

Bridging the Gap:

Mapping Gender Data
Availability in Africa
and in Latin America
and the Caribbean

METHODOLOGY REPORT

AUGUST 2020



data2x^o



Contents

Indicator assessment methodology	1
Background	1
Indicator selection (Africa)	1
Indicator selection (Latin America)	1
Tier classification	1
Domain typology	2
Country selection	2
Country assessments	3
Data collection.....	3
Notes and observations on the indicator assessment process.....	5
Challenges	5
Microdata Assessment	8
Background	8
Challenges and observations during the microdata assessment	9
Annex 1: Gender-relevant Indicators	10
Annex 2: Representative Indicator Summary Sheet	24
SDG Indicator 3.1.1 – from Bridging the Gap Africa	24

Indicator assessment methodology

Background

This publication provides the methodology for *Bridging the Gap: Mapping Gender Data Availability in Africa* and *Bridging the Gap: Mapping Gender Availability in Latin America and the Caribbean*. The research for *Bridging the Gap: Africa* was conducted between May 2018 and March 2019; research for *Bridging the Gap: Latin America and the Caribbean* was conducted between July 2019 and April 2020. This Methodology will be routinely updated as Open Data Watch and Data2X expands their research to other regions.

Indicator selection (Africa)

A list of 104 indicators of relevance for identifying the status and welfare of women was selected from the gender indicators proposed by United Nations' Inter-agency and Expert Group on Gender Statistics (IAEG-GS), by UN Women, or included in the Sustainable Development Goals (SDGs). The combined set investigated in this report is comprised of 32 SDG indicators identified by UN Women as gender-relevant (UNW); 36 additional SDG indicators identified by Open Data Watch as being capable of sex-disaggregation or having other gender relevance (AGI); 27 indicators included in IAEG-GS Minimum Gender Indicator list that were not included in the SDGs (MIN); and 9 supplemental indicators (SUP) suggested by UN Women in their publication *Turning Promises into Action* (2018).

Indicator selection (Latin America)

A list of 93 indicators of relevance for identifying the status and welfare of women was selected from the gender indicators proposed by United Nations' Inter-agency and Expert Group on Gender Statistics (IAEG-GS) or by UN Women or included in the Sustainable Development Goals (SDGs). The combined set investigated in this report is comprised of 32 SDG indicators identified by UN Women as gender-relevant (UNW); 52 additional SDG indicators identified by Open Data Watch as being capable of sex-disaggregation or having other gender relevance (AGI); and 9 supplemental indicators (SUP) suggested by UN Women in their publication *Turning Promises into Action* (2018).

The 27 IAEG-GS Minimum Gender Indicator list was not used for *Bridging the Gap Latin America and the Caribbean* (LAC). The number of indicators selected from the SDGs was increased in *Bridging the Gap LAC* as the team has identified additional Tier 1 and Tier 2 indicators.

The complete list of indicators for *Bridging the Gap Africa* and LAC is shown in Annex 1.

Tier classification

Indicators were classified by UN Women and by the Inter-agency and Expert Group on the SDGs (IAEG-SDGs) in one of three tiers:

- Tier 1 indicators have an internationally established methodology and are regularly produced by at least 50 percent of countries;
- Tier 2 indicators have an established methodology but are not regularly produced by countries;
- Tier 3 indicators lack an established methodology.

Only Tier 1 and Tier 2 indicators were included in the research set. The tier classification used was the one available in June of 2017. The IAEG-SDG has updated the tier classification at its semi-annual meetings. For Bridging the Gap Africa, the tier classification in the current list of indicators has been updated through 15 October 2018. (IAEG-SDG 2018) But at least one indicator with sex-disaggregation has been moved from Tier 3 to Tier 2 since the research list was drawn up and is omitted here. For Bridging the Gap LAC, the tier classification is based on the 9th meeting of the IAEG-SDGs (March 2019).

Domain typology

Mapping Gender Data Gaps (Data2X 2014) identified five statistical domains of development and gender interest: health, education, economic opportunities, political participation, and human security. In the current project an additional domain, encompassing environmental indicators was added. The indicators used in the current study were classified in six domains:

- Economic opportunities and access to resources (ECON)
- Education (EDUC)
- Environment and sustainability (ENVT)
- Health (HEAL)
- Human rights and security of women and children (HUMN)
- Public life and participation (PART)

Country selection

SUB-SAHARAN AFRICA

The Bridging the Gap Africa study looked at gender data gaps for 15 countries in Sub-Saharan Africa. Countries were selected to represent the diversity of countries in the region – both in terms of income level and statistical capacity – in order to better understand the realities that exist within different contexts. Additionally, the selected countries are participating in Data2X's Gender Data Network (GDN). These assessments can offer tailored possibilities for overcoming barriers which GDN focal points for those countries can take up.

The 15 selected African countries were: Botswana, Cote d'Ivoire, Ethiopia, Ghana, Kenya, Lesotho, Malawi, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.

LATIN AMERICA AND THE CARIBBEAN

The Bridging the Gap LAC project looked at gender data gaps for five countries that are part of the UN Economic Commission for Latin America and the Caribbean (ECLAC). The selection of these countries was based on ECLAC's sub-regional representation; it also sought a diverse representation of the national statistical office's capacity to produce gender data.

The selection of five countries from Latin America and the Caribbean was made in consultation with staff from ECLAC. The selected countries were: Colombia, Costa Rica, Dominican Republic, Jamaica, and Paraguay.

Country assessments

The project examined the availability of the selected indicators in national and international databases from 2010 onwards. Differences between the availability of indicators (and their disaggregations) in international and national databases occur because of adjustments made for international comparability; the use of different data collection instruments; or because countries choose not to publish indicators produced by international agencies.

A standard spreadsheet template was used for the 15 African and the five LAC assessments. The template listed the goal, target, indicator, and reference numbers, indicator name, tier classification, and the designated custodian or primary international agency for each indicator. The assessments were carried out by consultants and Open Data Watch staff under the supervision of the project manager and the director of research.

Assessing data availability for SDG indicators in international databases was a two-step process: the team first looked for data in the SDG Global Database maintained by the UN Statistics Division and then looked for data on the website(s) of the so-called custodian agencies or the World Bank's World Development Indicators. For non-SDG indicators, assessors looked for data published by inter-governmental organizations that are primarily responsible for publishing relevant statistics for the topic of interest. For the purpose of this report, these are referred to as primary international agencies.

At the national level, the team looked for data located on national websites maintained by the national statistical offices and other ministries and agencies that are responsible for disseminating statistics. In some cases, Google searches were used to locate sources. Research reports or other non-official sources were included if they were based on data collected in the country and were well documented. Non-official reports located on websites maintained within the country were treated as national data. As a practical matter, precedence was given to high level, readily accessible sites of official agencies.

Because of the ambiguous provenance of data stored on Open Data for Africa portals and DevInfo databases, these sources were not included as national or international data. The exception is Jamaica's JamStats Secretariat, which explicitly mentions its management of its DevInfo portal.¹

Data collection

Assessors were responsible for recording the following information:

- **International data source and metadata location:** For SDG indicators, assessors looked for data located on the SDG Global Database and on websites of custodian agencies. For non-SDG indicators, assessors looked for data on websites of the primary international agency. Upon completion of the indicator search, assessors recorded the following information:
 - Source
 - Navigation instructions for finding or generating datasets (if applicable)
 - Indicator name

¹ <http://www.jamstats.gov.jm/AboutUs/tabid/55/Default.aspx>

- Number of observations
- Available disaggregations
- The URL of the metadata
- **International data availability notes:** Assessors provided brief notes, explaining the availability of data and the basis for scoring.
- **International data availability score:** Based on the availability of data on the SDG Global Database and the custodian agency (or primary international agency), assessors assigned a score of:
 - A: Specified indicator available with all suggested disaggregations
 - B: Indicator available but lacks one or more disaggregations
 - C: Related indicator with or without disaggregations
 - X: Not available
- **International data – sex-disaggregation score:** After scoring data availability, assessors scored whether the indicator was disaggregated by sex, with the options of:
 - A: Sex-disaggregation available
 - F: Female-specific indicator²
 - X: Not available

Thus, an indicator could be scored as lacking one or more disaggregations (B) but still receive a score of A or F for sex-disaggregation. Or an indicator with multiple disaggregations could be scored as BX if it was not published with sex-disaggregation.

- **National data source and metadata location:** Assessors were encouraged to catalogue the of availability of publications, datasets, and databases across national statistical offices and ministry websites to help them easily access relevant publications. The project manager provided guidance and assistance to assessors to find reports of Demographic and Health Surveys, Multiple Indicator Cluster Surveys, Living Standard Measurement Surveys, Labor Force Surveys, and censuses, along with statistical yearbooks and similar sources. When finding relevant publications or datasets, Google searches were used as well. Assessors were encouraged to be aware of the structure of government URLs, as this can help refine their Google search (such as: “Uganda literacy rates education go.ug”). Upon completion of the indicator search, assessors recorded the following information:
 - Link to dataset or publication
 - Name of dataset (and page number for PDF publications)
 - Indicator name
 - Number of observations
 - Disaggregations available
 - URL of the metadata
- **National data availability notes:** Assessors provided brief notes, explaining the availability of data and the basis for scoring.

² Female-specific was designated for indicators that only pertain to girls, women, or single-sex.

- **National data availability score:** Scoring was based on the same rubric used for international data.
- **National data sex-disaggregation score:** Scoring was based on the same rubric used for international data.

Notes and observations on the indicator assessment process

- Because of lags in data collection and compilation, data from the most recent years are likely to be missing, so data that are currently in preparation but unpublished are not included. For those reasons, the results may not fully reflect new data collection programs initiated after the announcement of the SDGs in 2015.
- The dates of publication for indicators were recorded, but scores are not based on the number of observations, but rather, the availability of an indicator (even if there is only one observation).
- If an indicator has a score of “A” for international or national level availabilities, then the score of sex-disaggregation must be “A” or “F.”
- For the indicator availability score of “A,” the description of the specified indicator must match the located indicator, along with having all required disaggregations, including sex. There are instances where indicators from international or national-level sources match the SDG indicator by having sex-disaggregation but still lack a component. An example is indicator 8.5.2: unemployment rate by sex, age, and persons with disabilities. If an indicator was available by sex, but was missing other required disaggregations, then a score of “B” was given for indicator availability, and a score of “A” was given for disaggregation.

Challenges

Locating data availability at the national-level is not as structured as at international-level. During the research period, assessors accessed multiple national-level websites and publications to find relevant datasets. Furthermore, reports and statistical compilations derived from surveys or entries in statistical abstracts and yearbooks may show only one observation or an incomplete time series. Therefore, assessors accessed multiple publications to record multiple observations.

Box 1 highlights challenges in finding national-level data for Bridging the Gap Africa

Bridging the Gap Africa	
Botswana	For some annual publications, such as Vital Statistics Reports or Crime Statistics Reports, assessors faced additional challenges of documenting each annual publication to record an observation.
Côte d’Ivoire	Greater reliance in the use of Demographic and Health Survey reports, which are available on the NSO website. Publications from ministry websites did not have datasets that fully meet the selected indicators — either similar indicators are available, or the data are referenced within text. For other indicators where DHS reports are not referenced, the assessor noticed discrepancies in the timeliness of data between the NSO website and other ministry websites. While data from 2010 onwards are available on the NSO website, the assessor noted that the ministry website has more recent data.

Bridging the Gap Africa	
Ethiopia	On the Ministry of Education website, reports such as Education Statistics Annual Abstract 2015/16 have education data prior to 2008 available. While the reports are new, the observations are available for years prior to 2010, which cannot be recorded per our methodology.
Ghana	The assessor solely relied on the Ghana Statistical Service website, as other ministry websites had very little to no relevant data. The assessor encountered challenges in sorting through several different publications that have data on similar themes (such as health and education). With similar data being located across different publications, which lead to greater challenges in finding the best datasets.
Kenya	Kenya publications sometimes will include graphs with no data labels, and corresponding tables were not included in the publication. In such cases, we were not able to use that data since there were no data values available. Also, several Statistical Abstracts had coverage for only one specific year, so multiple versions needed to be kept open to verify data points.
Lesotho	<p>For many indicators, various observations were available in different reports in the Lesotho Bureau of Statistics website – this is a difference from the challenges we faced in assessing Botswana. An example is of indicator 9.2.2 – manufacturing employment as a proportion of total employment, where 2011 data are available in Lesotho’s DHS report and 2014/15 data are available in the Continuous Multi-Purpose Survey 3rd Quarter 2014/15 report.</p> <p>The assessor also observed that the latest DHS report available on the NSO or on any ministry website is from 2011. However, reference of Lesotho Demographic and Health Survey 2014 report is available on DHS website, with weblink to publication which can be downloaded. Although the report is available on the DHS website, the assessor was not able cite the report, as it is not available on the NSO or other ministry websites.</p>
Malawi	Many reports available through the national statistical office of Malawi have only one observation available. These reports include the DHS, Welfare Monitoring Survey, Integrated Household Survey reports. Assessors faced additional challenges by going through prior publications in order to record multiple observations.
Nigeria	<p>Data for numerous SDG indicators are available on Nigeria’s SDG Indicators Baseline Report (2016). While many datasets are available on the Baseline Report with proper citations, assessors could not access the underlying source for some indicators.</p> <p>An example is indicator 3.3.3 Malaria incidence per 1,000 population, where the SDGs Study 2016 was cited as the source. Users could not access detailed metadata or questionnaires for this study.</p>
Rwanda	Many statistical yearbooks on the National Institute of Statistics of Rwanda website were not consistent with table headings and numberings. Depending on the dataset, the statistical yearbooks give data for a single year or omit years all together.
Senegal	For some reports on the Agence National de la Statistique et de la Démographie website, such as DHS and Economic and Social Situation of Senegal reports, assessors faced additional challenges by documenting each annual publication to record an observation.
South Africa	Many reports available on the Statistics South Africa website have only one observation available. These reports include the Quarterly Labour Force Survey or the General Household Survey. Assessors faced additional challenges by going through prior publications in order to record multiple observations. For many indicators under SDG 8, our assessors recorded over five sources.

Bridging the Gap Africa	
Tanzania	<p>The primary challenge our assessors faced was distinguishing data between Tanzania (mainland) and the United Republic of Tanzania (Tanzania and Zanzibar). DHS reports available on National Bureau of Statistics of Tanzania, have data available for both Tanzania (mainland) and Zanzibar. However, Integrated Labour Force Survey Analytical Reports available on the NSO website are only available for Tanzania (mainland). Data on the Ministry of Education and the United Republic of Tanzania – Government Basic Statistics Portal are only available for Tanzania (mainland).</p> <p>For the purpose of this research, we allowed the recording and scoring of data availability for Tanzania (mainland).</p>
Uganda	<p>For annual reports available on the Uganda Bureau of Statistics website, such as DHS, Education Abstract, and Uganda National Abstract, assessors faced additional challenges by documenting each annual publication to record multiple observations.</p> <p>Many statistical yearbooks on the Uganda Bureau of Statistics website were not consistent with table headings and numberings. Depending on the dataset, the statistical yearbooks give data for a single year or omit years all together.</p>
Zambia	<p>Assessors encountered website downtime of ministry websites during the assessment period. Due to a lack of centralization of data, there were data on ministry websites that assessors once viewed but could no longer access due to the website downtime.</p>
Zimbabwe	<p>Towards the completion of Zimbabwe’s country-level data availability assessment, the website for the Zimbabwe National Statistics Agency website went down for a few days. When the Zimbabwe National Statistics Agency (ZimStat) was functioning, many reports, such as Labour Force Surveys, Demographic and Health Surveys, were no longer available. Additionally, ZimStat’s search function was no longer functioning. Initially, this posed some challenges in verifying accuracy of the datasets, however, the assessor downloaded all relevant publications prior to the website’s shutdown.</p>

Box 2 highlights challenges in finding national-level data for Bridging the Gap LAC.

Bridging the Gap LAC	
Colombia	<p>For annual survey reports available on the DANE website, such as the Encuesta de Calidad de Vida, assessors faced additional challenges by documenting each annual publication to record multiple observations. Similarly, assessors encountered similar obstacles on the Ministry of Health’s Indicadores Básicos report.</p>
Costa Rica	<p>No significant challenges. However, in areas where data are not available on the NSO’s SDG portal, assessors found proxy datasets elsewhere.</p>
Dominican Republic	<p>No significant challenges. However, in areas where data are not available on the NSO’s SDG portal, assessors found proxy datasets elsewhere.</p>
Jamaica	<p>The primary source of data was the Jamaica Voluntary National Report (2018). While many datasets are available on the Voluntary National Report with proper citations, assessors could not access the underlying source on many indicators.</p> <p>An example is indicator 2.2.2, where the Voluntary National Report cited the Jamaica Survey of Living Conditions. However, users cannot find the survey report on the NSO or other ministry websites.</p>
Paraguay	<p>No significant challenges. However, in areas where data are not available on the NSO’s SDG portal, assessors found proxy datasets elsewhere.</p>

Microdata Assessment

Background

Exploration of the microdata – census, survey, or administrative records used to produce the most recent estimate of the indicator – pinpoints the underlying instruments and examines whether data are in fact being collected but not being further used or made accessible. By better understanding the production and availability of gender data at these three levels, we can draw specific lessons on how to fill gender data gaps.

The study links SDG indicators to their microdata sources and provides a summary data page offering a description of the indicator, documentation of the indicator produced by each country, and its microdata sources. The information recorded during the indicator assessments was used to identify the censuses, surveys, or administrative records used to construct the indicators found in national databases. Survey questionnaires were examined as needed to clarify sources and the availability of disaggregations.

The goal of the microdata assessment is to create a record of the availability of the microdata used to produce each indicator, to identify systematic reasons for gaps in the statistical record, and to determine the means of filling those gaps. To understand the general landscape of microdata availability across the selected countries, the research team conducted a preliminary mapping exercise to examine the availability of surveys of possible relevance to the six domains. These included censuses, household income and expenditure surveys, labor force surveys, Demographic and Health surveys, Multiple Indicator Cluster Surveys, and general household surveys. The primary sources used to find available microdata include the IHSN Data Catalogue, World Bank Microdata Library, and the countries' NADA portals, if available.

The team then formed a template as a basis for preparing indicator summary pages for the gender-relevant SDG indicators. For Bridging the Gap Africa, the research team worked on indicator summary sheets for 68 gender-relevant SDG indicators. For Bridging the Gap LAC, the research team worked on indicator summary sheets for 84 gender-relevant SDG indicators.

Each report contains:

- SDG indicator number and indicator description
- Relevant notes from international metadata
- A list of available data from national sources that were used to assess the indicator's availability and disaggregation. In the situation where there are multiple sources or publications used to assess an indicator, only the latest source is recorded
- A list of the principal microdata sources used to construct the indicator for each country with available data
- Conclusions and recommendations

Upon completion of the indicator summary pages, the identified microdata sources were matched to the surveys located through the microdata mapping exercise to record indicators that can be constructed from existing surveys. The underlying data for indicators that were built from administrative sources were difficult to find but the most likely administrative source was noted in the summaries.

An example of an indicator summary page is shown in Annex 2.

Challenges and observations during the microdata assessment

- In examining surveys for potential disaggregation, it could be difficult to know what data had been collected. Survey modules were encountered that did not specify whether the questions were directed to all members of a household or to a head of household or other respondent. Without this information, it was difficult to determine whether the data could be constructed only for the household population or for the head of household or whether the survey response might have been influenced by the sex of the respondent.
- Survey questionnaires that were provided in an image or other format didn't allow for the searching of key words. Manual searches through these questionnaires took the team much longer to analyze them.
- Indicators that are constructed from administrative datasets did not have the proper source and metadata available for assessors to identify and view the underlying data. When administrative datasets are used to construct the indicators, the ministry responsible for the data is often referenced but without any mention of the name or location of the dataset. Attempts were made to find these data on the ministry websites that were noted but they are either not available or impossible to find without more information about the underlying datasets.

Annex 1: Gender-relevant Indicators

Table A1 lists the 104 indicators included in the Bridging the Gap Africa assessments, along with the 93 indicators in the Bridging the Gap LAC assessments. SDG indicators are shown with the indicator number and tier classification assigned by the IAEG-SDG. Indicators from the Minimum Set of Gender Indicators or from UN Women’s list of supplemental indicators were assigned a number by the research team based on their relationship to the SDG targets with the addition of an alphabetic character in the rightmost position. Tier classification for the Minimum Set indicators were assigned by the IAEG-GS.

The original source of the indicators is coded as follows:

- AGI Additional gender indicators in SDGs
- MIN Indicators from the Minimum Set of Gender Indicators proposed by IAEG-GS
- SUP Supplemental indicators proposed by UN Women
- UNW SDG gender indicators identified by UN Women

The development data domains are coded as follows:

- ECON Economic
- EDUC Education
- ENVT Environmental sustainability
- HEAL Health
- HUMN Human security
- PART Public participation

Table A1: List of gender-relevant indicators included in Bridging the Gap Africa and LAC

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
1.1.1	UNW	Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)	Tier I	Tier I	ECON	Yes	Yes
1.2.1	UNW	Proportion of population living below the national poverty line, by sex and age	Tier I	Tier I	ECON	Yes	Yes
1.2.2	UNW	Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	Tier II	Tier II	ECON	Yes	Yes
1.3.1	UNW	Proportion of population covered by social protection floors/systems, by sex, distinguishing children, unemployed persons, older persons, persons with disabilities, pregnant women, newborns, work- injury victims and the poor and the vulnerable	Tier II	Tier II	ECON	Yes	Yes
1.4.1	AGI	Proportion of population living in households with access to basic services	Tier II	Tier II	ENVT	No	Yes
1.4.2	AGI	Proportion of total adult population with secure tenure rights to land, (a) with legally recognized documentation, and (b) who perceive their rights to land as secure, by sex and type of tenure	Tier II	Tier II	ECON	No	Yes
1.5.1	AGI	Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population	Tier II	Tier II	ENVT	Yes	Yes
		Duplicate indicators: 11.5.1, 13.1.1					

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
2.1.1	AGI	Prevalence of undernourishment	Tier I	Tier I	HEAL	Yes	Yes
2.1.2	AGI	Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES)	Tier II	Tier II	HEAL	No	Yes
2.1.X	SUP	Prevalence of anemia among women of reproductive age			HEAL	Yes	Yes
2.2.1	AGI	Prevalence of stunting (height for age <-2 standard deviation from the median of the World Health Organization (WHO) Child Growth Standards) among children under 5 years of age	Tier I	Tier I	HEAL	Yes	Yes
2.2.2	AGI	Prevalence of malnutrition (weight for height >+2 or <-2 standard deviation from the median of the WHO Child Growth Standards) among children under 5 years of age, by type (wasting and overweight)	Tier I	Tier I	HEAL	Yes	Yes
2.2.X	MIN	Proportion of adults who are obese, by sex			HEAL	Yes	No
2.2.y	SUP	Share of women aged 15-49 whose BMI is less than 18.5 (underweight)			HEAL	Yes	Yes
2.3.2	AGI	Average income of small-scale food producers, by sex and indigenous status	Tier II	Tier II	ECON	No	Yes
3.1.1	UNW	Maternal mortality ratio	Tier I	Tier I	HEAL	Yes	Yes
3.1.X	MIN	Antenatal care coverage			HEAL	Yes	No
3.1.2	UNW	Proportion of births attended by skilled health personnel	Tier I	Tier I	HEAL	Yes	Yes
3.2.1	AGI	Under-five mortality rate	Tier I	Tier I	HEAL	Yes	Yes
3.2.2	AGI	Neonatal mortality rate	Tier I	Tier I	HEAL	Yes	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
3.3.1	UNW	Number of new HIV infections per 1,000 uninfected population, by sex, age and key populations	Tier II	Tier I	HEAL	Yes	Yes
3.3.X	MIN	Women's share of population aged 15-49 living with HIV/AIDS			HEAL	Yes	No
3.3.Y	MIN	Access to anti-retroviral drug, by sex			HEAL	Yes	No
3.3.2	AGI	Tuberculosis incidence per 100,000 population	Tier I	Tier I	HEAL	Yes	Yes
3.3.3	AGI	Malaria incidence per 1,000 population	Tier I	Tier I	HEAL	Yes	Yes
3.3.4	AGI	Hepatitis B incidence per 100,000 population	Tier II	Tier I	HEAL	Yes	Yes
3.3.5	AGI	Number of people requiring interventions against neglected tropical diseases	Tier I	Tier I	HEAL	Yes	Yes
3.4.1	AGI	Mortality rate attributed to cardiovascular disease, cancer, diabetes or chronic respiratory disease	Tier I	Tier I	HEAL	Yes	Yes
3.4.2	AGI	Suicide mortality rate	Tier I	Tier I	HEAL	Yes	Yes
3.4.X	MIN	Life expectancy at age 60, by sex			HEAL	Yes	No
3.4.Y	MIN	Adult mortality by cause and age groups			HEAL	Yes	No
3.5.2	AGI	Harmful use of alcohol defined according to the national context as alcohol per capita consumption (aged 15 years and older) within a calendar year in liters of pure alcohol	Tier I	Tier I	HEAL	Yes	Yes
3.6.1	AGI	Death rate due to road traffic injuries	Tier I	Tier I	HEAL	Yes	Yes
3.7.1	UNW	Proportion of women of reproductive age (aged 15-49 years) who have their need for family planning satisfied with modern methods	Tier I	Tier I	HEAL	Yes	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
3.7.2	UNW	Adolescent birth rate (aged 10-14 years; aged 15-19 years) per 1,000 women in that age group* <ul style="list-style-type: none"> ▪ For the purpose of this research, aged 10-14 will be omitted. 	Tier II	Tier I	HEAL	Yes	Yes
3.7.X	MIN	Contraceptive prevalence among women who are married or in a union, aged 15-49			HEAL	Yes	No
3.9.1	AGI	Mortality rate attributed to household and ambient air pollution	Tier I	Tier I	ENVT	Yes	Yes
3.9.2	AGI	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)	Tier I	Tier I	ENVT	Yes	Yes
3.9.3	AGI	Mortality rate attributed to unintentional poisoning	Tier I	Tier I	HEAL	Yes	Yes
3.a.1	AGI	Age-standardized prevalence of current tobacco use among persons aged 15 years and older	Tier I	Tier I	HEAL	Yes	Yes
3.b.1	AGI	Proportion of the target population covered by all vaccines included in their national programme	Tier II	Tier I	HEAL	No	Yes
4.1.1	AGI	Proportion of children and young people: (a) in grades 2/3; (b) at the end of primary; and (c) at the end of lower secondary achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	Tier III (a)/ Tier II (b,c)	Tier II	EDUC	Yes	Yes
4.1.X1	MIN	Adjusted net enrolment rate in primary education by sex			EDUC	Yes	No

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
4.1.X2	MIN	Gross enrolment ratio in secondary education, by sex			EDUC	Yes	No
4.1.X3	MIN	Gross enrolment ratio in tertiary education, by sex			EDUC	Yes	No
4.1.X4	SUP	Illiteracy rates, by sex			EDUC	Yes	Yes
4.1.X5	MIN	Adjusted net intake rate to the first grade of primary education, by sex			EDUC	Yes	No
4.1.X6	SUP	Proportion of women with six or less years of education			EDUC	Yes	Yes
4.1.X7	MIN	Primary education completion rate (proxy), by sex			EDUC	Yes	No
4.1.X8	MIN	Gross graduation ratio from lower secondary education, by sex			EDUC	Yes	No
4.1.X9	MIN	Effective transition rate from primary to secondary education (general programs), by sex			EDUC	Yes	No
4.1.X10	SUP	Proportion of women with less than a high school diploma			EDUC	Yes	Yes
4.2.1	AGI	Proportion of children under 5 years of age who are developmentally on track in health, learning and psychosocial well-being, by sex	Tier III	Tier II/III	HEAL	No	Yes
4.2.2	UNW	Participation rate in organized learning (one year before the official primary entry age), by sex	Tier I	Tier I	EDUC	Yes	Yes
4.3.1	UNW	Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by sex	Tier II	Tier II	EDUC	Yes	Yes
4.3.X	SUP	Primary and secondary out of school rates, by sex			EDUC	Yes	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
4.4.1	AGI	Proportion of youth and adults with information and communications technology (ICT) skills, by type of skill	Tier II	Tier II	EDUC	Yes	Yes
4.4.X	MIN	Share of female science, engineering, manufacturing and construction graduates at tertiary level			EDUC	Yes	No
4.5.1	AGI	Parity indices (female/male, rural/urban, bottom/top wealth quintile and others such as disability status, indigenous peoples and conflict-affected, as data become available) for all education indicators on this list that can be disaggregated • To score AA: gender parity index plus one other index must be available	Tier I/II/III depending on indice	Tier I/II/III depending on indice	EDUC	No	Yes
4.5.X	MIN	Educational attainment of the population aged 25 and older, by sex			EDUC	Yes	No
4.6.1	UNW	Proportion of population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	Tier II	Tier II	EDUC	Yes	Yes
4.6.X1	MIN	Youth literacy rate of persons (15-24 years), by sex			EDUC	Yes	No

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
4.a.1	UNW	Proportion of schools with access to (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions) Note: Only component F is assessed.	Tier II	Tier II	EDUC	Yes	Yes
4.c.1	AGI	Proportion of teachers in: (a) pre-primary; (b) primary; (c) lower secondary; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country	Tier II	Tier II	EDUC	Yes	Yes
4.c.X	MIN	Proportion of females among tertiary education teachers or professors			EDUC	Yes	No
5.2.1	UNW	Proportion of ever-partnered women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the previous 12 months, by form of violence and by age	Tier II	Tier II	HUMN	Yes	Yes
5.2.2	UNW	Proportion of women (aged 15-49) subjected to sexual violence by persons other than an intimate partner, since age 15*	Tier II	Tier II	HUMN	Yes	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
5.3.1	UNW	Proportion of women aged 20-24 years who were married or in a union before age 15 and before age 18	Tier II	Tier I	HUMN	Yes	Yes
5.3.2	UNW	Proportion of girls and women aged 15-49 years who have undergone female genital mutilation/cutting, by age	Tier II	Tier I	HUMN	Yes	Yes
5.4.1	UNW	Proportion of time spent on unpaid domestic and care work, by sex, age and location	Tier II	Tier II	ECON	Yes	Yes
5.4.X	MIN	Average number of hours spent on paid and unpaid domestic work combined (total work burden), by sex			ECON	Yes	No
5.5.1	UNW	Proportion of seats held by women in (a) national parliaments and (b) local governments	Tier I (a)/ Tier II (b)	Tier I (a)/ Tier II (b)	PART	Yes	Yes
5.5.2	UNW	Proportion of women in managerial positions	Tier I	Tier I	PART	Yes	Yes
5.5.X1	MIN	Women's share of government ministerial positions			PART	Yes	No
5.5.X2	MIN	Percentage of female police officers			PART	Yes	No
5.5.X3	MIN	Percentage of female judges			PART	Yes	No
5.6.1	UNW	Proportion of women aged 15-49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care	Tier II	Tier II	HEAL	Yes	Yes
5.6.X	SUP	Proportion of women who have an independent/joint say in own health care			HEAL	Yes	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
5.a.1	UNW	(a) Proportion of total agricultural population with ownership or secure rights over agricultural land, by sex; and (b) share of women among owners or rights-bearers of agricultural land, by type of tenure	Tier II	Tier II	ECON	Yes	Yes
5.b.1	UNW	Proportion of individuals who own a mobile telephone, by sex	Tier I	Tier II	ECON	Yes	Yes
6.1.1	AGI	Proportion of population using safely managed drinking water services	Tier II	Tier II	ENVT	Yes	Yes
6.2.1	AGI	Proportion of population using safely managed sanitation services, including a hand-washing facility with soap and water	Tier II	Tier II	ENVT	Yes	Yes
7.1.X	SUP	Proportion of women with access to clean cooking fuel			ENVT	Yes	Yes
8.10.2	AGI	Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money-service provider	Tier I	Tier I	ECON	Yes	Yes
8.3.1	UNW	Proportion of informal employment in non-agriculture employment, by sex	Tier II	Tier II	ECON	Yes	Yes
8.3.X1	MIN	Proportion of employed who are own-account workers, by sex			ECON	Yes	No
8.3.X2	MIN	Proportion of employed who are contributing family workers, by sex			ECON	Yes	No
8.3.X3	MIN	Proportion of employed who are employers, by sex			ECON	Yes	No
8.3.X4	MIN	Proportion of employed working part-time, by sex			ECON	Yes	No

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
8.5.1	UNW	Average hourly earnings of female and male employees, by occupation, age and persons with disabilities	Tier II	Tier II	ECON	Yes	Yes
8.5.2	UNW	Unemployment rate, by sex, age and persons with disabilities	Tier I	Tier I	ECON	Yes	Yes
8.5.X	SUP	Labor force participation rate, by sex			ECON	Yes	Yes
8.6.1	AGI	Proportion of youth (aged 15-24 years) not in education, employment or training	Tier I	Tier I	ECON	Yes	Yes
8.7.1	UNW	Proportion and number of children aged 5-17 years engaged in child labor, by sex and age	Tier II	Tier II	ECON	Yes	Yes
8.8.1	UNW	Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status	Tier II	Tier II	HEAL	Yes	Yes
9.1.1	AGI	Proportion of the rural population who live within 2 km of an all-season road	Tier III	Tier II	ENVT	No	Yes
9.2.2	AGI	Manufacturing employment as a proportion of total employment	Tier I	Tier I	ECON	Yes	Yes
9.2.X	MIN	Percentage distribution of employed population by sector, each sex (Sectors here refer to Agriculture; Industry; Services) (SDG: share of employment in manufacturing)			ECON	Yes	No
10.1.1	AGI	Growth rates of household expenditure or income per capita among the bottom 40 per cent of the population and the total population	Tier II	Tier II	ECON	Yes	Yes
10.2.1	AGI	Proportion of people living below 50 per cent of median income, by sex, age and persons with disabilities	Tier III	Tier II	ECON	No	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
10.3.1	AGI	Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law Duplicate indicator: 16.b.1	Tier III	Tier II	HUMN	No	Yes
11.1.1	AGI	Proportion of urban population living in slums, informal settlements or inadequate housing	Tier I	Tier I	ENVT	Yes	Yes
11.2.1	UNW	Proportion of population that has convenient access to public transport, by sex, age and persons with disabilities	Tier II	Tier II	ENVT	Yes	Yes
11.7.1	AGI	Average share of the built-up area of cities that is open space for public use for all, by sex, age and persons with disabilities	Tier III	Tier II	ENVT	No	Yes
16.1.1	UNW	Number of victims of intentional homicide per 100,000 population, by sex and age	Tier I	Tier I	HUMN	Yes	Yes
16.1.2	AGI	Conflict-related deaths per 100,000 population, by sex, age and cause	Tier III	Tier II	HUMN	No	Yes
16.1.3	AGI	Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months	Tier II	Tier II	HUMN	Yes	Yes
16.1.4	AGI	Proportion of population that feel safe walking alone around the area they live	Tier II	Tier II	HUMN	Yes	Yes
16.2.1	AGI	Proportion of children aged 1-17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	Tier II	Tier II	HUMN	Yes	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
16.2.2	UNW	Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	Tier II	Tier II	HUMN	Yes	Yes
16.2.3	UNW	Proportion of young women and men aged 18-29 years who experienced sexual violence by age 18	Tier II	Tier II	HUMN	Yes	Yes
16.3.1	AGI	Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms	Tier II	Tier II	HUMN	Yes	Yes
16.3.2	AGI	Unsentenced detainees as a proportion of overall prison population	Tier I	Tier I	HUMN	Yes	Yes
16.5.1	AGI	Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months	Tier II	Tier II	PART	Yes	Yes
16.6.2	AGI	Proportion of population satisfied with their last experience of public services, specifically a) healthcare services, b) education services and c) government services	Tier III	Tier II	PART	No	Yes
16.7.1	AGI	Proportions of positions in national and local public institutions, including (a) the legislatures; (b) the public service; and (c) the judiciary, compared to national distributions, by sex, age, persons with disabilities and population groups	Tier III	Tier II	PART	No	Yes

Indicator number	Source	Indicator	Updated Tier Classification (by IAEG-SDG Members - Oct 2018)	Updated Tier Classification (by IAEG-SDG Members - May 2019)	Domain	Included in BtG Africa?	Included in BtG LAC?
16.7.2	AGI	Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group	Tier III	Tier II	PART	No	Yes
16.9.1	AGI	Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	Tier I	Tier I	PART	Yes	Yes
16.10.1	AGI	Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months	Tier II	Tier II	HUMN	No	Yes
17.8.1	AGI	Proportion of individuals using the Internet	Tier I	Tier I	ECON	Yes	Yes

Annex 2: Representative Indicator Summary Sheet

SDG Indicator 3.1.1 – from Bridging the Gap Africa

SDG Indicator Description: Maternal Mortality Ratio

Relevant notes from the international metadata

Production method for international databases

Calculated by dividing recorded (or estimated) maternal deaths by total recorded (or estimated) live births in the same period and multiplying by 100,000. Measurement requires information on pregnancy status, timing of death (during pregnancy, childbirth, or within 42 days of termination of pregnancy), and cause of death. The maternal mortality ratio can be calculated directly from data collected through vital registration systems, household surveys or other sources.

Other important issues to note:

- To measure maternal mortality in household surveys, the sisters of the mothers in the house are asked about which of their siblings passed away during, soon after, or as a result of pregnancy.
- Maternal mortality is a difficult indicator to measure because of the large sample sizes required to calculate an accurate estimate. This is evidenced by the fact that the MMR is expressed per 100,000 live births, which demonstrates that it is a relatively rare event. As a result, maternal mortality estimates are subject to large sampling errors.
- There are often data quality problems, particularly related to the underreporting and misclassification of maternal deaths. Therefore, data are often adjusted in order to take these data quality issues into account. Some countries undertake these adjustments or corrections as part of specialized/confidential enquiries or administrative efforts embedded within maternal mortality monitoring programs.

Source: <https://unstats.un.org/sdgs/metadata/files/Metadata-03-01-01.pdf>

Differences in the availability of the indicator at the international and national levels

Data are available for 15 countries across both international and national databases.

Data available from national sources

All of the countries had data available and were scored as AF. The countries using the DHS for their maternal mortality ratio measurements, however, didn't directly adhere to the SDG methodology and asked for deaths within 60 days (2 months) and not 42 days after the termination of pregnancy. This is probably because it is easier for people to remember if someone died within 2 months of pregnancy than 6 weeks but the discrepancy could still cause issues. The data that didn't come from the DHS made it difficult to understand where they came from: Botswana, Ghana, Lesotho, South Africa, and Zimbabwe.

Primary sources used to construct the indicator

AF Countries

Botswana

Source name: Maternal Mortality Ratio 2016

Can SDG indicator be constructed: They are creating the data, but it is unclear where it is coming from and the source is listed just as Botswana data from Ministry of Health and Wellness.

URL: <http://www.statsbots.org/bw/sites/default/files/publications/Botswana%20Martenal%20Mortality%20Ratio%202016%20%28002%29.pdf>

Cote D'Ivoire

Source name: DHS 2012

Can SDG indicator be constructed: Yes, indicator can be constructed.

URL: <http://catalog.ihsn.org/index.php/catalog/6036>

Ethiopia

Source name: DHS 2016

Can SDG indicator be constructed: Yes, indicator can be constructed.

URL: <http://catalog.ihsn.org/index.php/catalog/7199>

Ghana

Source name: Population and Housing Census 2010

Can SDG indicator be constructed: The census is using the prescribed SDG methodology and asking if the death occurred 6 weeks after pregnancy.

URL: <http://catalog.ihsn.org/index.php/catalog/3780>

Kenya

Source name: Demographic and Health Survey, various editions, 1998, 2003, 2008/09, 2014

Can SDG indicator be constructed: Yes, indicator can be constructed.

URL: <http://catalog.ihsn.org/index.php/catalog/6510>

Lesotho

Source name: 2011 Demographic Survey

Can SDG indicator be constructed: For the assessment, the Lesotho Demographic Survey 2011 and Census 2016 are cited. Lesotho Demographic Survey 2011 is not a DHS survey, and the 2016 census does not have questionnaire available. Therefore, for the purpose of seeing whether the indicator can be constructed, we will use Lesotho DHS 2014 as a source. Please note that the final report is not accessible on the NSO website. Looking at the questionnaire of DHS 2014, it is possible to construct the SDG indicator.

URL: <http://catalog.ihsn.org/index.php/catalog/6666>

Malawi

Source name: DHS 2015-16

Can SDG indicator be constructed: Yes, it is possible to construct the SDG indicator.

URL: <http://catalog.ihsn.org/index.php/catalog/7013>

Nigeria

Source name: DHS 2013

Can SDG indicator be constructed: Yes, it is possible to construct the SDG indicator.

URL: <http://catalog.ihsn.org/index.php/catalog/4749>

Rwanda

Source name: 2014-15 DHS

Can SDG indicator be constructed: Questions on maternal mortality are not available in the annexes of the DHS report, but since there are detailed datasets on MMR, it is assumed the SDG indicator can be constructed.

URL: <http://catalog.ihnsn.org/index.php/catalog/7117>

Senegal

Source name: 2010-11 DHS MICS

Can SDG indicator be constructed: Questions on maternal mortality are not available in the annexes of the DHS report, but since there are detailed datasets on MMR, it is assumed the SDG indicator can be constructed.

URL: <http://catalog.ihnsn.org/index.php/catalog/2461>

South Africa

Source name: MDG Country Report 2015

Can SDG Indicator be constructed: This publication is a compilation of statistics, not a survey report. Therefore, microdata or questionnaires are not available. However, looking at page 10, the sources for MMR are: DHS 1998 and vital registration. In this case, it is assumed that vital registration records are used to calculate this MDG/SDG indicator.

URL: http://www.statssa.gov.za/MDG/MDG_Country%20Report_Final30Sep2015.pdf

Tanzania

Source name: DHS 2015/16

Can SDG indicator be constructed: Yes, SDG indicator can be constructed.

URL: <http://microdata.worldbank.org/index.php/catalog/2739>

Uganda

Source name: DHS 2016

Can SDG indicator be constructed: Yes, SDG indicator can be constructed.

URL: <http://catalog.ihnsn.org/index.php/catalog/7389>

Zambia

Source name: DHS 2013-2014

Can SDG indicator be constructed: Yes, SDG indicator can be constructed.

URL: <http://catalog.ihnsn.org/index.php/catalog/6251>

Zimbabwe

Source name: Census 2012

Can SDG indicator be constructed: The questionnaire (question number 37) asks for deaths that happened a month after pregnancy and not the 6 weeks that is recommended in the methodology.

URL: <http://catalog.ihnsn.org/index.php/catalog/2986>

Conclusions and recommendations

Are the methods used by the countries with data sufficient to produce the SDG indicator?

Yes, countries using the DHS method are capable of producing the SDG indicator. Though, because of the high sample size requirements for the indicator, confidence intervals are used

for the indicator which can be broad and could make it more difficult to interpret the results and the trajectory of maternal mortality ratio over time. Utilizing surveys or systems with larger sample sizes, such as the census, might be used to increase the sample size and reduce the confidence intervals.

What are the common characteristics of the microdata sources used by most countries? What are the major exceptions, if any?

Most of the data reviewed was from DHS and most of the data sources had the same structure and contained the same information. However, all the DHS data sources use a different time interval when asking if the person died due to pregnancy. DHS asks if it was 2 months after pregnancy and the indicator calls for 42 days. On the other hand, the Zimbabwean population census asks about deaths one month after a pregnancy. This discrepancy may not have a large effect on the results, because the time recall between those two time periods may not be significant, but it is worth noting that countries are asking for different time periods and the majority of them are not following the 6 weeks protocol.

How would you recommend countries currently without data produce the indicator?

All countries surveyed have maternal mortality ratio data but if there is a need more frequent data, then it seems like some of the questions could be tacked on or calculated with Censuses or with improved CRVS systems. Because the census has a high sample size, this would possibly reduce the confidence intervals in the maternal mortality ratios and provide more precise measurements.

Are there other possible sources that could be used to create this indicator?

Aside from household surveys, vital registration records may be used to create this indicator (as in the case of South Africa). Though, this depends on the strength of these CRVS systems.