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Methodological Note to the Gender Data Outlook 2024

PARIS21 and UN Women

About this Methodological Note

This Methodological Note accompanies the Gender Data Outlook 2024. It outlines in detail the process of building the Gender Data Outlook Index.

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Abbreviations and acronyms

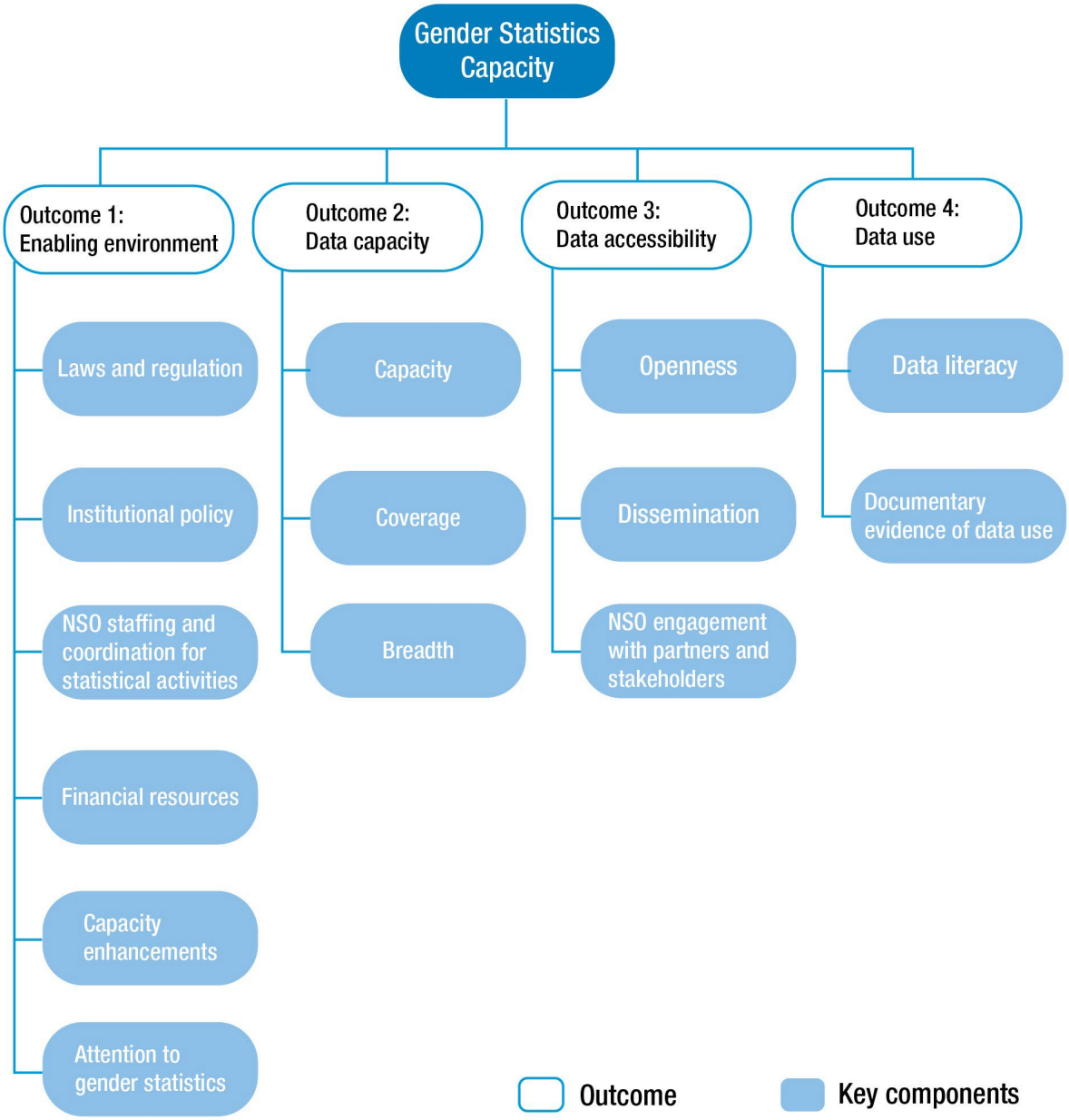
APHRC	African Population and Health Research Center
Compass	Gender Data Compass
GDO	Gender Data Outlook
GSGS	Global Survey on Gender Statistics
HDI	Human Development Index
IAEG-GS	Inter-Agency and Expert Group on Gender Statistics
ICRW	International Center for Research on Women
NSO	National statistics office
NSS	National statistical system
ODA	Official development assistance
ODIN	Open Data Inventory
ODW	Open Data Watch
PARIS21	Partnership in Statistics for Development in the 21st Century
PCA	Principal Component Analysis
SDG	Sustainable Development Goal
UN	United Nations
UN DESA	United Nations Department of Economic and Social Affairs
UNDP	United Nations Development Programme
UN Women	United Nations Entity for Gender Equality and the Empowerment of Women
UNSD	United Nations Statistics Division

1. GDO Index construction

The GDO Index is based on the gender data capacity framework outlined in the PARIS21 and UN Women (2024[1]) technical report (hereafter, gender data capacity framework). The framework has four dimensions, each highlighting a distinct element of gender data capacity: an enabling environment, data production, data accessibility and data use (Figure 1.1). Each dimension contains subcategories and an ideal indicator set as well as a narrower set of existing indicators that were recommended for this study.

This Section details the key steps and decisions taken during construction of the GDO Index. It first describes indicator selection including of those indicators constructed from newly available data (Section 1.1) and then the treatment of outliers (Section 1.2); indicator normalisation (Section 1.3); the analysis of relationships within and across dimensions (Section 1.4); the weighting of indicators (Section 1.5); the aggregation of indicators, subcategories and dimensions (Section 1.6); and robustness testing (Section 1.7).

Figure 1.1. Gender data capacity framework



Source: PARIS21 and UN Women (2024, p. 17[1]).
Note: Since the introduction of the framework in the PARIS21 and UN Women (2024[1]) paper, the terms Outcome and Key Components have been replaced with Dimensions and Subcategories, respectively. This Methodological Note will thus refer to and reflect these updated terms.

1.1. Indicator selection and construction

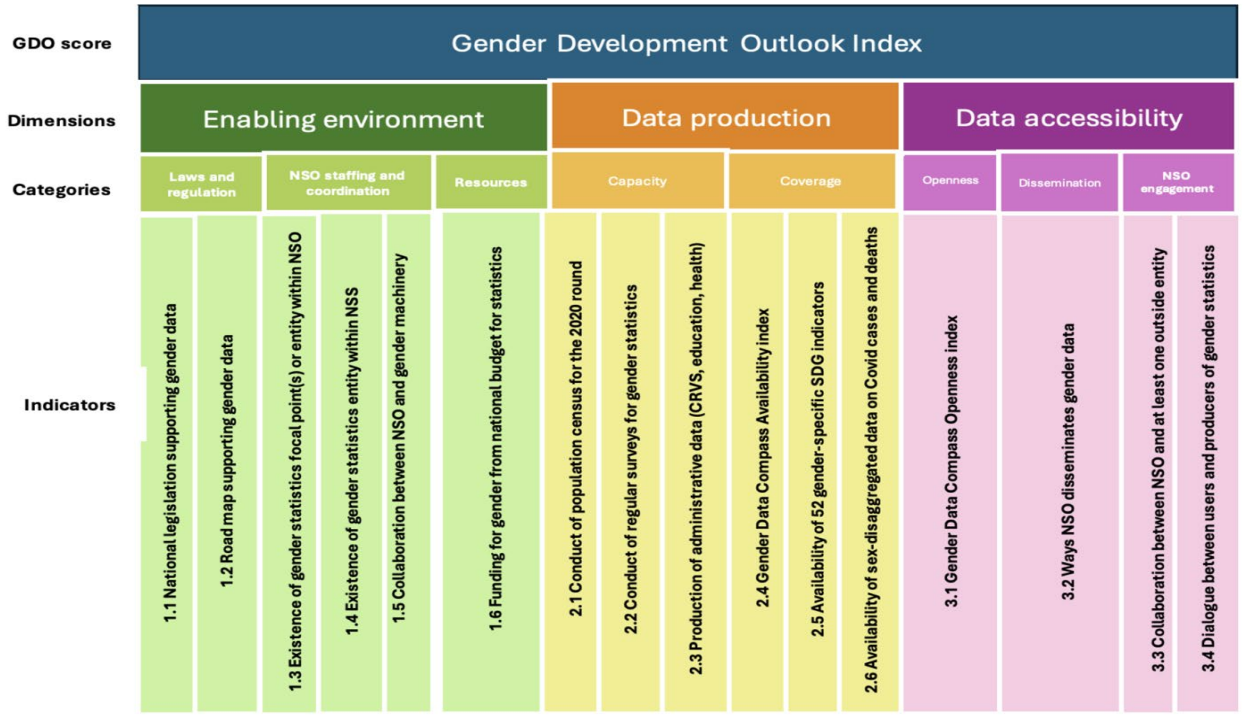
This methodological note updates the PARIS21 and UN Women, 2024[16] discussion in light of the quality and availability of the data to assemble the indicators identified for this study, and data which have become available since the framework was developed.

This first step of the GDO Index construction therefore involved review of the gender data capacity framework and relevant data to confirm which indicators could be included and review of newly available data, namely the 2022 round of the United Nations Statistics Division (UNSD) Global Survey on Gender Statistics (GSGS) and 2023 Gender Data Compass. Several indicators proposed in the gender data capacity framework were dropped from the Index for the following reasons:

- Redundancy – for instance, several indicators in data production referring to the availability of SDG indicators were, as expected, highly correlated
- Country coverage – owing to missing data, inclusion of the indicator would have reduced the sample size unduly
- Data sparsity – available indicators were judged insufficient to represent a subcategory
- Unreliability – concerns over the consistency or cross-national comparability of the source data, such as the policy documents used to produce the data use indicators
- Data availability – where the data exists but proved difficult to assemble, for instance on individual poverty and on the gap between the collection and reporting of sex-disaggregated data
- Newly available data – for example, the Open Data Watch (ODW) Gender Data Compass (or Compass) replaced indicators from its Open Data Inventory (ODIN).

Annex A elaborates upon the changes to the indicator set that were made following the gender data capacity framework (PARIS21; UN Women, 2024[1]). Figure 1.2 shows how indicators used in the GDO Index fit within the framework while Annex B provides metadata for the included indicators.

Figure 1.2. GDO Index Framework



Source: Authors' illustration.

The bulk of the 16 indicators used for the GDO Index construction derive from the 2022 round of the GSGS. This survey is conducted every ten years by the UNSD (see Box 1.1). The 2022 round amassed comprehensive information covering 107 countries and territories, of which 91 countries gave explicit consent for their data to be shared.[1] The UNSD draft questionnaire was available when the gender data capacity framework was written; the data became available subsequently. (Annex B details how the indicators used in the Index that were derived from UNSD data were constructed.) The ODW Gender Data Compass provides indicators of data production and accessibility. The Compass indicators are based on expert third-party review of the documentation available online for 185 countries for purposes of assessing gender data capacity along five so-called cardinal points: data availability, data openness, institutional foundations, capacity and financing (Open Data Watch, 2024).

Box 1.1. UNSD Global Survey on Gender Statistics

In 2022, the UNSD, in collaboration with the UN Regional Commissions and the IAEG-GS, conducted a global survey of national gender statistics programmes. This was the second such survey; the first was done ten years earlier. The Regional Commissions administered the GSGS, which was based on a common global questionnaire containing 17 questions. Representatives of the NSOs were asked to submit their responses after consultation with other entities in the country's national statistical system (NSS) as well as with the mechanism for the advancement of gender equality, line ministries, and any other relevant offices or agencies involved in the production, analysis, and use of gender statistics at the national level. The resulting data provide critical insights into their perceptions of progress in gender statistics over the previous ten years covering organisational settings and funding, data sources, legal requirements, collaboration and communication, and opportunities and challenges; the extent to which a gender perspective is mainstreamed into the NSS; and the relevance and impact of the work of the UN and its partners.

Source: UN Statistical Commission (Summary of Results of the Global Survey on Gender Statistics Common Questionnaire – in 2022, 2024), Summary of Results of the Global Survey on Gender Statistics Common Questionnaire – in 2022, https://url.uk.m.mimecastprotect.com/s/5Dr8CRo0QHvnoVwiNH2Mc?domain=unstats.un.org. This report, a background document for the 55th session of the UN Statistical Commission in February/March 2024, summarises results for 107 countries globally.

The Compass addresses some of the same areas as the UNSD GSGS. However, a comparison of the Compass assessment with UNSD responses shows that even for indicators that appear to be capturing the same concept, there is considerable divergence. There are various potential explanations related to the approach that the Compass and the UNSD each take to data collection (Box 1.2). The Compass team adopts a standardized approach to evaluating gender data capacity in all countries based on an external review of a country's laws, policies, and databases and will validate its findings with national statistics offices (NSOs) and other key stakeholders in future rounds.[2] On the other hand, responses to the UNSD survey are meant to reflect the perspectives of those within a country's national statistical system, that is, the NSOs were encouraged to consult with other entities within the country's NSS, the mechanism for the advancement of gender equality, line ministries, and any other relevant offices or agencies involved in the production, analysis, and use of gender statistics at the national level. In cases where it is mainly based on each respondent's knowledge and experience, it is possible that respondents in some countries may have been more assiduous or knowledgeable than others – and the data were not subject to external validation. The respondent's frame of reference also may affect responses to the GSGS questions; some may interpret such phrases in the questionnaire as "on a reoccurring and regular basis" differently from others.

More broadly, discussions with experts indicated that some concepts are, to varying extents, open to interpretation. For example, explicit evidence of a legislative mandate to produce gender statistics or even funding designated for this purpose may not emerge in a third-party review of available documentation. At the same time, respondents may perceive that a legal mandate exists or that funding is available for gender statistics even when this is not the case. It follows that more work is needed to better understand differing responses emerging from the Compass and the GSGS and how the two data sources can be reconciled. Furthermore, these differences point to a lack of internationally agreed standards, which makes the data sensitive to the approach, and highlight the need to develop standards and robust data collection methodologies that draw on NSO experience alongside the systematic review of available documentation.

Box 1.2. Differing approaches to data collection: the UNSD GSGS and Gender Data Compass

The GSGS and the Compass use different methodologies to assess countries' gender data capacity. The UNSD asks NSO representatives to provide information on gender data capacity in their country in consultation with relevant actors in the NSS. The Compass bases its analysis on third-party assessment of information on gender data capacity that can be derived from documents and data sets available online.

Take the example of whether statistical legislation in a country mandates the production and dissemination of gender statistics. The UNSD asks its respondents, "Are there laws/regulations in your country mandating the production and/or dissemination of gender statistics (or indicators) and related road map/strategy/action plan? (Check all that apply)"; the respondent is provided with the template shown in Figure 1.3 (representing question 5 of the GSGS, 2022).

Figure 1.3. Criteria for laws or regulations mandating the production and/or dissemination of gender statistics (or indicators) and related road map/strategy/action plan

	Existing laws/regulations	Existing road map/strategy/action plan	Neither existing
Statistics law/regulation	❑	❑	❑
Gender equality law/regulation	❑	❑	❑
Crime and criminal justice law/regulation	❑	❑	❑
Family law/regulation	❑	❑	❑
Law/regulation on mainstreaming gender-perspective into the production of statistics	❑	❑	❑
Other	❑	❑	❑

To score each country on "gender relevance in statistical laws" for the Gender Data Compass, in contrast, "the ODW team searched for the availability of statistical laws or decrees. If any are available online, the team searched for evidence of their gender relevance" (Open Data Watch, 2024[2]). Its scoring is shown in Table 1.1.

Table 1.1. Criteria for statistical laws or Decrees, Gender Data Compass

Criteria	Score
Statistical law is not available	N/A
There is no reference to gender in statistical law	0
There is reference to gender in statistical laws. This includes key words such as disaggregation, sex, gender, women, reproductive	100

Source: Open Data Watch, (Gender Data Compass Methodology Guide, 2024), *Gender Data Compass Methodology Guide*, https://docs.google.com/document/d/1phzCrmGf3bPHrShOlPCS0xSPOdLKgfc61QDzXP9DJKo/edit?rm=embedded&pli=1#heading=h.5uoc4mfz7mn4.

For the indicators in the enabling environment and data accessibility dimensions of the GDO Index, the UNSD GSGS is the main data source that informs the exercise since it derives from NSOs' responses for their respective NSS. The Compass data is the main data source for data production (four out of six indicators) and the source of one of the four data accessibility indicators. Data for the other two data

production indicators derive from the UN SDG database (UN Women and UN DESA, 2023[4]); a UN Women (2022[5]) methodological note; and the COVID-19 Sex-Disaggregated Data Tracker (Global Health 50/50, International Center for Research on Women and African Population and Health Research Center, 2022[6]). All data are for 2022 excepting the Compass data which is for 2023.Complementary indicators informing the GDO analysis derive from the PARIS21 (2023[7]) PRESS database, the OECD Creditor Reporting System database, the World Bank (World Bank 2021, World Bank Group n.d.) and PARIS21 text mining analysis (PARIS21, 2021[8]; PARIS21, 2023[7]). (See also Annex C.)

In the UNSD GSGS survey results, careful attention was given to the interpretation of non-response, or seeming non-response patterns. A key issue that needed to be addressed consistently in the UNSD GSGS survey results was how to interpret non-response, or seeming non-response. For most questions (those pertaining to indicators 1.1, 1.2, 1.5, 3.2, 3.3, 3.4), the survey provided an explicit negative response option, whereas for others (pertaining to 1.3, 1.4, 1.6), it only required positive responses. In the former scenario, there were cases in which respondents did not explicitly respond to a question or to parts of a question, whereas in the latter scenario, a negative response and no response were recorded in the same way. The patterns of (seeming) non-response were carefully analysed, and for all but one question (corresponding to indicator 3.4), non-response was presumed to denote that the country a lacked the characteristic or aspect being in the question (i.e. a negative response). For example, where the survey asked about the existence of a statistical law supporting the production and collection of gender data (part of indicator 1.1), both a negative response and non-response were presumed to indicate that no law existed. This interpretation of non-response was corroborated where possible; for three out of the six indicators in the enabling environment dimension (1.1, 1.2 and 1.6), Compass data from broadly comparable indicators were used to help validate responses where GSGS data appear to be missing. For indicator 3.4, only one country did not respond to the survey question; in that case, the data point was assumed to reflect genuine non-response and the country was dropped from the sample. Annex B elaborates upon the treatment of missing data for each indicator in the Index.

The available data were reviewed with the aim of generating two indicators of data use in policy to inform the GDO Index. One indicator concerned the use of gender statistics in national policy documents, and the other, the use of gender statistics relative to generic statistics in national policy documents (Annex C). These indicators were constructed for approximately 140 countries but were deemed insufficiently reliable at this stage for inclusion in the GDO Index. This was due in part to differences in the source material: the number and detail included in the available national policy documents varied dramatically across countries in ways that did not seem reflective of overall gender data capacity. The available data set typically included relatively more documents for lower-income countries, and often these documents were more detailed (perhaps because they may be used in requesting the official development assistance (ODA) of development partners). As a result, in the computation of the GDO Index, the fourth dimension of data use is not included (see Figure 1.2 and Annex C).

1.2. Treatment of outliers

As the newly constructed variables are binary or categorical, very few data points would be considered outliers. Upon review, the decision was made to preserve all data points given that they appear to reflect a range of different policy commitments to gender data capacity rather than measurement error. The secondary data used for this analysis will have been cleaned prior to their incorporation in the data set.

1.3. Normalisation of indicators

All data points in the Index are binary, categorical or computed as a percentage bounded between 0 and 100. Thus, it was unnecessary to standardise the data (e.g. through log transformation and/or the use of z-scores). It was decided instead to opt for a simple min-max normalisation to rescale the indicators on a 0-1 scale:

$$X_{normalised} \frac{= (X - X_{min})}{(X_{max} - X_{\min})}$$

Where X is the original value of the data point;
X_{max} is the maximum value of the indicator;
X_{min} is the minimum value of the indicator;
$X_{normalised}$ is the normalised value of the data point, which will range between 0 and 1.

Normalisation of indicators offers several inherent benefits. Adjusting indicators to a common scale enhances comparability and helps prevent bias, particularly in cases where certain indicators have larger absolute values. This process also facilitates the aggregation of indicators and mitigates the impact of outliers. However, normalisation can also assign more weight to differences in indicators that have a narrower range of values (Mazziotta and Pareto, 2021, pp. 41-52[9]).

1.4. Analysis of relationships within and across dimensions

The correlations between indicators within each dimension included in the Index were reviewed in terms of their strength and statistical significance to determine whether the expected relationships hold in practice and to ensure that none of the indicators are redundant. Across the dimensions, the relationships between indicators conformed to expectations, revealing very few statistically significant correlations. The correlations did not exceed 0.6 and were typically much lower.[3]

A principal components analysis (PCA) and factor analysis[4] were conducted on the normalised indicators within each dimension to thereby verify that the included indicators capture a coherent latent concept (Silcock and Gulrajani, 2020[9]). Eigenvalues represent the amount of variance explained by each factor, with values that are greater than one indicating that the corresponding factor explains more variance than any individual variable (University of California, Los Angeles, n.d.[10]). In each of the dimensions, according to the factor analysis, one dominant factor merges (eigenvalue>1), suggesting a conceptually coherent structure.[5]

1.5. Weighting of indicators

Decisions over weighting can be made using either normative or data-driven assessment (or so-called hybrid approaches).[6] A normative approach would require evaluating the relative importance of the indicators, subcategories and dimensions, informed by review of the existing literature and/or expert opinion. The advice of Atkinson et al. (2002[11]) is often cited[7] in this regard: “The interpretation of the set of indicators is greatly eased where the individual components have degrees of importance that, while not

necessarily exactly equal, are not grossly different." A data-driven approach instead determines weights from the actual data distribution, avoiding subjective value judgments, with two common approaches being PCA, which aims to describe the relationships between a set of indicators, and factor analysis, which aims to explain these relationships by identifying underlying factors (Decancq and Lugo, 2012[12]). Such methods can be applied within dimensions or across an entire set of indicators. Using either technique, weights (or loadings) can be derived based on each variable's contribution to one or more principal components or underlying factors. However, a significant downside of such approaches is their opacity – countries are ranked based on scores derived from principal components or factors that can be challenging to understand and interpret because of their abstract nature. Moreover, factor analyses implicitly assume that commonality is more significant than individual variance, which is a normative and potentially contentious assumption.

The approach taken in this exercise was to apply normative weights derived from the opinions of experts from PARIS21 and UN Women. Each dimension and subcategory are assigned an equal weight, as are the indicators within each subcategory. Factor analysis was also used to test the GDO Index for its sensitivity to the weights and aggregation method used in its construction (section 1.7). The robustness of the results suggests that the Index satisfies both data-driven and normative criteria.

1.6. Aggregation of indicators, subcategories and dimensions

Examination of the sample size for each indicator revealed some gaps in country coverage. To strike a balance between country coverage and the adequate representation of each concept, subcategory scores were computed for all those countries that have at least 60% coverage within a subcategory (e.g. two of three, or three of five non-missing values). A dimension score was computed for those countries for which all subcategories can be assigned a score and an index was computed for those countries for which all dimensions are assigned a score. The resulting sample consists of 83 countries. Table 1.2 shows details of the sample sizes for each dimension and the index.

Table 1.2. Indicators, subcategories and dimensions of the Gender Data Outlook Index

Dimension and subcategories	Indicator	Sample size	Using rule
Enabling environment			**91**
Laws and regulations			
Laws	1.1 Existence of statistical legislation supporting gender statistics	91	91
Road maps or action plans	1.2 Existence of road map or action plan supporting gender statistics	91	
NSO staffing and/or co-ordination			
Staffing	1.3 Gender statistics focal point or entity in the NSO	91	91
	1.4 Co-ordination – NSO and wider NSS	91	
Co-ordination	1.5 Collaboration – NSO and gender machinery	91	
Resources	1.6 NSO funding for gender statistics from national budget for statistics	91	
Data production			**178**
Capacity	2.1 Population and housing censuses	185	185
	2.2 Thematic surveys	176	

	2.3 Administrative data	185	
Coverage	2.4 Gender Data Compass availability index	185	199
	2.5 Availability of 52 gender-specific SDG indicators	193	
	2.6 Availability of sex-disaggregated data on crisis-related situations	198	
Data accessibility			**83**
Openness	3.1 Gender Data Compass openness index	185	185
Dissemination	3.2 Ways NSO disseminates gender data	91	91
NSO engagement with stakeholders and partners	3.3 NSO engagement with stakeholders to produce gender data	91	90
	3.4 Collaboration with and dialogue between users and producers	90	

While the process of index construction lends itself to diverse approaches to aggregating performance across dimensions, the focus in constructing the GDO Index was on average performance within and across dimensions.[8] Arithmetic averages allow full substitutability between indicators within dimensions and/or between dimensions, whereas the use of geometric averages rewards balanced performance by assuming limited substitutability between variables and/or dimensions. For the GDO Index, the decision was made to use arithmetic averages to aggregate indicators and subcategories – to permit substitutability between them – then to use a geometric average to aggregate dimensions. This is a similar method to the Human Development Index (HDI), which also relies on arithmetic means to produce dimension aggregates and then a geometric mean to produce the final index on the basis that income, health and education are non-commensurate. The respective formulas are as follows:

Arithmetic average: $\frac{1}{n}\sum_{i=1}^{n} x_i$

where X_{i-n} represent the indicators in a subcategory (or subcategories in a dimension) and n represents the number of indicators (subcategories)

Geometric average: Geometric average: $\left(\prod_{i=1}^{n} x_i\right)^{\left(\frac{1}{n}\right)}$

where X_{i-n} represent the dimension scores and n represents the number of dimensions.

For one country, Liechtenstein, the score for the enabling environment dimension was zero. Following standard practice (see UNDP 2022, p. 9), a minimum value of 0.01 is set in place of the zero score to avoid assigning the country a geometric mean of zero based on its score in a single dimension.

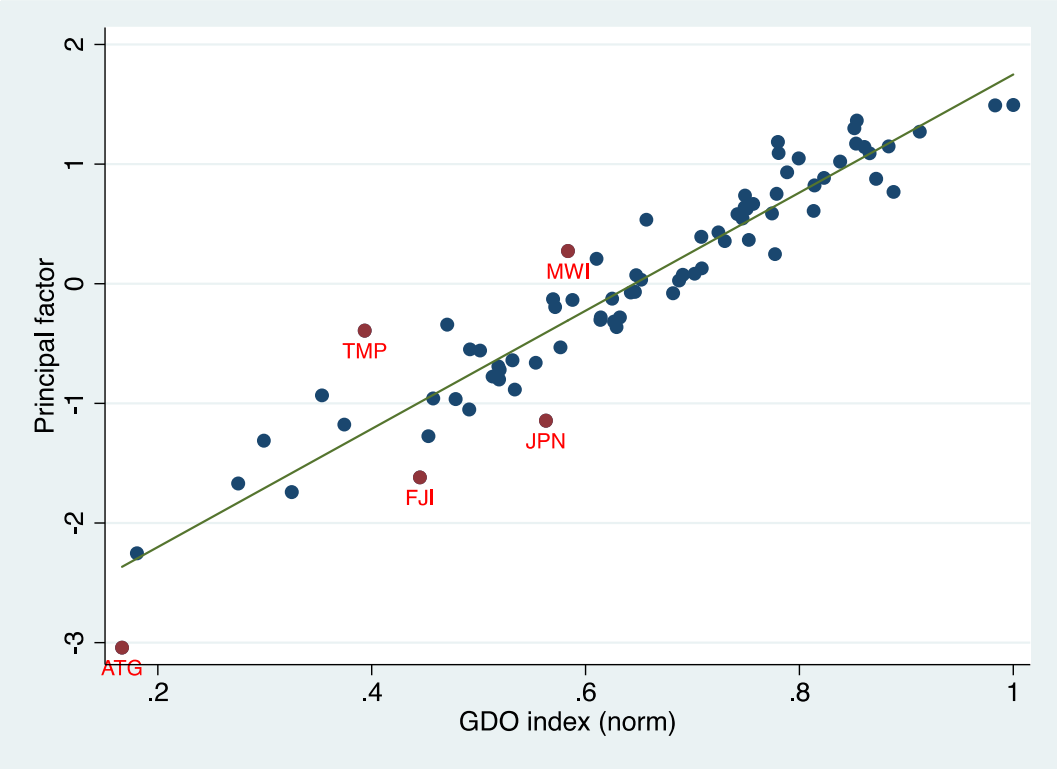
1.7. Sensitivity testing

A common sensitivity test is to compute the index minus each indicator in turn in order to test the robustness of the resulting country ranking. If the index is robust, the ranking should remain reasonably consistent – e.g. within roughly one-third of the size of the total countries being ranked (Silcock and Gulrajani, 2020[9]). The results from this test show that the median change is 0 (for all but four variables, for which it is either 1 or -1) and that there is just one change in rank in excess of 28 places (one-third of 83).[9] (Full rankings are available in the supplementary data file to this Note.)

Principal factor analysis was also used to create another version of the GDO Index (based on loadings of all indicators on dominant factor). By focusing on commonality among the variables, this technique should (partially) reduce any measurement error. Since missing data for this exercise were not imputed, the factor analysis has 78 countries and territories; missing are Liechtenstein, Nauru, Monaco, Syria, and the State of Palestine.[10] This factor-based version of the Index was then compared with the original version to identify outliers in terms of deviation from the trend line, based on the size of the residual (Figure 1.2). The countries with residuals that are than two standard deviations from the trend, shown in red in the figure, are Antigua and Barbuda, Fiji, Japan, Malawi and Timor-Leste.

A second factor-based index composed of only the indicators that correlate relatively highly in the original (on the grounds that these are likely to be more reliable measures) was tested as well. The results did not differ noticeably. The conclusion from this analysis is that Antigua and Barbuda, Fiji, Japan, Malawi and Timor-Leste may be outliers. The data for these countries are retained in the Index but should be treated with caution.

Figure 1.4. Factor-based version of GDO Index versus GDO Index to identify outliers



Source: Authors' illustration based on GDO Index analysis.

2. GDO Index analysis

This section of the Methodological Note analyses the coverage of the GDO Index and outlines the method used to probe further into the relationships among its component indicators. The first section describes the region and income group aggregates that can be constructed from the 83 countries included in the GDO Index sample. The second section describes the methodology underlying the cluster analysis used to better understand the relationships among the indicators by classifying countries according to key elements of their statistical systems.

2.1. Coverage of regional and income group aggregates

The data presented in the GDO rely on United Nations Statistics Division (UNSD) regional designations. Using the data sources and procedures presented earlier, the resulting Index contains 83 countries. These represent 52% of the global population, with global referring to the 195 UN-recognised countries or territories, included in the initial full data set. In line with standard practice (UN Women; UNDP, 2023, p. 37[13]), aggregates for income groups and regions should be presented when data are available for at least 50% of the countries in a particular group and at least two-thirds of the population in that group, criteria that are not met for any regions or income groups in our sample (see Annex D). Using the UNSD SDG regional groupings, the country coverage criterion is met for Europe and North America, while the population coverage criterion is met for Central Asia and Southern Asia and for Latin America and Caribbean, but no region meets both criteria.[11] Using World Bank income groups, the country coverage criterion is met for high-income countries and the population coverage criterion is met for lower-middle income countries, but no income group meets both criteria. For this reason, geographic and income-group based aggregates are not presented in the GDO.

2.2. Qualitative assessment of relationships among indicators

An additional descriptive and data-driven approach to understanding patterns in the data is to identify clusters, or groupings of countries, determined by the mathematical distance between different indicators and without insisting on a hierarchical ranking. The aim is to facilitate an understanding of which indicators of gender data capacity tend to be present together and the extent to which each indicator distinguishes clusters of countries.

Like principal component analysis (PCA) and factor analysis, cluster analysis can be considered a technique for data reduction. But while PCA and factor analysis are concerned with commonality and variance across the indicators of statistical capacity, cluster analysis is instead focused on commonality and variance between countries. It aims to produce a taxonomy and to organise groups of countries within

this taxonomy, such that observations in the same group are as similar to one another as possible and those in different groups are as different from one another as possible.[12]

A k-means cluster analysis procedure was used to identify relatively homogeneous groups of cases based on the indicators used in the GDO Index (with modifications to indicators 1.1, 1.2, 1.3 and 1.4, as described in Annex B). For the five countries with one missing data point, the missing data point was assigned the average for the other indicators in that subcategory to avoid pairwise deletion. Cluster centres were set up randomly, then updated in each iteration to a maximum of ten iterations or until convergence criteria had reached zero. A range of between 5 and 14 cluster solutions were examined, from which the 7-cluster solution was considered optimal. Two of these clusters contained one country each (respectively, Monaco and Nigeria), so the five clusters containing more than one member were retained in the analysis. The outputs of the analysis include cluster membership, distance information, final cluster centres, and an ANOVA table analysing differences between the cluster means (available in the supplementary data file to the Note).

Notes

[1] UN Statistical Commission (2024) provides summary results for the 107 countries which contributed to the 2022 GSGS (see Box 1.1).

[2] According to personal communication, Gender Data Compass.

[3] Full correlations between indicators, and between subcategories and dimensions, are available in the supplementary data file to this Note.

[4] PCA seeks to extract a new set of variables (or principal components) that are uncorrelated and to capture the maximum variance in the data without distinguishing shared and unique variance (Jolliffe and Cadima, 2016[15]). Factor analysis, in contrast, seeks to analyse the extent of shared variance amongst different indicators on the assumption that these reflect underlying latent constructs.

[5] Results available in the supplementary data file to this Note.

[6] For more information, see https://doi.org/10.1080/07474938.2012.690641.

[7] See for example https://doi.org/10.1016/j.jpubeco.2010.11.006 and https://doi.org/10.1093/acprof:oso/9780199689491.001.0001..

[8] This approach stands in contrast to other approaches such as factor-based approaches or the Alkire and Foster approach used in measures such as the Multidimensional Poverty Index, which requires interpreting each indicator in a binary fashion (e.g. non-deprived and deprived) and setting a threshold in terms of the number of deprivations that constitute deprivation or achievement (https://doi.org/10.1016/j.jpubeco.2010.11.006). This approach was not used because the aim was to understand gender data capacity as a continuum rather than a binary (achieved versus non-achieved).

[9] Chile drops 35 places when the variable on collaboration with at least one outside entity under the accessibility dimension is removed.

[10] All GDO results are presented following the SDG regional and sub-regional groupings. https://unstats.un.org/sdgs/indicators/regional-groups/

[11] Using UN Women regional designations, the country coverage criterion is met for Arab States and Europe and Central Asia, however, the population coverage criterion is not met in any region.

[12] The source of this paragraph is Colombia Mailman School of Public Health (n.d.).

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Annex A. Details of changes between the indicators in the gender data capacity framework vis-à-vis included in the GDO Index

The tables in this Annex shows differences between the indicators proposed in the PARIS21 and UN Women (2024[1]) technical report for this study and the indicators that were used to construct the GDO Index. The original numbers are those used in the former report.

Figure A.1. Enabling environment indicators: Six indicators used for the GDO Index

Subcategory	Original #	Indicator	Source	Changes made in constructing GDO Index	New #
Laws and regulations	1.1a	Existence of national statistical legislation supporting gender data and statistics	UNSD GSGS	Renumbered.	1.1
	1.1b	Existence of a road map, strategy or action plan supporting gender data and statistics	UNSD GSGS	Renumbered.	1.2
	1.1c	Existence of legislation mandating the conduct of specialised gender-based surveys	UNSD GSGS	Dropped owing to missing data for six countries and because it is a specific case of Indicator 1.1a, so it was considered redundant.	n.a.
NSO staffing / coordination	1.7	Existence of a gender statistics unit or individual within the NSO	UNSD GSGS	Renumbered.	1.3
		Existence of gender statistics entities in wider NSS (gender machinery, other ministries/agencies, a working or advisory group on gender statistics)	UNSD GSGS	This was not in original proposal.	1.4
	1.9	Evidence of regular collaboration – NSO and gender machinery	UNSD GSGS	Renumbered.	1.5
Resources	1.13	Proportion of NSO funding for gender statistics that derives from the national budget for statistics as opposed to the women's machinery or other sources, and its regularity	UNSD GSGS	Revised to refer to regular or irregular funding for gender statistics from the national budget for statistics (see Annex B).	1.6
	1.15	External financing (from official development assistance and private sources) that supports	PARIS21 PRESS database	Used for complementary analysis given it applies only to DAC member	n.a.

		gender data efforts as a percentage of external financing for statistical activities (three-year average)		countries and to ODA-eligible countries receiving such assistance.	
	1.17	Agility in the face of crisis – whether COVID-19 led to the maintenance of or an increase in UNSD GSGS NSO resource allocation for gender statistics	UNSD GSGS	Dropped because missing data for twenty countries reduced the sample size unduly.	n.a.
Attention to gender statistics	1.20	Number of civil society organisations (CSOs) active in both "Statistics" and "Gender issues and advancement of women" (potentially standardised as the share of CSOs active in each Derived from UNSD NGO register country)	Derived from UNSD NGO register	Dropped because the data source was deemed potentially unreliable as a measure of attention to gender data.	n.a.
	1.21	Whether a country identifies "Disaggregation of data on gender and population groups" as a priority area where the NSO plans to invest in capacity development over next three years	2021 Cape Town Framework Survey	Dropped because of an insufficiency of indicators in its assigned subcategory and its limited overlap with the UNSD GSGS countries.	n.a.

Source: PARIS21 and UN Women 2024: 26, Table 4.1

Table A.1. Data production indicators: Six indicators used for the GDO Index

Sub-category	Original #	Original indicator	Original source	Changes made in constructing GDO Index	New #
Capacity		Whether a population census has taken place or is being conducted for the 2020 round	Gender Data Compass	PARIS21 and UN Women (2024) recommended against using original indicator 2.1, 'Weaknesses in core gender data instruments' for this study owing to a lack of data. The Compass subsequently developed these indicators to capture this concept.	2.1
		Whether the country's statistical system conduct enough regular surveys to collect gender statistics	Gender Data Compass		2.2
		Whether country is producing sufficient administrative data (CRVS, education administrative surveys, health administrative systems)	Gender Data Compass		2.3
	2.2	Collection of specialised data relating to gender in previous five years	UN Women	Dropped because deemed redundant as the collection of time use data is included in new Indicator 2.2.	n.a.
Coverage	2.3	Gender mainstreaming in statistical production	UNSD GSGS	Dropped because inconsistently missing data impeded cross-country comparability.	n.a.
	2.4	ODIN – Gender Data Index coverage score: availability of 35 gender indicators or those with sex-disaggregation; timeliness	Open Data Watch	Replaced with newly available Gender Data Compass Availability index: availability of 53 gender	2.4

		(last 5-10 years); and geography (first/second administrative levels)		indicators or those with sex-disaggregation; timeliness (last 5-10 years); and geography (first/second administrative levels)	
	2.5	ODIN – Gender Data Index coverage score: gender relative to non-gender categories	Open Data Watch	Dropped because there is no analogue to this indicator in the Gender Data Compass (see new Indicator 2.4)	n.a.
	2.6	Percentage of Minimum Set of Gender Indicators available	UNSD	Dropped because deemed redundant as indicator 2.7 was selected to measure the availability of SDG data.	n.a.
	2.7	Percentage of 52 gender-specific indicators available to monitor progress on the Sustainable Development Goals (SDGs) in 2023	UN Women	Renumbered.	2.5
	2.8	Number of years needed to achieve 100 percent SDG gender data availability across 82 gender-specific SDG indicator series in 2022 or 2023	UN Women / UN DESA	Dropped because of a small sample size (72 countries).	n.a.
	2.9	Percentage of World Bank list of 50 gender-related SDG indicators available to monitor SDG progress	World Bank, UNSD	Dropped because deemed redundant as indicator 2.7 was selected to measure the availability of SDG data.	n.a.
	2.9a	Percentage of World Bank list of 50 gender-related SDG indicators available to monitor SDG progress relative to total number of SDG indicators	World Bank, UNSD	Dropped because deemed unnecessary given indicator 2.9 was not used.	n.a.
	2.11	Availability of individual (rather than household-based) poverty data	World Bank	Dropped due to lack of a cross-national data source	n.a.
	2.12	Gap between population estimates that can be sex-disaggregated and sex-disaggregated reporting of gender-related SDG indicators	World Bank, UNSD	Dropped because data is not available in the public domain.	n.a.
Breadth	2.13	Availability and accessibility of sex-disaggregated data on crisis-related situations (for Year 1: whether a country is providing sex-disaggregated data on COVID-19 cases and deaths, or only cases or deaths, or neither)	COVID-19 Sex-Disaggregated Data Tracker	Included in the Index as an indicator of coverage rather than breadth because it is the only 'breadth' indicator that is retained and can equally be considered a measure of coverage.	2.6
	2.14	Breadth of non-traditional data sources (geospatial, citizen-generated, modern media or private sector data) used to produce gender statistics	UNSD GSGS	Dropped because of missing data as well as a lack of alignment with the underlying factor in this dimension.	n.a.
	2.15	Breadth of administrative data sources used for gender statistics	UNSD GSGS		n.a.

	2.16	Breadth of economic data sources used for gender statistics	UNSD GSGS		n.a.
	2.17	Breadth of survey data sources used for gender statistics	UNSD GSGS		n.a.

Table A A.2. Data accessibility indicators: Four indicators used for the GDO Index

Subcategories	Original number.	Original indicator	Original data source	Changes made in constructing GDO Index	New #
Openness	3.1	ODIN Gender Data Index openness score, which is a composite including the availability of download options that make the data more accessible; an open data license or open data terms of use; data in machine-readable format; reference metadata; data in nonproprietary format	Open Data Watch	Replaced with newly available Gender Data Compass Openness index, a composite including the availability of download options that make the data more accessible; an open data license or open data terms of use; data in machine-readable format; reference metadata; data in non-proprietary format	3.1
	3.2	ODIN – Gender Data Index openness score: gender relative to non-gender categories	Open Data Watch	Dropped because there is no analogue to this indicator in the Gender Data Compass (see new Indicator 3.1)	n.a.
Dissemination	3.3	Number of ways the national statistical office (NSO) disseminates gender data covering publication(s), web/landing page, data portal(s) and/or data visualization tools	UNSD GSGS	Renumbered.	3.2
NSO stakeholder engagement	3.11	Number of stakeholders with whom the NSO collaborates regularly to produce gender statistics, and the regularity of that collaboration	UNSD GSGS	Revised to refer to regular or irregular collaboration with at least one stakeholder (see Annex B)	3.3
	3.12	Collaboration and dialogue between users and producers of gender statistics	UNSD GSGS	Renumbered.	3.4

Annex B. Metadata for indicators included in GDO Index

1. Enabling environment dimension

Laws and regulation subcategory

Indicator 1.1. Existence of national statistical legislation supporting gender data and statistics

Data source. UNSD GSGS question 5 asks whether statistical legislation and a corresponding road map, strategy or action plan mandate the production and/or dissemination of gender statistics in the following five areas: statistics law or regulation, gender equality law or regulation, crime and criminal justice law or regulation, family law or regulation, and law or regulation on mainstreaming a gender perspective into the production of statistics. The “other” category is not included for reasons of comparability.

Indicator construction. For each category, each country is assigned a binary score (0/1) based on the indication that a law exists. The scores across the categories are then aggregated so that each country will have a score of between 0 (no law in any of the five areas) and five (a law in each of the five areas). The approach thus places equal emphasis on laws in each category.

Cluster analysis. For each category, each country is assigned a binary score (0/1) based on the indication of whether or not statistical legislation mandates the production and/or dissemination of gender statistics. This change is made to facilitate interpretation of the cluster analysis results and because the existence of statistical legislation is often cited as a key driver of gender data capacity.

Missing data. Survey responses allow the respondent to specify that a law and/or road map does not exist or to not respond to a question. There were 5 countries that did not respond to any parts of this question (Austria, Croatia, India, Liechtenstein, Monaco), while 45 countries have at least one missing data point. The status of laws supporting gender statistics for the five countries for which no responses were provided was checked in the Open Data Watch (ODW) Gender Data Compass indicator “gender relevance in statistical laws”. The Compass assigns each of 185 countries a binary score corresponding to whether its statistical law contains a reference to gender (including keywords such as disaggregation, sex, gender, women and reproductive), based on a desk review of laws that could be located online (see Open Data Watch 2024). This source suggested that no statistical laws supported the production or dissemination of gender statistics in these five countries, so they were assigned a zero score for this category. In practice, this variable counts the number of reported laws such that missing responses and the reported non-existence of a law are treated as interchangeable. The final score indicates the number of areas in which the respondent indicates explicitly that a legal mandate exists.

Sample size. 91 countries.

Indicator 1.2. Existence of a roadmap, strategy or action plan supporting gender data and statistics

Data source. UNSD GSGS question 5 asks whether statistical legislation and a corresponding road map, strategy or action plan mandate the production and/or dissemination of gender statistics in the following areas: statistics law and/or regulation, gender equality law and/or regulation, crime and criminal justice law and/or regulation, family law and/or regulation and law and/or regulation on mainstreaming a gender perspective into the production of statistics. The "other" category is not included for reasons of comparability.

Indicator construction. For each category, each country is assigned a binary score (0/1) based on the indication that a road map exists. The scores across the categories are then aggregated so that each country will have a score of between 0 (no road map in any of the five areas) and five (a road map in each of the five areas). The approach places an equal value on road maps, strategies and action plans in each of the five areas.

Cluster analysis. For each category, each country is assigned a binary score (0/1) based on the indication of whether or not a road map or action plan corresponding to statistical legislation supports the production and/or dissemination of gender statistics. This change is made to facilitate interpretation of the cluster analysis results and because the existence of statistical legislation is often cited as a key driver of gender data capacity.

Missing data. Survey responses allow the respondent to specify that a law or road map does not exist or to not respond to a question. There were 5 countries that did not respond to any parts of this question while 45 countries have at least one missing data point. The status of action plans supporting gender statistics for the five countries for which no response is available was checked in the ODW Gender Data Compass indicator "NSDS gender integration and strategy" (see Open Data Watch 2024). The Compass scores each of 185 countries according to the extent to which its NSDS and other statistical planning documents available online integrate gender. Their coding is as follows:

- N/A means an NSDS or other statistical planning document is not available.
- 0 means there is no recognition of gender in the NSDS.
- 33 means there is some recognition of gender in the NSDS (for example, gender is recognised as a weakness in a SWOT analysis in the NSDS or there is an action item in conducting a reproductive health survey).
- 66 means gender is included in the NSDS as a strategic area of focus (for example, gender data are a strategic goal of the NSDS).
- 100 means gender is fully integrated and mainstreamed throughout the NSDS (for example, there is a stand-alone gender data plan or gender is integrated in every aspect of the NSDS.

This source suggested that either no NSDS were available or the NSDS did not recognise gender, which supported the decision to assign these countries a zero score for this category. In practice, this variable counts the number of reported action plans such that missing responses and the reported non-existence of an action plan are treated as interchangeable. The final score indicates the number of areas in which the respondent indicates explicitly that a road map or action plan exists.

Sample size. 91 countries depending on the treatment of missing data.

NSO staffing and co-ordination subcategory

1.3. Existence of a gender statistics unit or individual in the NSO

Data source. UNSD GSGS question 1 asks about the existence of a gender statistics entity within the NSO and/or any institutions of the national statistical system in a country. Within the NSO, respondents are asked to select whether a gender statistics-dedicated office, a focal point and/or multiple focal points/officers are present.

Indicator construction. This indicator seeks to identify the existence of a dedicated gender statistics unit or individual who is responsible for coordinating and overseeing the collection, analysis, and dissemination of gender-related data and statistics, and ensuring that gender considerations are integrated into statistical production and analysis more broadly. Each country is scored between as follows:

- 0 means no individual or division or focal points within the NSO.
- 1 means a focal point within the NSO.
- 2 means an office and/or multiple focal points within the NSO.

This scoring assumes that having an individual, individuals or a unit within the NSO dedicated to gender statistics is better than having none and that having a dedicated division or multiple focal points is better than a single focal point.

Cluster analysis. The analysis retains three binary variables indicating, respectively, whether or not there exists an individual focal point, multiple focal points and a dedicated gender statistics division. These binary variables are introduced in place of the categorical variable used in index construction to add greater specificity when defining clusters.

Missing data. Fourteen countries have no data point. A response of “missing” is assumed to indicate the absence of the gender statistics focal point or entity in the NSO since there is no negative response option.

Sample size. 91 countries.

1.4. Existence of co-ordination between the NSO and wider NSS

Data source. UNSD GSGS question 1 asks about the existence of a gender statistics entity within the NSO and/or any institutions of the NSS in a country. If there is an entity outside the NSO but within the NSS, countries are then asked to select a gender statistics entity in the national women’s machinery; a gender statistics entity in other ministries or agencies; and/or gender statistics working groups, advisory groups or other standing groups.

Indicator construction. This indicator seeks to identify the existence of co-ordination between the NSO and any key actors within the NSS, namely a gender statistics entity in the national women’s machinery; a gender statistics entity in other ministries or agencies; or working groups and/or gender statistics working groups, advisory groups or other standing groups. The indicator is the number of forms of reported co-ordination, ranging from 0 to three. This scoring assumes that more forms of co-ordination are better than fewer forms, independent of the quality of the resulting collaboration (on which no data is available).

Cluster analysis. The analysis retains three binary variables indicating, respectively, the existence of a gender statistics entity in the national women’s machinery, a gender statistics entity in other ministries or agencies, and an advisory group on gender statistics. These binary variables are introduced in place of the categorical variable used in Index construction to add greater specificity when defining clusters.

Missing data. Forty-four countries have no data point. It is assumed that missing responses indicate the absence of a specific form of co-ordination since no negative response option was provided.

Sample size. 91 countries.

1.5. Evidence of collaboration: NSO and gender machinery

Data source. UNSD GSGS question 7 asks whether the NSO collaborates with other entities in the country for the production of gender statistics, among these the “machinery for the advancement of women”, and asks about the frequency of any collaboration.

Indicator construction. Each country is scored between 0 and 2 as follows:

- 0 means no existing collaboration with the gender machinery.
- 1 means irregular collaboration with the gender machinery.
- 2 means regular collaboration with the gender machinery.

Missing data. Responses include both “non-existence / unknow” and missing ('-'). Based on UNSD input, these two categories are treated interchangeably as indicating “no known collaboration”. Thirty-four countries had missing data for this indicator.

Sample size. 91 countries.

Resources subcategory

1.6 Regularity of NSO funding for gender statistics from the national budget for statistics

Data source. UNSD GSGS question 2 asks how gender statistics in the NSO are mainly funded – specifically whether funding is received from the national budget for statistics, from the budget of the women’s machinery, and/or from any other sources and whether this funding occurs on an ad hoc and irregular basis or on a reoccurring and regular basis.

Indicator construction. Each country scored between 0 and 2 as follows:

- 0 means no regular funding from the national budget for statistics.
- 1 means irregular funding from the national budget for statistics.
- 2 means regular funding from the national budget for statistics.

Missing data. It is assumed that missing data indicate the absence of funding from a particular entity as there is no negative response option; respondents are asked to indicate only if funding exists. Eleven countries reported no funding in any category. Funding for gender statistics was checked in the ODW Gender Data Compass using the “national allocation of funding to gender data” indicator. The Compass assigns a binary score based on a desk review of statistical planning documents that could be located online, using the following coding:

- NA means NSDS or other statistical planning documents are not available.
- 0 means NSDS or other statistical planning documents are available but have no budget for gender data activities/workstreams.

- 100 means NSDS or other statistical planning documents are available and have a budget for gender data activities and/or workstreams.

For these countries, the Compass reported either no available documentation or no evidence of funding, which supported the decision to assign these countries a zero score for this category.

Sample size. 91 countries.

2. Data production dimension

Capacity subcategory

2.1. Whether a population census has taken place or is being conducted for the 2020 round

Data source. ODW Gender Data Compass. Each country is assigned a binary score based on whether a population census has taken place or is being conducted for the 2020 round (Open Data Watch, 2024).

Missing data. N/A

Sample size. 185 countries.

2.2 Whether the country's statistical system conducts enough regular surveys to collect gender statistics

Data source. ODW Gender Data Compass. Each country is assigned a score reflecting whether its NSS conducted enough regular surveys to collect gender statistics over the previous ten years according to the following thresholds: at least three household wealth and well-being surveys; at least two household income and/or expenditure surveys; at least ten labour force surveys; at least two time use surveys; and at least two agricultural surveys and/or censuses (Open Data Watch, 2024).

Missing data. N/A.

Sample size. 185 countries.

2.3. Whether the country is producing sufficient administrative data (CRVS, education administrative systems, health administrative systems)

Data source. The ODW Gender Data Compass assigns each country a score that reflects the availability of data on CRVS (birth registration, death rates and marriage registration); education systems (primary and secondary enrolment rates, primary and secondary competency exam results, and number of teaching staff); and health systems (number of health facilities and number of beds or related to healthcare staff) (Open Data Watch, 2024).

Missing data. N/A.

Sample size. 185 countries.

Coverage subcategory

2.4 Gender Data Compass Availability index

Data source: The ODW Gender Data Compass produces an index that quantifies the extent to which gender data are available for 53 gender-relevant indicators on the websites of either the NSS or other national ministries or from international organisations. For each indicator, a country is assigned a score based on data availability with sex disaggregation; data availability with sex and non-geographic disaggregation (e.g. age, income, nationality); data availability with geographic disaggregation; and availability of time series data (Open Data Watch, 2024).

Approach and indicator construction. The average availability index is the average score for the 53 indicators provided for each country.

Missing data. N/A.

Sample size. 185 countries.

2.5. Percentage of 52 gender-specific Sustainable Development Goal (SDG) indicators available to monitor progress on the SDGs

Data source. UN Women.

Approach and indicator construction. For each country, UN Women calculated the latest availability (as of December 2022) of sex-disaggregated data for the 52 gender-specific SDG indicators using a list of indicators identified by UN Women and UN DESA (UN Women and UN DESA, 2022).

Missing data. N/A.

Sample size. 193 countries.

2.6. Availability of sex-disaggregated data on crisis-related situations

Data source. The 2022 COVID-19 Sex-Disaggregated Data Tracker published by Global Health 50/50, the International Center for Research on Women, and the African Population and Health Research Center. The dataset was last updated in September 2022.

Indicator construction. Given the recency of the COVID-19 pandemic, for year one this indicator is concerned with whether a country reports sex-disaggregated data on COVID-19 cases and deaths. Each country is scored as follows:

- 0 means it does not provide sex-disaggregated data on either COVID-19 cases or deaths.
- 1 means it provides sex-disaggregated data on COVID-19 cases or deaths.
- 2 means it provides sex-disaggregated data on COVID-19 cases and deaths.

Missing data. N/A.

Sample size. 183 countries.

3. Data accessibility dimension

Openness subcategory

3.1. Gender Data Compass openness index

Data source. The ODW Gender Data Compass produces an index that quantifies barriers to the access and use of available gender data for 53 gender-relevant indicators either on the websites of a country's NSS or other national ministries or from international organisations. For each indicator, a country is assigned a score based on data availability in open formats (machine readable and non-proprietary), metadata availability, the availability of download options, and data licences.

Approach and indicator construction. The openness index is the average score for the 53 indicators provided for each country.

Missing data. N/A.

Sample size. 185 countries.

Dissemination subcategory

3.2. Ways the NSO disseminates gender data

Data source. UNSD GSGS question 1.9 asks whether the NSO has a dedicated webpage, data portal, publication and/or data visualisation tool on gender statistics.

Indicator construction. The indicator is the number of existing resources a country reports having (ranging from 0 to four).

Missing data. Missing ('-') is indicative of non-response as opposed to a "no", as the respondent is offered an explicit negative response option. However, in practice, countries are scored according to the number of known existing resources, so "no" and '-' indicate no known existing source. This means, for example, that a country with one "yes" response and three responses of '-' has same score as country with one "yes" and three "no" responses. All countries responded to at least one part of this question. Sixty four countries did not respond to at least one part of the question.

Sample size. 91 countries.

The indicator is the proportion of the number of types

NSO engagement with partners and stakeholders subcategory

3.3. Existence of collaboration between the NSO and an outside stakeholder to produce gender statistics and the regularity of that collaboration

Data source. UNSD GSGS question 1.7 asks about the number of stakeholders the NSO collaborates with to produce gender statistics, ranging from ministries, international organisations, machinery for the advancement of women, other national entities, academia, research and think tanks, and NGOs to none of

the above. The question also asks about the frequency of collaboration (i.e. reoccurring and regular or ad hoc and irregular).

Indicator construction. Each country is scored as follows:

- 0 means no existing collaboration.
- 1 means irregular collaboration with at least one outside entity.
- 2 means regular collaboration with at least one outside entity.

The “other national entity” category is not used for reasons of cross-country comparability.

Missing data. Responses to this question include both “non-existence / unknown” and “missing”. Per UNSD advice, these two categories are treated interchangeably as indicating “no known collaboration. Two countries did not respond to any part of this question.

Sample size. 91 countries.

3.4. Collaboration and dialogue between users and producers of gender statistics

Data source. UNSD GSGS question 1.8 asks about the existence of a task force, technical committee or a similar working group at the national level for collaboration with and dialogues between users and producers of gender statistics to ensure data produced are fit for purpose and used.

Indicator construction. Each country is scored as follows:

- 0 means no existing collaboration and dialogues.
- 1 means collaboration and dialogues exist on an irregular basis.
- 2 means collaboration and dialogues exist on a regular basis.

Missing data. Only one country had missing data. This missing data point is assumed to indicate non-response.

Sample size. 90 countries.

Annex C. Metadata for indicators included in complementary GDO analysis

Statistical capacity

Statistical Performance Index

Data source. World Bank Group n.d.

Indicator construction. The SPI is a composite measure of country statistical capacity consisting of 51 indicators. It seeks to assess statistical system maturity and performance across five so-called pillars: Data Use, Data Services, Data Products, Data Sources and Data Infrastructure (see World Bank 2021). The data used were for 2022.

Sample size. 186 countries.

External finance

External financing for gender data, i.e. official development assistance (ODA) that supports gender data efforts as a percentage of ODA for statistical activities

Data source. PARIS21 PRESS 2023 data set.

Indicator construction. For each country, the percentage of ODA disbursements to gender statistics (funding that is assigned gender marker) in statistics ODA is computed. The three-year average (2019-21) is used owing to volatility in this indicator, following ODW and Data2X (2021). The percentage is computed for each year and then averaged.

Sample size. 30 DAC members. Note that Lithuania and Estonia became DAC members in 2022 and 2023 respectively such that the DAC now contains 32 members.

External financing for gender equality, i.e. official development assistance (ODA) that supports gender equality as a percentage of ODA

Data source. OECD's Creditor Reporting System database.

Indicator construction. For each country, the percentage of ODA disbursements to gender equality (funding that has a principal' focus on gender) in ODA is computed, following Silcock and Gulrajani (2020, p. 12[9]) who observe that excluding ODA with a 'significant' gender focus avoids overstating donor spending directed toward gender activities. The three-year average (2020-22) is used to dampen any volatility in this indicator. The percentage is computed for each year and then averaged.

Sample size. 30 DAC members. Note that Lithuania and Estonia became DAC members in 2022 and 2023 respectively such that the DAC now contains 32 members.

Data use

Policy indicators

Use of gender statistics in national policy documents

Data source. Adapted from the PARIS21 Statistical Capacity Monitor (SCM) indicator on use of statistics in national policy documents derived through text mining.

Indicator construction. This indicator assesses the systematic use of statistical knowledge related to gender with statistical terms and indicators in national policy documents (National Development Plan and Poverty Reduction Strategy Papers) obtained through text mining techniques. It is a composite indicator consisting of four sub-indices that aim to reflect the relevance of statistical evidence. It comprises four main dimensions: (1) basic consideration (Level 1), (2) diagnosis and quantification (Level 2), (3) statistical analysis (Level 3), and (4) disaggregation. Higher values of this indicator suggest that a country is more advanced in its use of gender statistics and data in its policy documents. Data were available through 2023.

Missing data. Countries where national policy documents are unavailable count as missing data.

Sample size. 146 countries.

Use of gender statistics in national policy documents relative to generic statistics in national policy documents

Data sources. Use of gender statistics in national policy documents (4.3a). Use of generic statistics indicator is the PARIS21 SCM indicator on use of statistics in national policy. The generic use of statistics (UoS) data set includes gender as one of the 16 sectors it covers, though the keywords are more basic than the UoS for gender (excluding some abbreviations and words that are only meaningful when mentioned in the gendered context).

Indicator construction. This indicator is the ratio of the score a country receives on its use of gender statistics and data in national policy documents relative to its score on the use of generic statistics and data in national policy documents. Data were available through 2023.

Missing data. Countries where national policy documents are unavailable count as missing data.

Sample size. 139 countries.

Annex D. Coverage of GDO Index countries by income group and regional designation

This Annex shows the coverage of the 83 countries in the GDO Index sample by income group (Table A.4) and regional designations according to UNSD (Table A.5) and UN Women (Table A.6). Within a given income group or region, the tables show the proportion of countries for which data are available and the corresponding proportion of the population they house.

Table D.1. Number of GDO Index countries by income group and their coverage

Income group	GDO Index sample	Number of countries in income group	Country coverage (%)	Population coverage (%)
High-income	33	60	55	55
Low-income	8	27	30	36
Lower middle-income	19	52	37	83
Upper middle-income	23	55	42	22
Total	83	194	43	52

Note: The total number of countries is 194 because World Bank does not currently assign an income group designation to Venezuela.
Source: Authors' calculations.

Table D.2. Number of GDO Index countries by region (UNSD designations) and their coverage

SDG regional grouping	GDO Index sample	Number of countries in group	Country coverage (%)	Population coverage (%)
Central Asia and Southern Asia	4	14	29	89
Eastern and South-Eastern Asia	8	18	44	20
Europe and Northern America	29	47	62	41
Latin America and Caribbean	11	33	33	70
Northern Africa and Western Asia	14	23	61	46
Oceania	3	14	21	61
Sub-Saharan Africa	14	46	30	52
Total	83	195	43	52

Source: Authors' calculations.

Table D.3. Number of GDO Index countries by region (UN Women designations) and their coverage

Regional grouping	GDO Index sample	Number of countries in group	Country coverage (%)	Population coverage (%)
Americas and the Caribbean	12	35	34	49
Arab States	10	18	56	38
Asia-Pacific	15	39	39	54
East and Southern Africa	6	25	24	44
Europe and Central Asia	32	54	59	56
West and Central Africa	8	24	33	56
Total	83	195	43	52

Source: Authors' calculations.

Methodological Note

Gender Data Outlook 2024

Over the past five years, PARIS21 and UN Women have collaborated to respond to the need for more and better gender data. This collaboration has involved specific efforts to integrate gender into national statistical planning and programming.

To address the critical question of how diverse investments in gender data translate into meaningful change for women and girls, PARIS21 and UN Women are introducing the Gender Data Outlook (GDO), that will assess countries' levels of statistical maturity using the new global framework and corresponding overall measure for gender data capacity.

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