments/offices) responsible for monitoring this indicator at the global level. Country reporting: This concept has no national counterpart.

1.a. Organisation: Organisation unit information of the contact points for the data or metadata.

1.d. Contact person function: Functional title(s) of the contact points for the data or metadata.

1.e. Contact phone: Phone number(s) of the contact points for the data or metadata.

1.f. Contact mail: Mailing address(es) of the contact points for the data or metadata.

1.g. Contact emails: E-mail address(es) of the contact points for the data or metadata.

2.a. Definition and concepts: Precise definition of the indicator preferably relying on internationally agreed definitions. The indicator definition should be unambiguous and be expressed in universally applicable terms. Precise definition of all different concepts and terms associated with the indicator, also including reference to any associated classifications.

2.b. Unit of measure: Description of the unit of measurement (proportion, dollars, number of people, etc.)

2.c. Classifications: Describe references to both national and international standards and classification being used. [Information to be provided where applicable.]

3.a. Data sources: Description of all actual and recommended sources of data. This description should include, when applicable, any changes of the data source over time, details of denominator (if from a different source) and any other relevant information related to the origin of the source or indicator. Similar details should be given for administrative sources.

3.b. Data collection method: Description of all methods used for data collection. This description should include, when applicable, the sample frame used, the questions used to collect the data, the type of interview, the dates/duration of fieldwork, the sample size and the response rate. Some additional information on questionnaire design and testing, interviewer training, methods used to monitor non-response etc. should be provided here. Questionnaires used should be annexed (if very long: via hyperlink).
3.c. **Data collection calendar**: Dates when source collection is next planned.

3.d. **Data release calendar**: Expected dates of release of new data for this indicator, including the year (or, ideally, the quarter/month when the next data point associated with the indicator will become available).

3.e. **Data providers**: Identification of national and/or international data provider(s), specifying the organization(s) responsible for producing the data.

3.f. **Data compilers**: Organization(s) responsible for compilation of this indicator either at national or global level.

3.g. **Institutional mandate**: Description of the set of rules or other formal set of instructions assigning responsibility as well as the authority to an organisation for the collection, processing, and dissemination of statistics for this indicator.

4.a. **Rationale**: Description of the purpose and rationale behind the indicator, as well as examples and guidance on its correct interpretation and meaning.

4.b. **Comment and limitations**: Comments on the feasibility, suitability, relevance and limitations of the indicator. Also includes data comparability issues, presence of wide confidence intervals (such as for maternal mortality ratios); provides further details on additional non-official indicators commonly used together with the indicator.

4.c. **Method of computation**: Explanation of how the indicator is calculated, including mathematical formulas and descriptive information of computations made on the source data to produce the indicator (including adjustments and weighting). This explanation should also highlight cases in which mixed sources are used or where the calculation has changed over time (i.e., discontinuities in the series).

4.d. **Validation**: Description of process of monitoring the results of data compilation and ensuring the quality of the statistical results, including consultation process with countries on the national data submitted to the SDGs Indicators Database. Descriptions and links to all relevant reference materials should be provided.

4.e. **Adjustments**: Global reporting: Description of any adjustments with respect to use of standard classifications and harmonization of breakdowns for age group and other dimensions, or adjustments made for compliance with specific international or national definitions. National reporting: This concept is typically not applicable for national reporting.

4.f. **Treatment of missing values (i) at country level and (ii) at regional level**: Global reporting: (National level) Description of the methodology employed for producing estimates for the indicator when country data are not available, including any mathematical formulas and description of additional variables used as input into the estimation process. (Regional level) Description of how missing values for individual countries or areas are imputed or otherwise estimated by international agencies to derive regional or global aggregates of the indicator. National reporting: This concept is not applicable for national reporting.
4.g. Regional aggregations: Global reporting: Description of the methodology, including any mathematical formulas, used for the calculation of the regional/global aggregates from the country values. Description of the weighting structure used for aggregating country indicator values to regional and global levels. Additional methodological details on how the data from countries or areas is assembled by custodian international agencies to provide regional and global aggregates. This is distinct from the method of computation, which looks at how the indicator is compiled at a national level. National reporting: This concept is not applicable for national reporting.

4.h. Methods and guidance available to countries for the compilation of the data at the national level: Global reporting: Description of methodology used by countries for the compilation of data at national level and the relevant international recommendations and guidelines available to countries. Descriptions and links to all relevant reference materials should be provided. National reporting: For national reporting a country may refer to the globally available metadata and explain how it is being used.

4.i. Quality management: Description of systems and frameworks in place within an organisation to manage the quality of statistical products and processes.

4.j Quality assurance: Description of practices and guidelines focusing on quality in general and dealing with quality of statistical programmes at your agency, including measures for ensuring the efficient use of resources.

4.k Quality assessment: Description of overall evaluation of fulfilling quality requirements, based on standard quality criteria.

5. Data availability and disaggregation: Global reporting: Indicate for how many countries the data for this indicator are already currently available on a regular basis. Data availability by regional breakdowns and time periods can also be described here. Describe the specification of the dimensions and levels used for disaggregation of the indicator (e.g., income, sex, age group, geographic location, disability status, etc.). National reporting: Data availability by sub-national breakdowns and time periods can be described here. Describe the specification of the dimensions and levels used for disaggregation of the indicator (e.g., income, sex, age group, geographic location, disability status, etc.).

6. Comparability / Deviation from international standards: Explanation on the differences between country produced and internationally estimated data on this indicator, highlighting and summarising the main sources of differences.

7. References and Documentation: Descriptions and links to all relevant reference materials related to this indicator.

Goes under 4

Disaggregated country level data are available in the global database by sex of child, place of residence (urban, rural), wealth status of household, age of child (0-1, 2-3 and 4-5 months), maternal education and administrative/geographic regions.
Treatment of missing values:

- **At country level**
  There is no imputation for countries with no data on exclusive breastfeeding.

- **At regional and global levels**
  There is no imputation for individual countries with missing data. Global and regional aggregates for this indicator are based on countries with available data.

**Regional aggregates:**
Regional aggregates are calculated as population weighted averages of the prevalence of exclusive breastfeeding in each country over a specific time-period, using the total number of births (age 0) from the United Nations Population Division World Population Prospects as weights.

Regional aggregates are available for the following classifications: UN, SDG, UNICEF, WHO, The World Bank income groups. As a rule, regional aggregates are only displayed if available data represents at least 50 percent of the region’s birth population.

Sources of discrepancies:
The standard analysis approach to construct the database aims for a maximum comparability of country estimates. For the inclusion of estimates into the database, quality assessment criteria are applied. When there is insufficient documentation, the source is not included until information becomes available and clears quality criteria.

Due to differences in analysis, there may be a discrepancy between country reported estimates and the global database for exclusive breastfeeding given a difference in the treatment of the response “Don’t Know/Missing”. Exclusive breastfeeding is estimated by asking about an exhaustive list of liquids and food groups fed to infants under 6 months of age in the last 24 hours. The global guidance recommends that only children for whom a response of “No” was given to each item on the liquid and food list can be counted as being exclusively breastfed. However, country estimates produced through some survey programs treat responses of “Don’t Know/Missing”, as “No” during analysis, while the analysis used to generate estimates for the global database does not count these as “No”. In most surveys this leads to a small difference in exclusive breastfeeding rates (e.g. < 3 percentage points) but in the few surveys where many respondents answered “Don’t know” to at least one liquid/food item, the difference in exclusive breastfeeding rates may be large.