MODULE 3

CALCULATING GENDER STATISTICS FOR SDG MONITORING

TRAINING SYLLABUS

Curriculum on Gender Statistics Training

This product was developed under the guidance of the Subgroup on Gender Statistics Training, within the Asia-Pacific Network of Statistical Training Institutes.

Introduction

This syllabus has been designed to guide trainers on how to conduct related training. The syllabus can also be used by learners who wish to know more about this topic and people who are generally interested in gender statistics.

This syllabus is part of a wider module on this area of gender statistics. Other materials within this module might include exercises, PowerPoint presentations and example quizzes. Please refer to the additional set of materials for a comprehensive and effective learning experience.

Who is this module for?

- Statisticians and other experts that wish to calculate gender statistics to monitor the SDGs from a gender perspective
- Policymakers and decision-makers in general, who are looking to understand the methodological details behind the gender-related SDG indicators and to interpret them accurately to use data for evidence-based decision-making
- Academics who wish to replicate calculations for gender-related SDG indicators for their own academic research
- Civil society organizations that wish to better understand and interpret gender-related SDG data and indicators
- Media personnel interested in accurately interpreting and integrating gender data from select SDG indicators into their media products
- Anyone who wishes to find out how to compute and accurately interpret some of the gender-related SDG indicators

What do I need to know before going through this module?

This module is primarily targeted to experts since it requires the learner to have some knowledge of statistics. Non-expert audiences can benefit from it as well, although some knowledge of basic gender statistical concepts will be required. It would be good for learners to be familiar with the content of Modules 1, 2 and 9 as well as to have a good understanding of what the Sustainable Development Goals (SDGs)[1] are, including their targets and indicators[2].

Learning objectives

The expected learning outcomes for this module include:

- After going through this module, the learner is expected to become familiar with the methodological details of how to calculate specific gender indicators across the SDG indicator framework. This includes gender indicators across the economic, social and environmental dimensions of sustainable development.

[1] For additional information on the SDGs see: https://www.un.org/sustainabledevelopment/sustainable-development- goals/

[2] See: https://unstats.un.org/sdgs/indicators/indicators-list/

- The learner is expected to understand the key concepts, methods of computation and practical examples associated with the calculation of gender-related SDG indicators.

- In addition, the learner is expected to understand that, in order to monitor the SDGs from a gender perspective, gender statistics need to be incorporated across all the SDGs. The learner will be shown how to use gender data to monitor progress with some indicators that are not necessarily gendered in the official SDG monitoring framework.

Note to trainer: Depending on the pace of trainer and trainees, it is expected that the training for this module can be delivered in 1 to 2 hours.

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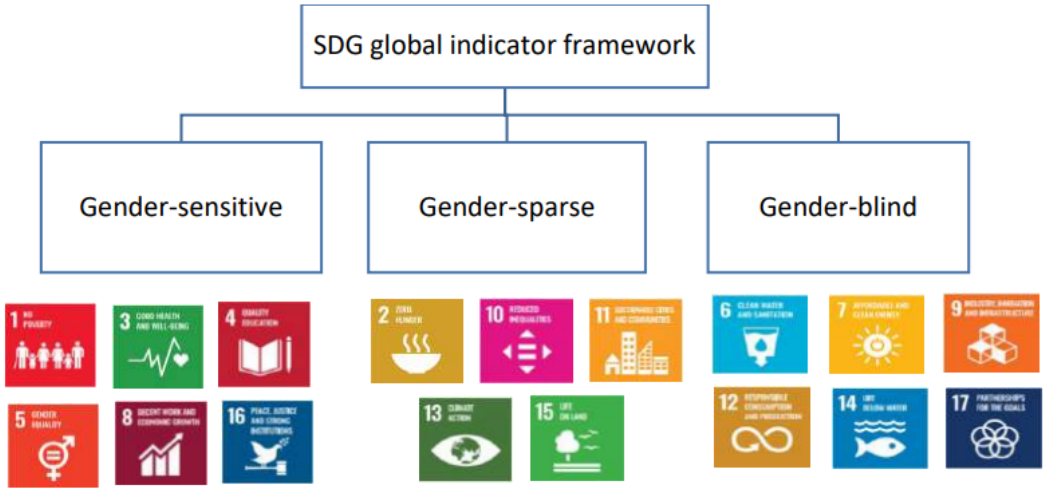
1. The SDG indicator framework

Fulfilling the *2030 Agenda for Sustainable Development* requires accelerated change. If the aim is to 'leave no one behind', we must first identify those furthest behind. Since women and girls are often the furthest behind, effective monitoring of women's progress across all SDGs is crucial to fulfill this agenda[3]. For this purpose, gender has been mainstreamed across the SDG global indicator framework. However, the coverage of gender is uneven: out of 232 indicators that conformed the original set of indicators in the SDG global indicator framework, only 53 indicators directly addressed gender-related issues[4]. Additionally, these 53 gender-specific indicators[5] are clustered around six of the 17 SDGs. Out of the remaining Goals, five are gender-sparse (i.e. the call for an explicit sex-disaggregation exists for very few of their indicators) and six are completely gender-blind, (i.e. they do not include a gender angle in any of their indicators)[6]. As the SDG global indicator framework is being revised at the time this training module is written (in 2020), changes are expected to take place in this distribution of gender-related indicators.

Figure 1: Uneven distribution of gender across the SDG global indicator framework



[3] See UN Women. 2018. *Turning Promises into Action*. https://www.unwomen.org/-/media/headquarters/attachments/sections/library/publications/2018/sdg-report-gender-equality-in-the-2030-agenda-for-sustainable-development-2018-en.pdf?la=en&vs=4332

[4] For full list of the 53 gender specific indicators, please refer to the Gender Snapshot 2021: https://unstats.un.org/sdgs/gender-snapshot/2021/UNW_GenderSnapshot.pdf

[5] Gender-specific are indicators that either explicitly call for disaggregation by sex and/or refer to gender equality as an underlying objective.

[6] Ibid.

2. Mainstreaming gender across the three pillars of SDGs

During the Rio +20 Conference on Sustainable Development[7], which took place in the year 2012, Member States "acknowledged the need to mainstream sustainable development at all levels, integrating economic, social and environmental aspects and recognizing their interlinkages to achieve sustainable development in all its dimensions". This would require monitoring all three pillars of sustainable development: economic, social and environmental development[8]. The global indicator framework was designed to monitor progress across these three pillars. Gender is relevant for all three pillars and must be integrated when measuring progress throughout.

Figure 2: Gender is relevant for all 3 pillars of the SDGs

Source: UN Women. 2018. *Turning Promises into Action*.

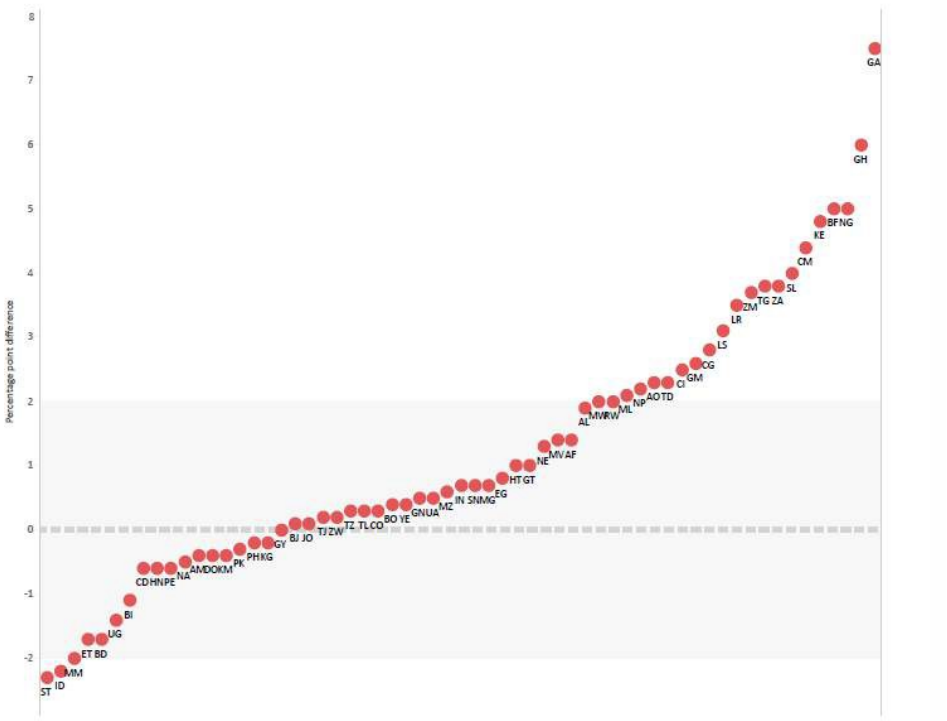
[7] https://sustainabledevelopment.un.org/rio20

[8] https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&Lang=E

3. Monitoring all SDGs from a gender perspective

At least 85[9] of the SDG indicators are gender-relevant and address issues affecting the lives of men and women. Although some of these indicators do not explicitly mention sex, women or men, or specific gender issues, 'gendered' estimates for some such indicators can be calculated by disaggregating data by sex or other variables. For instance, the official SDG indicator 11.1.1, 'Proportion of urban population living in slums, informal settlements or inadequate housing', is not explicitly sex disaggregated, nor does it include a mention of specific gender issues. However, a gendered analysis is possible by sex disaggregating the data or by calculating the gender gap among women and men living in slums[10]. As illustrated in the graph below, women are more likely to be slum dwellers than men, in the majority of countries with available data.

Figure 3: Gender gap (proportion of women/proportion of men) among individuals aged 15–49 living in slums, 2007 or later



Source: Azcona, Duerto, Bhatt (Forthcoming)

[9] https://www2.unwomen.org/-/media/field%20office%20eseasia/docs/publications/2018/10/apsdg-report_web-28aug2018.pdf?la=en&vs=4304

[10] Source: UN Women calculations based on Demographic and Health Surveys (various) ICF International.

Disaggregating data by sex can unveil inequalities between the lives of men and women. This information is crucial to make sure progress towards the *2030 Agenda* is evenly enjoyed by all groups in society.

4. Calculating gender statistics for SDG indicators

To fulfill the commitments made around the *2030 Agenda* and monitor the situation of women and girls across all three pillars of sustainable development, a gender perspective needs to be integrated when calculating SDG indicators for all goals. The following are examples of gender-related SDG indicators and how to calculate them. A set of relevant indicators was selected for illustration purposes. This does not imply that these indicators are necessarily more important than others. Each country should select the indicators of calculation according to national priorities and needs. It is important to keep in mind, however, that data disaggregation can and should be performed for SDG indicators that do not necessarily include the disaggregation by sex in the official indicator name, if an accurate picture of development in the lives of women and men is desired.

Some of the indicators selected for this training module align exactly with the official SDG indicator name (e.g. the official indicator is gender-sensitive), while others have been disaggregated or modified slightly to capture a gender angle. The following indicators have been selected to illustrate the step-by-step methodology for monitoring the SDGs from a gender perspective. While many of them are placed under Goal 5 of the SDG monitoring framework, it is important to note that not all are, as gender equality is critical to the achievement of all goals.

Gender equality in the context of SDGS:

Gender equality, within the context of the Sustainable Development Goals (SDGs), represents a fundamental right and an essential path to addressing today's most pressing global challenges. Women are disproportionately affected by issues such as economic crises, limited access to healthcare, climate change, violence, and conflicts. However, they also offer vital leadership and solutions. Gender discrimination not only holds back women but hinders global progress. The 2030 Agenda for Sustainable Development, comprising 17 SDGs, serves as a roadmap for sustainable progress with a commitment to leaving no one behind. Gender equality and women's empowerment are not just standalone goals; they are integral to the achievement of all 17 SDGs. Embracing the rights of women and girls across all goals is the key to justice, inclusivity, thriving economies, and the preservation of our shared environment for current and future generations.

Indicator 5.1.1: Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

Definition

This Indicator is based on an assessment of Government's efforts for putting in place legal frameworks that promote, enforce and monitor gender equality[11].

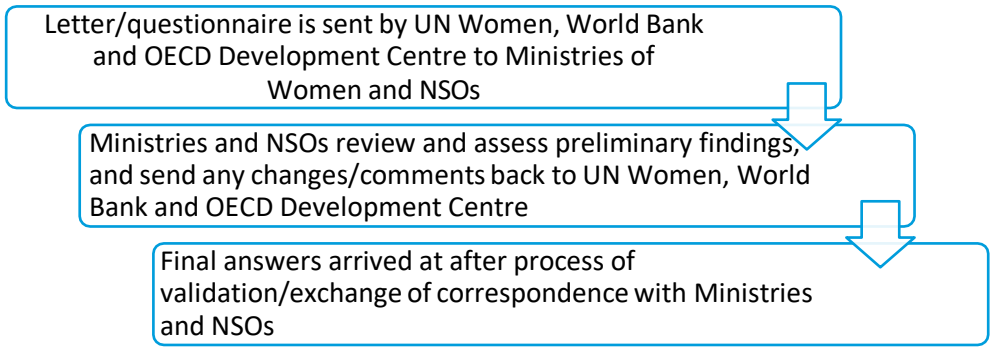
Key concepts

- Legal frameworks: defined broadly to encompass laws, mechanisms and policies/plans to 'promote, enforce and monitor' gender equality.
- Promote: Legal frameworks that 'promote' are those that establish women's equal rights with men and enshrine non-discrimination on the basis of sex.
- Enforce and monitor: Legal frameworks that 'enforce and monitor' are directed to the realization of equality and non-discrimination and implementation of laws, such as policies/plans, establishment of enforcement and monitoring mechanisms, and allocation of financial resources.

Computation method

The data for the indicator should be derived from an assessment of legal frameworks of the country. The assessment is to be carried out by National Statistical Offices (NSOs) and/or National Women's Machineries (NWMs), and legal practitioners/researchers on gender equality, using a questionnaire comprising 45 yes/no questions under four areas of law: (i) overarching legal frameworks and public life;
(ii) violence against women; (iii) employment and economic benefits; and (iv) marriage and family. The process, which is led by the co-custodian agencies of this indicator (e.g. UN Women, World Bank Group, OECD Development Centre) takes place as follows:

Figure 4: Process of data collection for Indicator 5.1.1[12]



[11] https://unstats.un.org/sdgs/metadata/files/Metadata-05-01-01.pdf
[12] World Bank Group and OECD Development Centre collect and publish data on the same areas which is used for the preliminary findings to prepopulate the questionnaires.

The 42 yes/no questions used in the SDG Indicator 5.1.1 questionnaire are divided into the four areas of law, as follows:

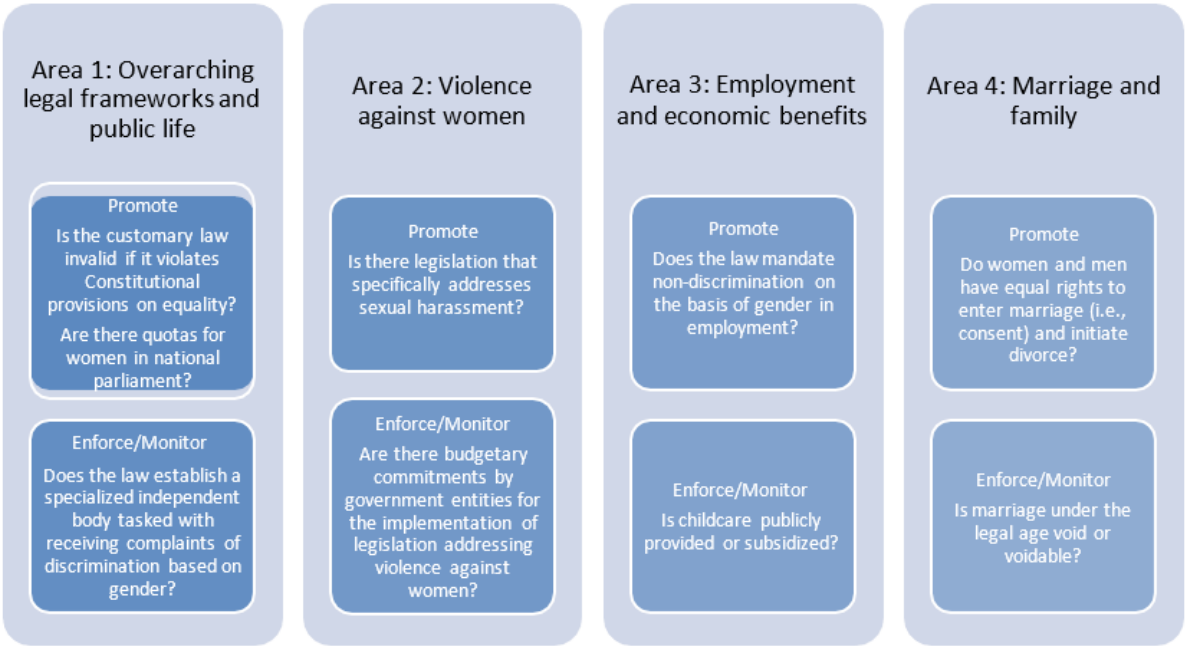
Figure 5: Areas of law for Indicator 5.1.1

Area	Focus	Number of questions
1	Overarching legal frameworks and public life	12
2	Violence against women	12
3	Employment and economic benefits	10
4	Marriage and family	11

For each area of law, there are questions that aim to assess whether the legal frameworks of the country:

1. Promote gender equality, and
2. Enforce/monitor gender equality

Figure 6: Examples of questions relating to promotion, enforcement, and monitoring for Indicator 5.1.1



The answers to these questions are coded as 1 if the answer is "yes" and 0 if the answer is 'No'. For the following two questions only, they may be scored "N/A" in which case they are not included as part of the overall score calculation for the area:

- If customary law is a valid source of law under the Constitution, is it invalid if it violates constitutional provisions on equality or non-discrimination?
- If personal law is a valid source of law under the Constitution, is it invalid if it violates constitutional provisions on equality or non-discrimination?

All questions should be answered. The total score for each of the four areas is calculated as an unweighted mean:

$$Score\ Area\ 1 = \frac{score\ q1 + score\ q2 + \cdots + score\ qi}{total\ number\ of\ questions\ asked\ for\ that\ particular\ area}$$

Results of the four areas are reported as percentages as a dashboard: $\langle AA_1, AA_2, AA_3, AA_4 \rangle$.

The following example demonstrates how the scores are calculated:

Figure 7: Example of scoring for Indicator 5.1.1: Whether or not legal frameworks are in place to promote, enforce and monitor equality and non-discrimination on the basis of sex

Area of law	No. of questions	No. of questions coded as 1 (Yes)	Final percentage Score *(No. of questions coded 1/ Total number of questions) *100*
Overarching legal frameworks and public life	12	8	**(8/12)*100**
Violence against women	12	6	**(6/12)*100**
Employment and economic benefits	10	8	**(8/12)*100**
Marriage and family	**11**	**7**	**(7/11)*100**

Exercise 5: Please refer to the following site[13] (link in footnotes) and answer the following questions:

1. Why are quotas for women (reserved seats) on parliamentary election candidate lists or quotas for women in national parliaments important?
2. What are elements of good practice in legislation that specifically addresses sexual harassment?
3. What do good practice laws provide regarding maternity leave benefits?
4. What do good practice laws provide regarding minimum age of marriage?

[13] (Click on the 'i' symbol for additional information), at : shorturl.at/mnzLQ

Solution to exercise:

1. Women continue to be underrepresented at all levels of political leadership. Temporary special measures, such as quota systems, have the capacity to accelerate the elimination of discrimination against women and bring about more equal participation of women in political, economic, social, cultural or other fields.
2. Good practice laws prohibit sexual harassment and address the issue in a comprehensive way. Elements of good practice laws include defining sexual harassment as unwanted sexually determined behaviour, prohibiting sexual harassment in a wide range of areas of public life, and providing complaints mechanisms and remedies to eliminate impunity, revictimization and retaliation.
3. In accordance with ILO standards, good practice laws provide for a minimum of 14 weeks of maternity benefits to women and at least 2/3rds of her previous earnings.
4. Good practice laws provide a minimum age of marriage of 18 for both women and men without exceptions and with adequate sanctions.

Indicator 5.2.1: 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

Definition

This indicator measures the percentage of ever-partnered women and girls aged 15 years and older who have experienced physical, sexual or psychological violence by a current or former intimate partner, in the previous 12 months[14].

Key concepts

- **Violence against women**: is defined as "any act of gender-based violence that results in, or is likely to result in physical, sexual or psychological harm or suffering to women – including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life. Violence against women shall be understood to encompass, but not be limited to, the following: physical, sexual and psychological violence occurring in the family […]"[15].
- **Intimate partner violence against women**: includes any abuse perpetrated by a current or former partner within the context of marriage, cohabitation or any other formal or informal union.

[14] UNSD https://unstats.un.org/sdgs/metadata/files/Metadata-05-02-01.pdf

[15] UN Declaration on the Elimination of Violence against Women https://www.un.org/en/genocideprevention/documents/atrocity-crimes/Doc.21_declaration%20elimination%20vaw.pdf

Indicator 5.2.1 includes three main forms of violence against women: physical, sexual and psychological, which are defined as follows[16].

- **Physical violence**: consists of acts aimed at physically hurting the victim and include, but are not limited to acts like pushing, grabbing, twisting the arm, pulling hair, slapping, kicking, biting or hitting with a fist or object, trying to strangle or suffocate, burning or scalding on purpose, or threatening or attacking with some sort of weapon, gun or knife.
- **Sexual violence**: is defined as any sort of harmful or unwanted sexual behaviour that is imposed on someone, whether by use of force, intimidation or coercion. It includes acts of abusive sexual contact, forced engagement in sexual acts, attempted or completed sexual acts without consent, non-contact acts such as being forced to watch or participate in pornography, etc. In intimate partner relationships, sexual violence is commonly defined as: being physically forced to have sexual intercourse, having sexual intercourse out of fear for what the partner might do or through coercion, and/or being forced to so something sexual that the woman considers humiliating or degrading.
- **Psychological violence**: consists of any act intended to induce fear or emotional distress caused by a person's behaviour or act. It includes a range of behaviours that encompass acts of emotional abuse, such as being frequently humiliated in public, intimidated or having things you care for destroyed, etc. These often coexist with acts of physical and sexual violence by intimate partners. In addition, surveys often measure controlling behaviours (e.g. being kept from seeing family or friends, or from seeking health care without permission).

Note: Feasibility

This indicator calls for reporting on physical, sexual and psychological violence. While there is global consensus on how physical and sexual intimate partner violence are generally defined and measured, psychological partner violence – which may be conceptualized differently across cultures and in different contexts – does not yet have an internationally agreed definition. Thus, it is not yet feasible to report on psychological partner violence globally. As a result, this indicator currently covers only physical and/or sexual intimate partner violence when reporting globally. Efforts are underway by custodian agencies to develop a global standard for measuring and reporting on psychological intimate partner violence.

Similarly, this indicator calls for reporting of violence experienced by ever-partnered women aged 15 years and above. However, most data used for this indicator come from Demographic and Health Surveys, which typically sample only women aged 15–49. Other age groups are used in other surveys, but there is a lack of consistency in the age range across countries. Thus, in practice, the global SDG indicator reports this indicator for the age group 15–49. For surveys that use a different age group, the prevalence for ages 15– 49 can often be calculated from available data. Efforts are currently underway to expand age ranges and better understand this issue

[16] For a more detailed definition of physical, sexual and psychological violence against women, see: UN. 2014. *Guidelines for Producing Statistics on Violence against Women Statistical Surveys* and UNODC. 2015. International Classification of Crime for Statistical Purposes. https://unstats.un.org/unsd/gender/docs/guidelines_statistics_vaw.pdf

among women ages 50 and above.

Data sources

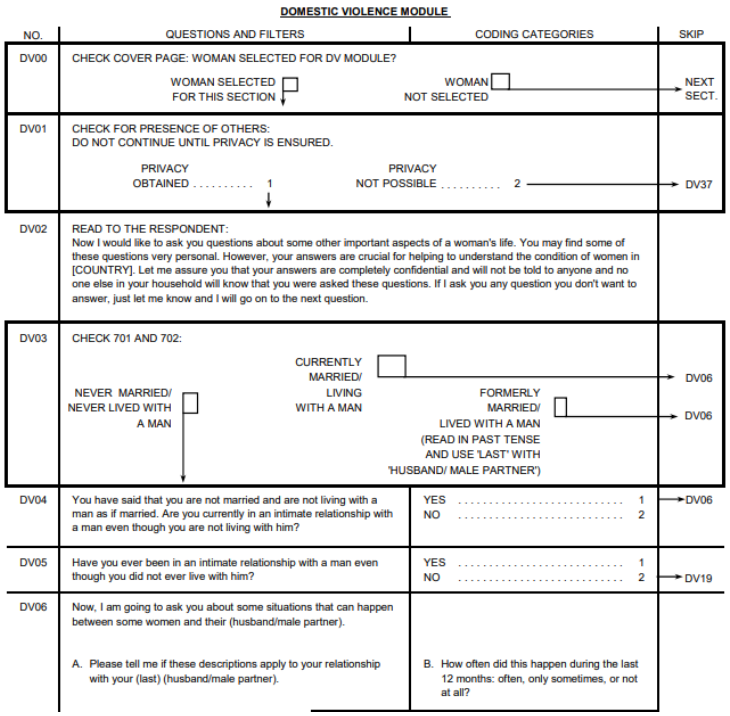
UNICEF, UN Women, UNODC, UNFPA, UNSD and WHO are the co-custodian international agencies for this indicator. Their guidance indicates that violence prevalence data should only be obtained from specialized national population-based household surveys dedicated to measuring violence against women and international household surveys that include a separate module on experience of violence by women (e.g. Demographic and Health Surveys). These surveys implement an internationally standardized methodology to measure violence against women, in most cases based on the WHO Multi-Country Study on Women's Health and Domestic Violence[17]. Enumerators are specially trained to build rapport with women respondents and interview them about their experiences of violence in a sensitive manner. Specialized survey and module questionnaires are also carefully designed to introduce the topic of violence sensitively: starting with questions about views on relationship behaviours, and increasingly moving towards more direct experiences of violence. Survey questionnaires use act-based questions, asking women if they have experienced specific acts of violence (e.g. Does your husband say or do something to humiliate you in front of others? How many times did this happen in the last 12 months?). Furthermore, adhering to globally agreed ethical and safety standards for the collection of violence against women data and ensuring that women interviewed are not put at higher risk of violence is of paramount importance. Recommendations include not sampling more than one woman per household, ensuring privacy during the interview and ensuring support services are available for women who report experiencing violence and need support, among others[18].

Note: Although administrative data from health, police, courts, justice and social services, among other services used by survivors of violence, can provide information on violence against women and girls, these do not provide prevalence data, but rather incidence data or service use (i.e. number of cases received in/reported to these services). Many abused women do not report violence and those who do tend to be the most serious cases. Therefore, administrative data should not be used as a data source for this indicator[19].

See below an excerpt from the Demographic and Health Survey (DHS)'s Domestic Violence Module. This is an optional module that some countries may choose to include with the standard DHS modules.

[17] https://www.who.int/reproductivehealth/publications/violence/24159358X/en/
[18] https://www.who.int/gender-equity-rights/knowledge/who_fch_gwh_01.1/en/
[19] For more information on recommended practices in production of violence against women statistics, see: UN. 2014. UN Guidelines for Producing Statistics on Violence against Women - Statistical Surveys.

Figure 8: Domestic Violence Module, DHS



DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
DV00	CHECK COVER PAGE: WOMAN SELECTED FOR DV MODULE? WOMAN SELECTED FOR THIS SECTION ↓ WOMAN NOT SELECTED →		NEXT SECT.
DV01	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED ..... 1 ↓ PRIVACY NOT POSSIBLE ..... 2 →		DV37
DV02	READ TO THE RESPONDENT: Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in [COUNTRY]. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions. If I ask you any question you don't want to answer, just let me know and I will go on to the next question.		
DV03	CHECK 701 AND 702: CURRENTLY MARRIED/ LIVING WITH A MAN → NEVER MARRIED/ NEVER LIVED WITH A MAN ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH 'HUSBAND/ MALE PARTNER') →		DV06 DV06
DV04	You have said that you are not married and are not living with a man as if married. Are you currently in an intimate relationship with a man even though you are not living with him?	YES ..... 1 NO 2	DV06
DV05	Have you ever been in an intimate relationship with a man even though you did not ever live with him?	YES ..... 1 NO 2	DV19
DV06	Now, I am going to ask you about some situations that can happen between some women and their (husband/male partner). A. Please tell me if these descriptions apply to your relationship with your (last) (husband/male partner).	B. How often did this happen during the last 12 months: often, only sometimes, or not at all?	

Other specific questions about violence included in specialized survey questionnaires, many of which are relevant for the calculation of Indicator 5.2.1 include[20]:

Physical violence:

- In the past 12 months, did your (last) husband/partner ever do any of the following things to you?
    - push you, shake you or throw something at you?
    - slap you?
    - twist your arm or pull your hair?
    - punch you with his/her fist or with something that could hurt you?
    - kick you, drag you or beat you up?
    - try to choke you or burn you on purpose?
    - attack you with a knife, gun or other type of weapon?

Sexual violence:

- In the past 12 months, did your (last) husband/partner ever do any of the following things to you?
    - physically force you to have sexual intercourse with him/her even when you did not want to?
    - physically force you to perform other sexual acts you did not want to?

[20] The following questions have been obtained from the survey questionnaire of Cambodia's Demographic and Health Survey, 2014-2015. See: https://dhsprogram.com/pubs/pdf/FR312/FR312.pdf

- force you with threats or in any other way to perform sexual acts you did not want to?

Psychological violence:

- In the past 12 months, did your (last) husband/partner ever:
  - say or do something to humiliate you in front of others?
  - threaten to hurt or harm you or someone you care about?
  - Insult you or make you feel bad about yourself?

Computation method

This indicator calls for a breakdown by form of violence and age group. In this regard, the computation for each form of violence can be carried out as follows:

- *Physical violence*

$$\frac{\begin{array}{c}No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\\ who\ experienced\ physical\ violence\ by\ a\ current\ or\ former\ intimate\\ partner\ in\ the\ previous\ 12\ months\end{array}}{No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\ in\ the\ population}\ x100$$

- *Sexual violence*

$$\frac{\begin{array}{c}No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\\ who\ experienced\ sexual\ violence\ by\ a\ current\ or\ former\ intimate\\ partner\ in\ the\ previous\ 12\ months\end{array}}{No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\ in\ the\ population}\ x100$$

- *Psychological violence*

$$\frac{\begin{array}{c}No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\\ who\ experienced\ psychological\ violence\ by\ a\ current\ or\ former\ intimate\\ partner\ in\ the\ previous\ 12\ months\end{array}}{No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\ in\ the\ population}\ x100$$

- *Any form of physical and/or sexual violence*

$$\frac{\begin{array}{c}No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\\ who\ experienced\ physical\ and/or\ sexual\ violence\ by\ a\ current\ or\ former\ intimate\\ partner\ in\ the\ previous\ 12\ months\end{array}}{No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\ in\ the\ population}\ x100$$

- *Any form of physical, sexual and/or psychological violence*

$$\frac{\begin{array}{c}No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\\ who\ experienced\ physical,sexual\ and/or\ psychological\ violence\ by\ a\ current\ or\ former\ intimate\\ partner\ in\ the\ previous\ 12\ months\end{array}}{No.\,of\ ever-partnered\ women\ and\ girls\ (aged\ 15\ years\ and\ above)\ in\ the\ population}\ x100$$

Note: Again, for international comparability purposes, countries are encouraged to additionally

compute the above figures for ever-partnered women aged 15 to 49 if they use a different age group.

Note: Disaggregation variables used for this indicator might differ from others. Recommended disaggregation variables that are specific for this indicator include, for instance, marital/partnership status, relationship to the perpetrator (e.g. current or former intimate partner) and frequency of violence.

Exercise 4: Utilizing DHS STATcompiler, find out what the prevalence of physical violence perpetrated by intimate partner in the past 12 months is among ever-partnered women and girls (aged 15 years and older) in India. In addition, find the estimates for this indicator across different wealth brackets.

Solution:

- Go to DHS STATcompiler: https://www.statcompiler.com/en/
- Select 'India' as the choice of country
- Select 'Intimate partner'
- Select 'Physical violence in the past 12 months'.
- STATcompiler will return estimates as shown in Figure 9.

Figure 9: Results for prevalence of physical violence committed by partner/husband in the 12 months preceding the DHS surveys, India

Country	Survey	Physical violence committed by husband/partner in last 12 months Total 15-49
India	2015-16 DHS	20.6
India	2005-06 DHS	20.5

- To disaggregate these estimates by wealth, select 'Wealth quintile' from the indicators box:

Figure 10: List of disaggregation variables

- STATcompiler will return estimates for the two rounds of the survey (2006 and 2016) as follows:

Figure 11: Prevalence of intimate partner violence in India for two rounds of DHS survey (2005- 2006 and 2015-2016), disaggregated by wealth quintile

Physical violence committed by husband/partner in last 12 months

Wealth quintile				
Lowest	Second	Middle	Fourth	Highest
32.1	25.3	20.7	17.2	10.5
29.1	26.8	22.0	16.7	8.6

Indicator 5.4.1: Proportion of time spent on unpaid care and domestic work, by sex, age and location[21]

Definition

This indicator is defined as the proportion of time spent in a day on unpaid domestic and care work by men and women in different age groups and location (urban/rural)[22]. Note that, as opposed to other indicators, this indicator does not capture a proportion of people but rather the proportion of time that people spend on a very specific set of activities (i.e. unpaid domestic and care work). In particular, unpaid domestic and care work refers to activities related to the provision of services for own final use by household members, or by family members living in other households. The identification of the intended destination of the activity is of paramount importance to differentiate unpaid domestic and care work from other forms of work[23]. For instance, providing childcare to your niece (i.e. family member) living in another household/dwelling unit is considered unpaid domestic and care work. On the contrary, providing childcare to your next-door neighbour is considered volunteer work, as the service is not intended for family members or one's own household members. These activities are listed in the International Classification of Activities for Time-Use Statistics 2016 (ICATUS 2016) under the major divisions "3. Unpaid domestic services for household and family members" and "4. Unpaid caregiving services for household and family members".

[21] https://unstats.un.org/sdgs/metadata/files/Metadata-05-04-01.pdf

[22] As specified in the SDGs metadata repository, the recommended age groups are: 15+, 15-24, 25-44, 45-54, 55-64 and 65+.

[23] In 2013, the International Conference of Labour Statisticians (ICLS) adopted Resolution concerning statistics of work, employment and labour underutilization. This Resolution provides the reference concept of work and presents the framework of forms of work. For further references, please see: Resolution concerning statistics of work, employment and labour underutilization.

Concepts

Unpaid domestic work refers to activities including food and meal management preparation, cleaning and maintaining of own dwelling and surroundings, do-it-yourself decoration, maintenance and repair of personal and household goods, care and maintenance of textiles and footwear, household management, pet care, shopping for own household and family members and travel related to previous listed unpaid domestic services. Unpaid care work refers to activities related to childcare and instruction, care of the sick, elderly, or disabled household and family members, and travel related to these unpaid caregiving services.

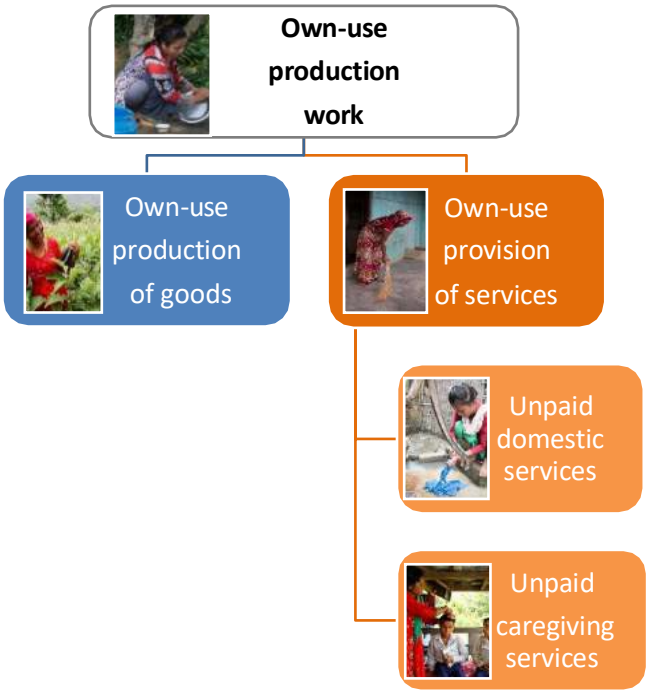
Activity scope

Indicator 5.4.1 only considers the provision of services for own use (i.e. activities related to unpaid domestic services and unpaid caregiving services undertaken by households and families for their own use). For example, unpaid domestic work refers to activities such as shopping for own household and family members, including travel time. As for unpaid care work, it refers to activities r such as caring for a child within the household or a family member, and related travel time. If the care or domestic work is performed for other households, such as neighbor or (non family members) they should not be counted as unpaid care and domestic work.

A potential source of error is to include activities classified as unpaid production of goods, such as growing crops and kitchen gardening, gathering fodder, gathering firewood and other natural products used as fuel, and fetching water from natural and other sources. Time spent on the unpaid production of goods, even if these are for household consumption, should not be considered for the computation of this indicator. Figure 12 illustrates the scope of this indicator. It includes only unpaid provision of domestic and caregiving services (i.e. orange boxes) and does not include time spent on activities related to the unpaid production of goods (i.e. blue box)[24].

[24] For further reference on the activity scope of own-use production of goods, see ICATUS. 2016. Major Division 2.

Figure 12: Scope of SDG Indicator 5.4.1 on own-use provision of services



The first step in calculating this indicator is therefore to identify which activities can be classified as own- use provision of services. For this, it is a good practice to refer to the International Classification of Activities for Time Use Statistics (ICATUS 2016)[25]. ICATUS 2016 is the international statistical classification of all activities a person may spend time on during the 24 hours in a given day. The purpose of ICATUS 2016 is to serve as a standard framework for time-use statistics based on activities grouped in a meaningful way and to promote international comparability of time-use statistics[26].

[25] The United Nations Statistical Commission adopted ICATUS at its 48th Session in March 2017. For further reference, see: https://unstats.un.org/unsd/statcom/48th-session/documents/BG-3h-ICATUS-2016-13-February- 2017-E.pdf

[26] https://unstats.un.org/unsd/statcom/48th-session/documents/BG-3h-ICATUS-2016-13-February-2017-E.pdf

Figure 13: ICATUS classification of activities

Major divisions

Major division	Activity
1	Employment and related activities
2	Production of goods for own final use
3	Unpaid domestic services for household and family members
4	Unpaid caregiving services for household and family members
5	Unpaid volunteer, trainee and other unpaid work
6	Learning
7	Socializing and communication, community participation and religious practice
8	Culture, leisure, mass-media and sports practices
9	Self-care and maintenance

The activity scope of SDG 5.4.1. are activities listed in the ICATUS 2016 Major Divisions 3 and 4, which are, respectively, unpaid domestic services and unpaid caregiving services for household and family members. These major divisions are further divided into sub-activities at 3-digit level[27]. For example, Major Division 3, "Unpaid domestic services for household and family members", constitutes activities such as food and meals management and preparation; cleaning and maintaining own dwelling and surroundings; household management for final use, etc. Likewise, Major Division 4 includes activities relating to "unpaid caregiving services for household and family members". For example, it includes childcare and instruction, care for dependent adults, and help to non-dependent household and family members.

In ICATUS 2016, each activity has a standardized definition and inclusion criteria. The user must refer to this information to correctly classify activities and calculate this indicator. Below is an example of what it means, according to ICATUS and for indicator calculation purposes, to be engaged in management of food and meals:

[27] See UNSD for complete list of activities https://unstats.un.org/unsd/statcom/48th-session/documents/BG-3h- ICATUS-2016-13-February-2017-E.pdf

Figure 14: Illustration of description of activities in ICATUS

Definition	Refers to all activities in connection with food and meals management and preparation for household and family members
Includes	Includes: – 311 Preparing meals/snacks – 312 Serving meals/snacks – 313 Cleaning up after food preparation/meals/snacks – 314 Storing, arranging, preserving food stocks – 319 Other activities related to food and meals management and preparation
Excludes	Excludes: – 136 Providing paid domestic services – 221 Making, processing food products, beverages and tobacco for own final use – 32 Cleaning and maintaining of own dwelling and surroundings – 33 Do-it-yourself decoration, maintenance and repair – 34 Care and maintenance of textiles and footwear – 35 Household management for own final use – 36 Pet care – 37 Shopping for own household and family members – 38 Travelling, moving, transporting or accompanying goods or persons related to unpaid domestic services for household and family members – 39 Other unpaid domestic services for household and family members – 511 Unpaid volunteer household maintenance, management, construction, renovation and repair

Data source

Time-use statistics[28] are quantitative summaries of how individuals spend or allocate their time over a specified period, typically over 24 hours of a day or over the 7 days of a week. Time-use surveys are the main data source of time-use statistics and more specifically of data on time spent in unpaid care and domestic work. Time-use surveys can take the form of: (1) a stand-alone survey; or (2) a time-use module integrated into multipurpose household surveys. This choice usually depends on available resources and required frequency of data collection.

There are two main methods to collect information on time use, namely: (a) diary-based methods and (b) stylized retrospective questions. Diary-based methods are the recommended instruments to gather time- use data. Diary-based time-use methods are well positioned to gather four types of information that are also useful for computing the SDG 5.4.1 Indicator, namely:

1) type of activities in which people engage
2) how much time people spend in these activities
3) time of the day when individuals undertake certain activities
4) activities occurring simultaneously

There are several kinds of time-use diaries. The most common type of diary is the 24-hour time diary (light diary), in which the respondent is asked to take note of all the activities in which he or she engaged in the last 24 hours. While some such diaries have fixed time intervals (e.g. every

[28] See UNSD https://unstats.un.org/unsd/gender/timeuse/

10 minutes), others have open time intervals. When an open-time-slots diary is administered, the respondent reports the activity as well as the start time and end time for the activity. For instance, a time-use diary with open time slots might look as follows:

Figure 15: Time diary with open time intervals

Starting time	Ending time	(1)	(2)	(3)	(4)	(5)
		What was your main activity? (Please record all activities, even if they only lasted a few minutes)	Whom did you do this for?	What else were you doing at the same time?	Where were you?	Who was with you at home, or with you away from home?

An example of how this time diary could be filled is provided below:

Figure 16: 24-hour time diary

Starting time	*Ending time*	*(1)*	*(2)*	*(3)*	*(4)*	*(5)*
		What was your main activity? (Please record all activities, even if they only lasted a few minutes)	Whom did you do this for?	What else were you doing at the same time?	Where were you?	Who was with you at home, or with you away from home?
5:45	6:00	Brushed teeth	Self	Nothing	Home	Husband and 5-year-old child
6:00	6:30	Prepared lunch for husband	Husband	Talking to husband and watching over sleeping child	Home	Husband and 5-year-old child
6:30	7:00	Talked to husband	Self	Watching over sleeping child	Home	Husband and 5-year-old child
7:00	7:30	Took a bath	Self	Nothing	Home	5-year-old child
7:30	7:45	Woke my child up	Child	Nothing	Home	5-year-old child
7:45	8:15	Dressed my child for school	Child	Talking to child	Home	5-year-old child
8:15	8:30	Walked the child to	Child	Talking to child	Outside home	5-year-old child

		school				
8:30	8:45	Purchased fruits and vegetables	Household	Listening to music	Outside home	No one
8:45	9:10	Walked back home	Self	Listening to music	Outside home	No one
9:10	9:45	Prayed/Meditated	Self	Nothing	Home	No one
9:45	10:30	Ate breakfast	Self	Watched television	Home	No one
10:30	10:45	Assisted the house help	House	Watched television	Home	No one

The advantage of a time diary of this kind is that it gives in-depth insight into the daily routine of the respondent. Additionally, it captures simultaneity of activities. For example, the respondent was primarily preparing lunch for their husband between 6-6:30 am. But, in addition to that, she was also passively taking care of a sleeping child. This information is important to truly capture the proportion of time spent on unpaid care and domestic work. This form of work often occurs simultaneously with other activity.

Another type of survey instrument to capture this kind of information is a light time-use diary. Unlike the 24-hour diary, where the respondent has to mention or write down all the activities, in the light time-use diary a set of pre-coded activities is already included. The respondent only needs to mention the time at which they were engaged in that activity and for how long. Figure 17 shows an example of a light time- use diary with 22 pre-coded activity categories:

Figure 17: Light time-use diary

Activity categories		04:00-05:00				05:00-06:00				06:00-07:00				07:00-08:00			
Sleeping and resting	1																
Eating	2																
Personal care	3																
School (also homework)	4																
Work as employed	5																
Own business work	6																
Framing	7																
Animal rearing	8																
Fishing	9																
Shopping/getting services	10																
Weaving, sewing	11																
Cooking	12																
Domestic work	13																
Care for children/adult/elderly	14																
Commuting	15																
Traveling	16																
Watching TV	17																
Reading	18																
Sitting with family	19																
Exercising	20																
Social visits	21																
Practicing hobbies	22																

Other, specify	23															

A second method to collect time-use data is through stylized retrospective questions. These questions are directly asked to respondents for them to recall how much time they usually spend performing a certain activity in a week. Stylized retrospective questions collect information only on a given set of activities people engage in and usually do not capture time spent in simultaneous activity. For instance, when looking at Figure 17 above, if recall stylized questions were asked to someone about how much time the person spent cooking + how much time taking care of the child, the total estimate for time spent on unpaid care and domestic work would be overestimated. Herein lies one of the key advantages of using diaries.

Coding of responses

In a diary-based method, respondents describe their activities in their own words. Trained staff then code these responses to an activity code system based on standard guidelines. In the case of light time-use diaries, coding is less burdensome, as respondents report their time allocation against a set of pre-coded activities (see Figure 17). Coding of responses might be complicated when activities are taking place simultaneously, particularly in the cases when enumerators need to decide how much of the total time was indeed allocated to a primary vs. a secondary activity. For further details on this, refer to UNSD[29].

Computation method

Data for this indicator is expressed as a proportion of time spent on unpaid domestic and care work in a day. Weekly data is averaged over seven days of the week to obtain the daily average time. Average number of hours spent on unpaid domestic and care work derives from time-use statistics that are collected through stand-alone time-use surveys or a time-use module attached to other household surveys. Data on time-use may be summarized and presented as either (1) average time spent for participants (in each activity) only or (2) average time spent for all populations of a certain age (total relevant population). In the former, the total time spent by the individuals who performed the activity is divided by the number of persons who performed it (participants). In the latter, the total time is divided by the total relevant population (or a sub-group thereof), regardless of whether people performed the activity or not. This is important because people tend to complete different activities on weekdays vs. weekends, for instance. Similarly, because of the seasonality of certain work and lifestyles, time-use surveys are sometimes conducted several times a year, and the information compiled is then averaged to be representative of an average day. Once the information compiled has been coded according to ICATUS, this indicator can be calculated using the following formula:

$$Indicator\ 5.4.1 = \frac{Daily\ number\ of\ hours\ spent\ on\ domestic\ work + Daily\ number\ of\ hours\ spent\ on\ care\ work}{24} \times 100$$

[29] See UNSD. 2005. The Guide to Producing Statistics on Time Use: Measuring Paid and Unpaid Work. https://unstats.un.org/unsd/publication/SeriesF/SeriesF_93E.pdf

Where,

$$Daily\ number\ of\ hours\ spent\ on\ relevant\ activities = \frac{Total\ number\ of\ hours\ spent\ by\ the\ population\ on\ relevant\ activities}{Total\ population\ (regardless\ of\ whether\ they\ participated\ in\ the\ activity)}$$

According to the official SDG indicator name, this indicator should be disaggregated by sex, age and location. Moreover, an important feature of this indicator lies in the reference population used for its computation. That is, the daily number of hours spent on unpaid domestic and care work is the ratio of the total number of hours spent by the population on unpaid domestic and care work and the total population (regardless of whether they participated in the activity).

Exercise: 1

Which of the following activities classify as 'engagement in preparation of food and meals'?

1. Shopping for own household and family members
2. Cleaning and maintaining of own dwelling and surroundings
3. Storing, arranging, preserving food stocks
4. Serving meals/snacks

Solutions to Exercise 1: Activities 3 and 4 only.

Indicator 5.5.1b: Proportion of seats held by women in local governments

Definition

This indicator measures the proportion of elected seats held by women in legislative/deliberative bodies of local government, expressed as a percentage[30].

Key concepts

Local government: is one of the subnational spheres of government and a result of decentralization, a process of transferring political, fiscal and administrative powers from the central government to subnational levels of government. Most countries in the world (about 90%) have a local government sphere, and about a quarter have an intermediate sphere of government[31] to regulate and/or run certain government functions or public services on their own. Local government consists of multiple local government units, defined in the System of National Accounts as "institutional units whose *fiscal, legislative and executive* authority extends over the smallest geographical areas distinguished for administrative and political purposes"[32]. These fiscal, legislative and executive authorities, or powers, enable local governments to regulate and/or run certain government functions on their own and are the key criteria for

[30] https://unstats.un.org/sdgs/metadata/files/Metadata-05-05-01b.pdf

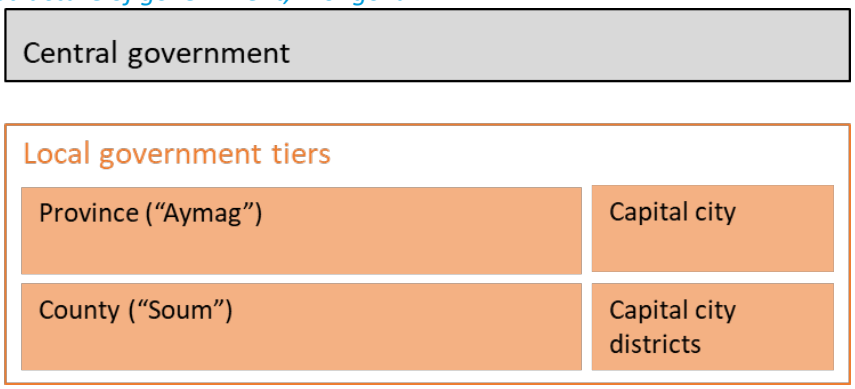
[31] The distinction between central, state and local government is consistent with the 2008 System of National Accounts (SNA) (para 4.129)

[32] SNA (para 4.145).

differentiating between what constitutes local government and what constitutes simple state or public administration implementing state policies or delivering services at local level.

Local government may be organized in one or more tiers, as prescribed by a country's national legal framework, including national constitutions and local government acts or equivalent legislation. For instance, Mongolia has a central government sphere and a local government sphere. The local government sphere is organized into two tiers: an upper tier of the provincial-level local government units and the City of Ulaanbaatar (a city with provincial status), and a lower tier of the county/district-level local government units, including the counties and the nine municipal districts of the City of Ulaanbaatar.

Figure 18: Structure of government, Mongolia



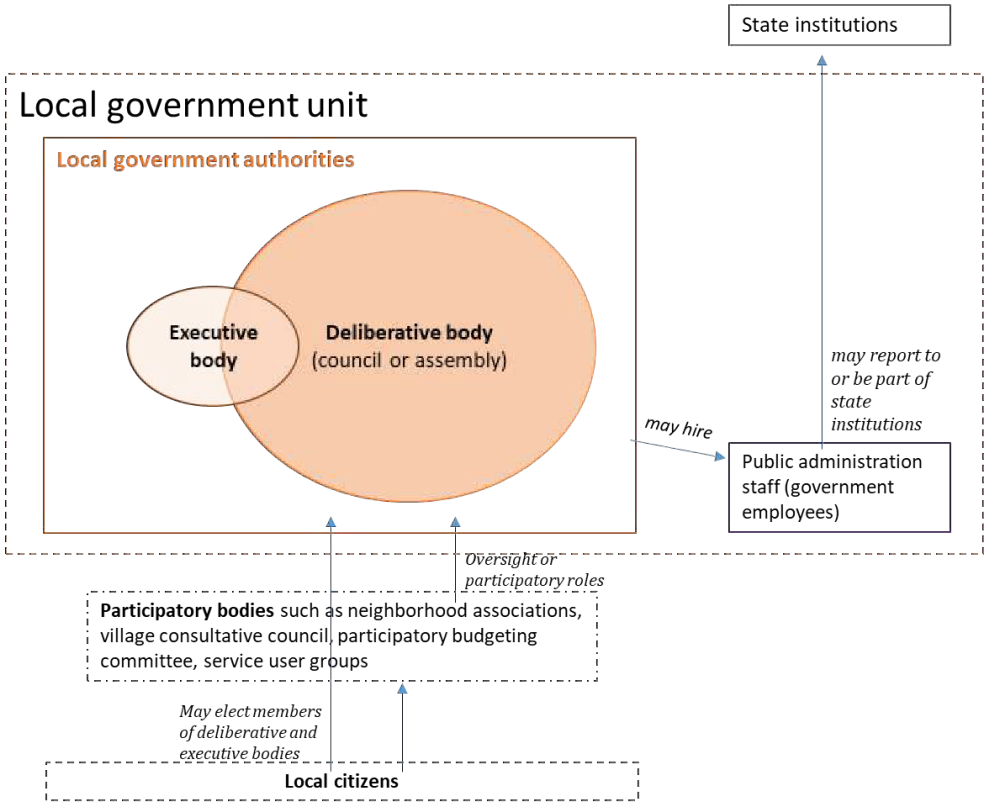
Source: UN Women review of local governments

- Each local government unit has a deliberative body and an executive body. **Deliberative bodies**, such as councils or assemblies, are formal entities with decision-making power, including the ability to issue by-laws, on a range of local aspects of public affairs. They are the local version of the legislative bodies at national level (the parliaments). Local deliberative bodies have a prescribed number of members as per national or state legislation, which are usually elected by universal suffrage. For instance, in Mongolia, the deliberative bodies of local government are the Hural of citizen representatives.

  Note: By comparison, executive bodies (also formal entities of local government), consisting of an executive committee or a mayor, typically prepare and execute decisions made by the deliberative body. Members of executive bodies may be elected, appointed or nominated. Executive bodies are not included in the measurement of SDG Indicator 5.5.1b.

  Note: In addition to the deliberative and executive bodies, other groups may be participating in the process of local governance, without being part of the local government members as shown in Figure 19. These are public administration staff, members of auxiliary or participatory bodies, representative of interest groups, representatives of traditional leaders and local citizens. These groups do not have legislative/deliberative or executive powers on matters of local self- government and are not members of the local government. Therefore, these groups are excluded from the measurement of Indicator 5.5.1b.

Figure 19: The composition of a local government unit



Source: UN Women. 2018. Methodological Note on SDG Indicator 5.5.1b.

- **Elected seats/positions** are selected in local elections, based on a system of choosing political office holders in which the voters cast ballots for the person, persons or political party that they desire to see elected. The category of elected positions includes both elected persons who competed on openly contested seats and persons selected during the electoral processes through a quota system (for instance, based on reserved seats).

Note: Some members of local government may be appointed, typically by government officials from higher-ranking tiers of government. Appointed positions of local government are more frequent among the leadership positions, such as the heads of the executive body, representatives of specific groups (e.g., disadvantaged groups, youth); and, temporary committees/delegations/ /caretakers appointed by government officials when a council has been dissolved.

Computation method

UN Women is the custodian agency for this indicator. UN Women recommends that the following formula be used for calculation:

$$\frac{Number\ of\ elected\ seats\ held\ by\ women\ in\ deliberative\ bodies\ of\ local\ government}{Total\ number\ of\ elected\ seats\ in\ deliberative\ bodies\ of\ local\ government} x100$$

Example: Given the figures below, the indicator can be calculated as follows:

$$\frac{sum\ of\ elected\ positions\ held\ by\ women\ in\ deliberative\ bodies\ of\ local\ government}{Seu\ of\ elected\ positions\ held\ by\ wmen\ and\ men\ in\ deliberative\ bodies\ of\ local\ government} x100$$

An example of a country with two tiers:

- Upper tier: 10 women in elected positions out of 100 total women and men in elected positions
- Lower tier: 500 women in elected positions out of 2000 total women and men in elected positions
- Indicator calculated as:

$$\frac{10 + 500}{100 + 2000} x100 = 24\%$$

Data sources

Administrative data on election results are the main source of data on elected members of local government, and the recommended data source for Indicator 5.5.1b. These data are produced by Electoral Management Bodies (EMBs) or equivalent bodies tasked with organizing elections at the local level. The data on elected women and men required to calculate Indicator 5.5.1b are derived from administrative information on election winners of most recent local elections, disaggregated by sex. No adjustments or estimates are necessary to transform this administrative information into statistics for monitoring the indicator.

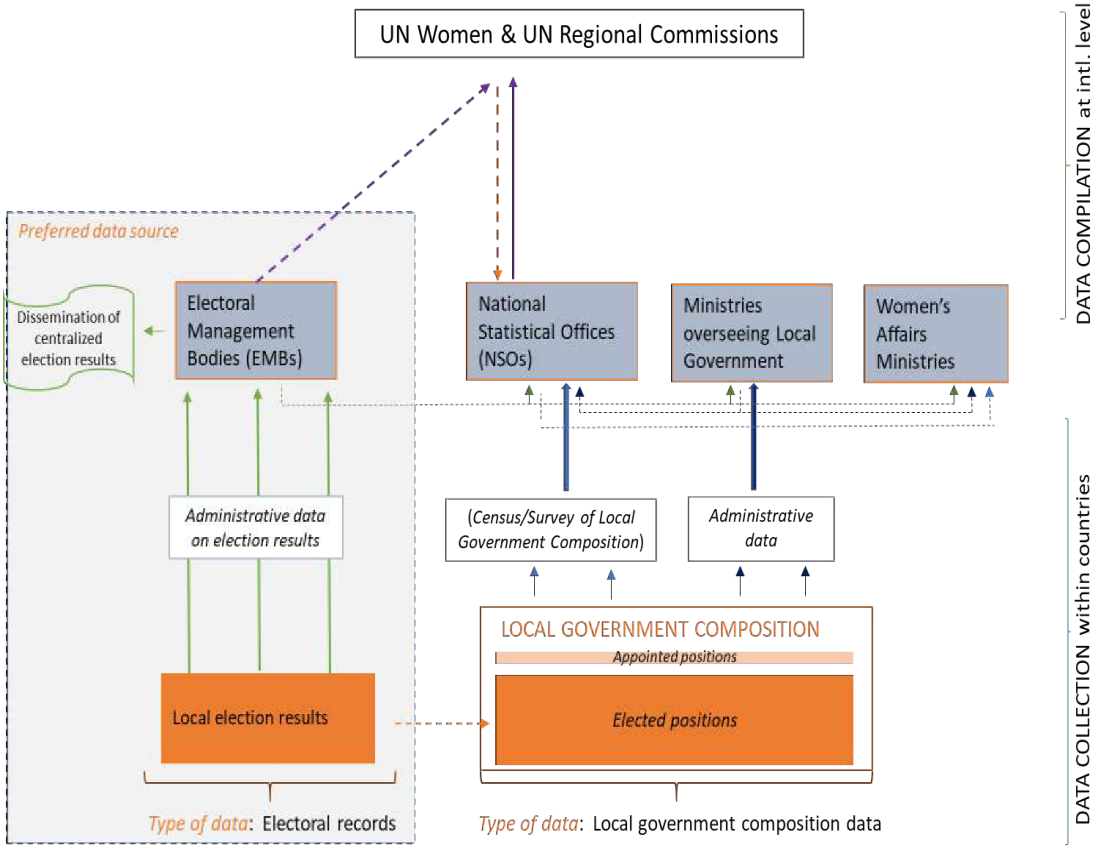
When sex-disaggregated data based on electoral results are not available, two other types of sources of data may be used:

- **Public administration data**, available to line ministries overseeing local government, may include information on local government members. Additional processing of information may be necessary, however, when the information on women and men in elected positions of local government is mixed with information that is not covered by Indicator 5.5.1b, including on appointed positions, other categories of local government members and public administration employees. In some cases, elected positions may not be covered in the records maintained, for example, if the administrative records are restricted to only those positions that are on the government payroll.
- Existing **surveys or censuses using local government units as units of observation.** These surveys or censuses may be undertaken by National Statistical Offices and/or line ministries and may take the form of (a) local government censuses or surveys; (b) establishment surveys; and (c) municipality surveys. They would also need to distinguish between elected positions of local government and other categories of local government members or public administration employees, which are not covered by Indicator 5.5.1b.

For the global compilation of data for this indicator, UN Women, in coordination with the UN regional commissions, sends out a data request to National Statistical Offices annually and/or

after new local elections are conducted.

Figure 20: Sources and flow of data on women's representation in local



Source: UN Women. 2018. Methodological Note on SDG Indicator 5.5.1b

Exercise 5

Below are two examples of countries with different government organization and different manners of selecting the members of deliberative/legislative bodies of government. Please calculate SDG Indicator 5.5.1b for these two examples.

Country A

		Deliberative bodies						Administrative staff Number of persons	
Geographical level	Government sphere	Number of persons elected on openly contested seats		Number of persons elected on reserved seats		Appointed persons			
		Women	Men	Women	Men	Women	Men	Women	Men
Provinces	Intermediate	35	80	0	0	0	0	250	120
Districts	Local	788	2903	239	0	0	0	2037	1352
Municipalities	Local	12300	50376	571	0	0	0	10005	8261

Country B

		Deliberative bodies				Executive bodies		Administrative staff	
Geographical level	Government sphere	Number of persons elected on openly contested seats		Number of persons elected on reserved seats		Elected persons		Number of persons	
		Women	Men	Women	Men	Women	Men	Women	Men
Provinces	Local	35	80	0	0	0	0	235	220
Districts	Local	789	2903	239	0	87	193	2007	2352
Municipalities	Local	12364	50376	570	0	836	8037	10345	9262

Solutions to Exercise 5:

- In Country A, the proportion of seats held by women in local governments is 20.69, calculated as (788+12300+239+571)*100/ (788+12300+239+571+2903+50376+0+0+0)
- In Country B, the proportion of seats held by women in local government is 20.78, calculated as (35+789+12364+0+239+570)*100/(35+789+12364+0+239+570+80+2903+50376+0+0+0)

Indicator 5.5.2: Proportion of women in managerial positions

Definition

This indicator refers to the proportion of women in the total number of persons employed in managerial positions. It provides information on the proportion of women who are employed in decision-making and management roles in government, large enterprises and institutions, thus providing some insight into women's power in decision-making and in the economy, (especially compared to men's power in those areas)[33].

To calculate the proportion of women in managerial positions, two measures or indicators can be used.

1. The share of women in total management. This includes all levels of management positions, such as junior management, middle management and senior management.
2. The share of women in senior and middle management positions. The rationale for this is that women's participation in junior management is still high but as the management levels increase, women are underrepresented.

Key concepts

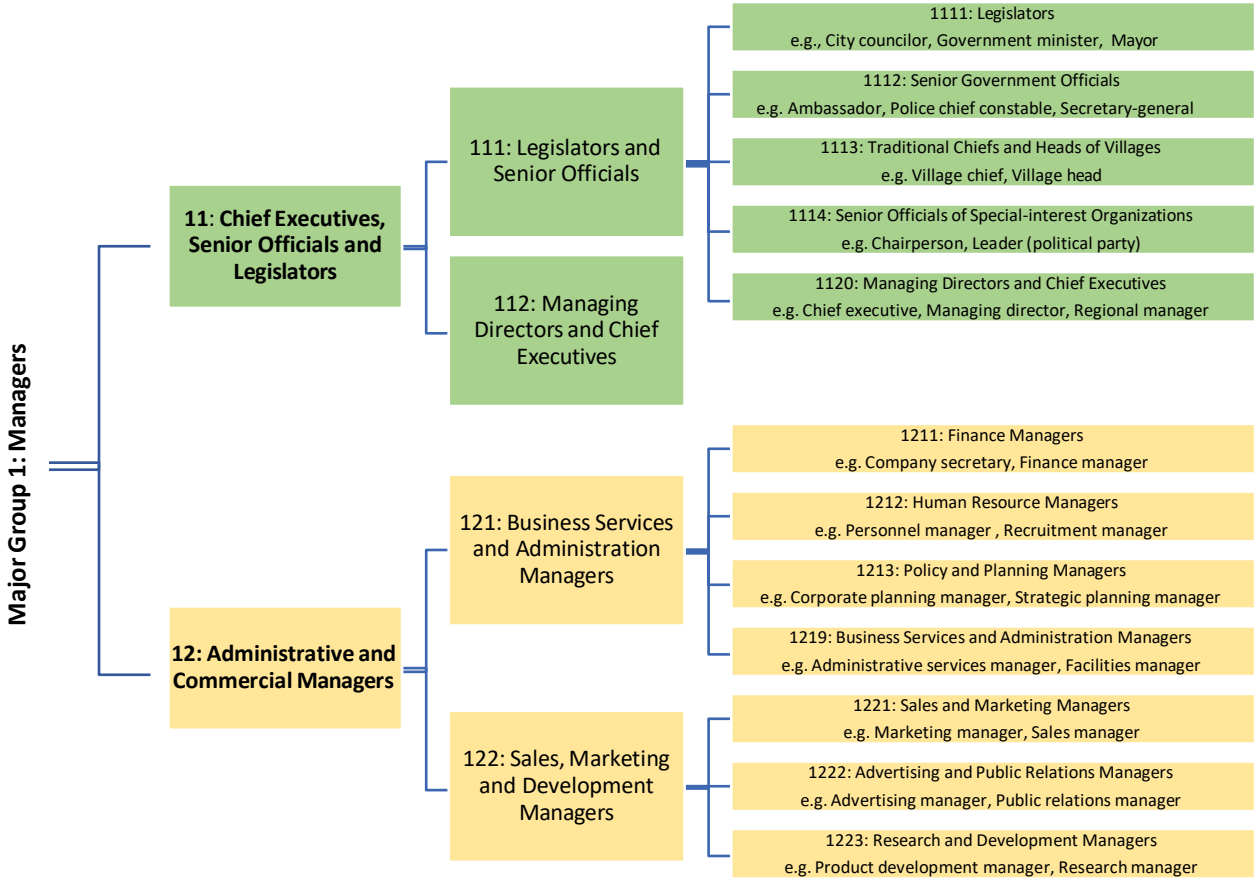
This classification of junior management versus senior management is defined by the International Standard Classification of Occupations (ISCO-08). It organizes jobs into a clearly defined set of groups based on the tasks and duties undertaken in the job. Major category 1

[33] UNSD. https://unstats.un.org/sdgs/metadata/files/Metadata-05-05-02.pdf

consists of all the managerial categories: junior, middle and senior. It is further divided into sub-major and minor categories. Sub-major categories 11, 12 and 13 refer to middle and senior management-level positions, while category 14 refers to junior management level.

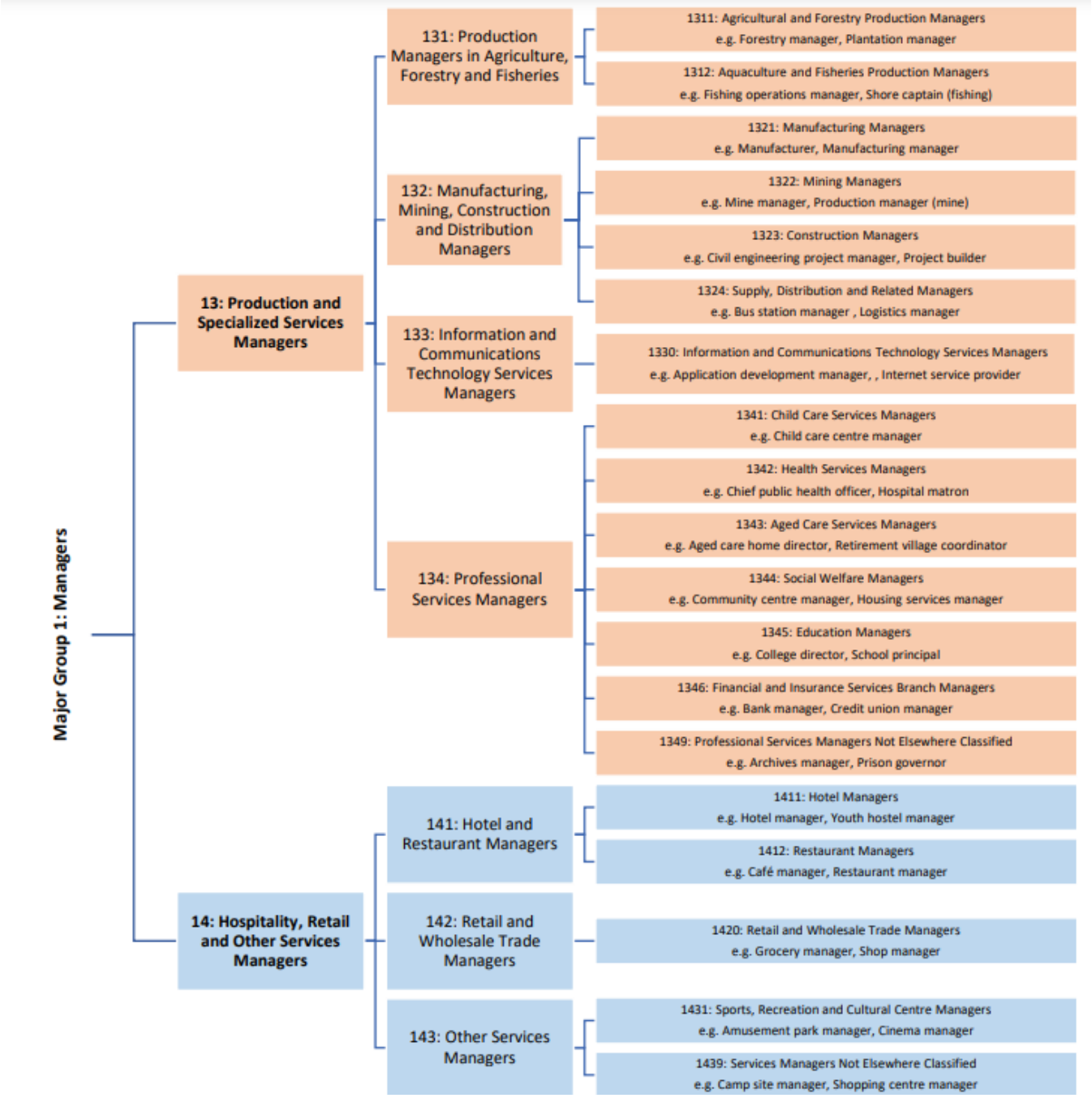
Figure 21 shows the expanded list of all the managerial categories[34], with the example of occupations within each category:

Figure 21: ISCO-08 Classification of managers



[34] https://www.ilo.org/public/english/bureau/stat/isco/isco08/

Figure 21: ISCO-08 Classification of managers (contd.)



Data sources

Among other instruments, data for this indicator can be obtained from:

- Labour Force Surveys
- Survey modules on employment
- Establishment surveys
- Administrative records

Establishment surveys and administrative records, however, offer limited coverage as they only capture formal enterprises or enterprises larger than a certain size. Labour force surveys are, typically, the preferred source for the calculation of this indicator.

Figure 22: Despite parity in educational attainment, representation of women decreases at higher levels of management

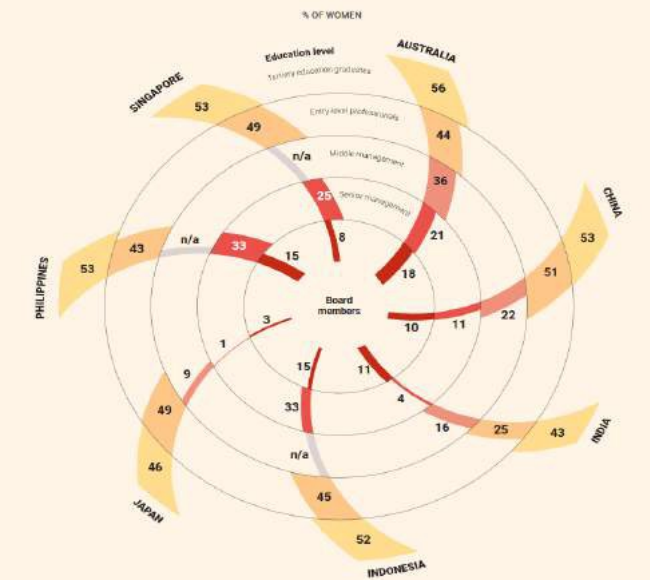


Image source: Turning Promises into Action, 2018

Computation method

Once the microdata has been coded according to ISCO-08, estimates for this indicator can be calculated using the following formula:

1) To calculate the share of women in total management (junior level + middle level + senior level):

$$\frac{Women\ engaged\ in\ employment\ activities\ that\ fall\ under\ ISCO\ 08\ category\ 1}{People\ engaged\ in\ employment\ activities\ that\ fall\ under\ ISCO\ 08\ category\ 1} x100$$

2) To calculate the share of women in middle and senior management:

$$\frac{Women\ engaged\ in\ employment\ activities\ that\ fall\ under\ ISCO\ 08\ categories\ 11+12+13}{People\ engaged\ in\ employment\ activities\ that\ fall\ under\ ISCO\ 08\ categories\ 11+12+13} x100$$

Using managerial level as a disaggregation variable

Women are underrepresented in senior and middle management positions within government, large enterprises and institutions[35]. Figure 22[36] shows the underrepresentation of women in senior management positions in seven countries in Asia and the Pacific. It also depicts the glass ceiling women face in the region, as more women graduate from tertiary education, but significantly less make it to top levels of management.

In addition, using managerial level as a disaggregation variable can help unveil the disparity between men and women in many areas, including:

- Wage gap, by managerial level
- Proportion of women researchers, by managerial level
- Proportion of women in a particular occupation, by managerial level
- Proportion of time spent on unpaid care and domestic work, by employment status and managerial level
- Proportion of women who have a say in making large household purchases, by employment status and managerial level

Exercise 2: If ISCO-08 category 14 refers to junior management, is the following statement correct? Women in middle and senior management can be calculated as:

$$\frac{\textit{Women engaged in employment activities that fall under ISCO 08 category 1} - \textit{Women engaged in employment activities that fall under ISCO 08 category 14}}{\textit{People engaged in employment activities that fall under ISCO 08 category 1} - \textit{People engaged in employment activities that fall under ISCO 08 category 14}} X\,100$$

Solution to Exercise 2

Yes, the statement is correct. This is because:

ISCO 08 Category 1 = Total management

ISCO 08 Category 11 + 12+ 13= Middle and senior management ISCO 08 Category 14 = Junior management

So, instead of writing 'women employed in 11+12+13', we can write 'women employed in Category 1' (total management) – 'women employed in Category 14' junior management.

[35] See UN Women. 2018. *Turning Promises into Action*

[36] See ADB. 2018. https://www.adb.org/publications/gender-equality-sdgs-asia-pacific

Indicator 5.a.1 (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 [37]

Definition

SDG indicator 5.a.1 consists of 2 sub-indicators:

- Sub-indicator 5.a.1 (a): Proportion of total adult agricultural population with ownership or secure rights over agricultural land, disaggregated by sex. Sub-indicator 5.a.1 (a) is a prevalence measure; it measures the prevalence of people in the agricultural population with ownership or secure rights over agricultural and, disaggregated by sex. The sub-indicator is calculated as follows:

$$\frac{\text{No. of people in the adult agricultural population with ownership or secure rights over agricultural land}}{\text{Total adult agricultural population}} \times 100, \text{ by sex}$$

- Sub-indicator 5.a.1 (b): Share of women among owners or rights-bearers of agricultural land, by type of tenure. Sub-indicator 5.a.1 (b) focuses on gender parity, measuring the extent to which women are disadvantaged in ownership or secure rights over agricultural land.

  The sub-indicator is calculated as follows:

$$\frac{\text{Number of women in the adult agricultural population with ownership or secure rights over agricultural land}}{\text{Total in the adult agricultural population with ownership or secure rights over agricultural land}} \times 100, \text{ by type of tenure}$$

Key concepts

The basic concepts and terms essential to collecting data needed to compute SDG indicator 5.a.1 are the following:

(1) Agricultural land
(2) Agricultural household
(3) Agricultural population
(4) Ownership or secure rights over agricultural land

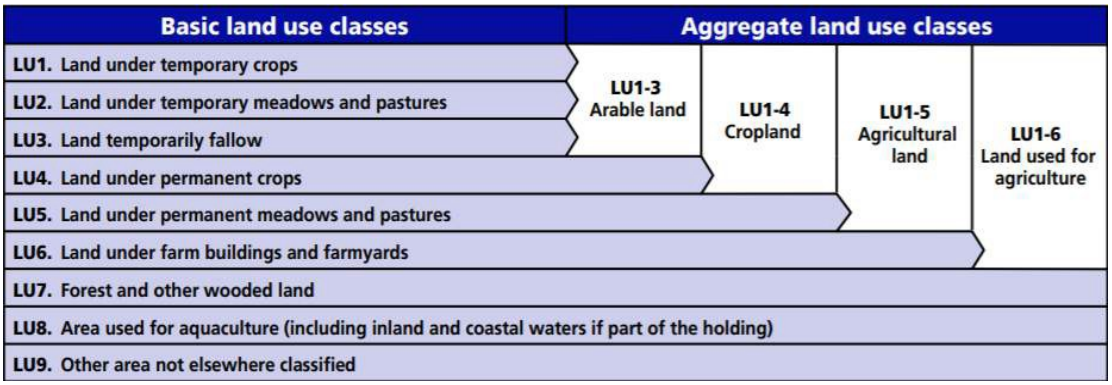
[37] See UNSD https://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdf (Updated 2023-05-15)

(1) Agricultural land

Land is considered 'agricultural land' according to its use. The classes and definitions of land use are based on the classification of land use for the agricultural census recommended by the World Programme for the Census of Agriculture 2020[38]. In this classification, summarized in Figure 23, agricultural land includes:

- LU1-arable land under temporary crops (i.e., crops with less than a one-year growing cycle)[39]
- LU2-arable land under temporary meadows and pastures (i.e., cultivated with herbaceous forage crops for mowing or pasture)[40]
- LU3-arable land that is temporarily fallow (due to crop rotation systems or temporary unavailability for planting)[41]
- LU4-land under permanent crops[42]
- LU5-land under permanent meadows and pastures[43]

Figure 23: Classification of land use, according to FAO guidelines



Since indicator 5.a.1 focuses on agricultural land, it excludes all forms of land that are not

[38] FAO. 2015. World Programme for the Census of Agriculture 2020- Volume 1: Programme, concepts and definitions. FAO Statistical Development Series 15, paras 8.2.13 – 8.2.28.
[39] As per the World Census of Agriculture (WCA) 2020 definition, "temporary crops" encompass all types of crops with a growing cycle of less than one year. Temporary crops include those that require reseeding or replanting after each harvest to ensure new production, such as cereals. Comprehensive list of crops classified as 'temporary' in the WCA 2020 report on page 165, accessible at http://www.fao.org/3/a-i4913e.pdf.
[40] Defined as: "land that has been cultivated for less than five years with herbaceous or forage crops for mowing or pasture".
[41] Temporary fallow land is defined as arable land left uncultivated for at least one agricultural year due to reasons like crop rotation or the inability to plant new crops. It's important to note that this category doesn't encompass land that is currently uncultivated but is intended for sowing and planting before the end of the agricultural year.
[42] "Permanent crops" refers to land cultivated with crops that do not require annual replanting, including fruits, nuts, certain stimulant crops, and more.
[43] Land that is under cultivation with herbaceous forage crops or remains in its natural state as wild prairie or grazing land for a period exceeding five years.

considered 'agricultural', including:

- Land under farm buildings and farmyards
- forest and other wooded land
- area used for aquaculture (including inland and coastal waters if part of the holding)
- Other area not elsewhere classified

(2) Agricultural household

Ownership or secure rights over agricultural land are specifically relevant to individuals whose livelihood relies on agriculture. These individuals are identified by way of whether their household[44] can be classified as an agricultural household which for purposes of calculating indicator 5.a.1 is characterized by the following:

- Criterion 1: A member or members of the household operated land for agricultural purposes or raised livestock over the past 12 months *regardless of the final purpose of production*

  AND

- Criterion 2: At least one member of the household operated land for agricultural purposes or raised livestock *as an own-account worker*.

(3) Adult agricultural population

To classify a person as part of the adult agricultural population, they should satisfy two conditions:

- The person is a member of an agricultural household as defined above.

- The person is an adult. For the purposes of global monitoring, 'adult' is defined as a person who is 18 years old or older. For country-specific monitoring, national legal definitions of 'adult' could be used.[54]

Thus, all adult household members of an "agricultural household", are considered as part of the adult agricultural population.

Note: The use of household to measure whether a person belongs to an adult agricultural population is especially important from a gender perspective. That is, data collection instruments must compile information on whether a household (and not necessarily a person) is involved in agricultural practices. This is recommended because women often provide significant support to the agricultural activities carried out by their household, but when it comes to reporting, they consider themselves as not involved in agriculture if, for instance, they don't get direct income out of agricultural work. Thus, a household- level measure can better take into account women's participation in agricultural activities.

[44] Household is defined according to the United Nations Principles and Recommendations for Population and Housing Censuses, Revision 3: https://unstats.un.org/unsd/publication/seriesM/Series_M67rev3en.pdf

(4) Ownership of agricultural land and secure rights over agricultural land

Land ownership is defined as a person's right to acquire, to use and to transfer land. "Secure rights" in the context of indicator 5.a.1 is defined as secure tenure rights, i.e., rights to use, manage and control land, fisheries and forests in the sense of the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security[45].Operationally, for the purposes of measurement of this indicator, secure tenure rights comprise both land ownership and two key alienation rights: the right to sell and the right to bequeath agricultural land.

Note: It is challenging to operationalize the definition of ownership of and secure rights to agricultural land for purposes of data collection. In addition, differences in legal systems and how legal systems protect rights to agricultural land across countries poses challenges in providing comparable statistics across countries. In many countries, a combination of systems of ownership as well as secure tenure rights to land may exist. A common combination would be where the private property system prevails, but with pockets of state-owned and/or communal land. For some countries, the system may primarily be that of state-owned land or communal land.[46]

Criteria to classify a person as a land-owner

Considering the various combinations of systems of ownership and secure tenure rights to land and to facilitate international comparability, the following three criteria (proxies) define when an individual has ownership or secure rights to agricultural land:

- Proxy 1 (Formal documentation[47]): Presence of legally recognized documents in the name of the individual.

  OR

- Proxy 2 (Alienation rights48): Right to sell- ability of an individual to permanently transfer the land in question in return for cash or in-kind benefits.

  OR

- Proxy 3: Right to bequeath- the ability of an individual to pass on the land in question to other person(s) after their death, by written will, oral will (if recognized by the country) or when the deceased left no will, through intestate succession.

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[45] Refer to https://www.fao.org/tenure/voluntary-guidelines/en/

[46] For more details on typologies of land ownership systems, refer to p. 5 of the Metadata for 5.a.1 https://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdfhttps://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdf

[47] For more details on what formal documentation covers, refer to pp 6-7 of the Metadata for 5.a.1 https://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdfhttps://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdf

[48] For more details on what alienation rights, refer to pp 7 of the Metadata for 5.a.1 https://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdfhttps://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdf

Data sources

Indicator 5.a.1 focuses on adult individuals living in agricultural households, as defined above. Thus, the data required to estimate the indicator, can be collected through agricultural surveys/ censuses or general national household-based surveys having a suitable coverage of agricultural households. The recommended data collection vehicles would be ones that have a suitable coverage of agricultural households and the reference population for the indicator. In addition, the data collection should be regularly conducted— e.g., every 3-5 years. The metadata for 5.a.1 discusses the advantages and limitations of the following data sources:

- Agricultural Survey
- Census of Agriculture (when the timing aligns)
- Specialized gender and environment surveys
- Nationally representative general household surveys, such as:
    - Household Budget Surveys (HBS)
    - Living Standard Measurement Surveys (LSMS)
    - Labour Force Surveys (LFS)
    - Demographic and Health Surveys (DHS)
    - Multiple Indicator Cluster Surveys (MICS)

Minimum set of questions to collect data on agricultural land ownership

An example of a minimum set of questions for collecting data on ownership of or secure rights to agricultural land using the self-respondent approach (i.e., the individual directly answers the questions as opposed to the proxy respondent approach where a household representative responds for all household members) is shown in Figure 24.

Note that Individual-level, self-reported responses are most appropriate for this indicator. Household surveys which interview proxy respondents often produce inaccurate results. This is especially problematic from a gender perspective since decision-makers want to know the extent to which women are empowered and not about other people's judgment of how empowered they are.

Figure 24: Minimum set of questions for collecting data on ownership of or secure rights to agricultural land[49]

Questions	Function
Q1. Do you own or hold secure rights to any agricultural land, either alone or jointly with someone else? 1 - Yes 2 – No (end of the module)	*This question refers to whether the respondent, not the respondent's household, holds any agricultural land. It measures reported possession, which captures the respondent's self-perception of his/her possession status, irrespective of whether the respondent has a formal or legal documentation of ownership.*
Q2. Is there a formal document for <u>any</u> of the agricultural land you own or hold secure rights to that is issued by or registered at the Land Registry/Cadastral Agency, such as a title deed, certificate of ownership, or certificate of hereditary acquisition? 1 - Yes 2 – No >> Q4	*This question identifies whether there is a legally recognized document for any of the agricultural land the respondent reports having.* *Documented ownership/secure rights refer to the existence of any document an individual can use to claim ownership or secure rights in law over the land.*
Q3a. What type of documents are there for the agricultural land you own? **LIST UP TO 3.** **CODES FOR DOCUMENT TYPE:** **TITLE DEED.....1** **CERTIFICATE OF CUSTOMARY OWNERSHIP.....2** **CERTIFICATE OF OCCUPANCY....3** **CERTIFICATE OF HEREDITARY ACQUISITION LISTED IN REGISTRY.....4** **SURVEY PLAN.....5** **OTHER (SPECIFY).....6**	*The list of options presented here is indicative. It is of utmost importance that the list includes all the legal documents recognized/ enforceable by law according to the national land tenure system.* ***Refer to discussion in Section 2.a on formal documentation.***
Q3b. Is your name listed on any of the documents as owner? 1 – Yes 2 – No 98 - Don't know 99 - Refusal	*Because individual names can be listed as witnesses on a document, it is important to ask if the respondent is listed "as an owner" or "holder" on the document. <u>The respondent does not need to show the document to the enumerator.</u>*
Q4. Do you have the right to *sell* any of the agricultural land held (alternatively 'land possessed, used or occupied'), either alone or jointly with someone else? 1 - Yes 2 – No >> Q5 98 - Don't know	*<u>Alienation rights- Proxy 2</u>* *This question obtains information on whether the respondent believes that he/she has the right to sell any of the agricultural land s/he reports possessing. When a respondent has the right to sell the land, it means that he or she has the right*

[49] Source: Metadata for 5.a.1, pp 12013 @ https://unstats.un.org/sdgs/metadata/files/Metadata-05-0a-01.pdf

Questions	Function
99 - Refuses to respond	*to permanently transfer the land to another person or entity for cash or in-kind benefits.*
Q5. Do you have the right to *bequeath* any of the agricultural land held (alternatively 'land possessed, used or occupied'), alone or jointly with someone else? 1 - Yes 2 - No 98 - Don't know 99 - Refuses to respond	*Alienation rights- Proxy 3* *This question obtains information on whether the respondent believes that he/she has the right to bequeath any of the agricultural land he/she reports possessing.* *When a respondent has the right to bequeath the land, it means that he/she has the right to give the land by oral or written will to another person upon his/her death his/her death.*

Computational formulas

In summary, to compute for the indicators, the following computation formulas are used. Note that when the data are from sample surveys the appropriate sampling weights need to be applied to obtain the values for the numerator and denominator of the computational formulas.

- Sub-indicator 5.a.1 (a): Measure for total population

$$\frac{Number\ of\ peope\ in\ adult\ agricultural\ population\ with\ ownership\ or\ secure\ rights\ over\ agricultural\ land}{Total\ adult\ agricultural\ population} x100$$

- Sub-indicator 5.a.1 (a): Measure for women only

$$\frac{Number\ of\ women\ in\ adult\ agricultural\ population\ with\ ownership\ or\ secure\ rights\ over\ agricultural\ land}{Total\ adult\ agricultural\ population} x100$$

- Sub-indicator 5.a.1 (a): Measure for men only

$$\frac{Number\ of\ men\ in\ adult\ agricultural\ population\ with\ ownership\ or\ secure\ rights\ over\ agricultural\ land}{Total\ adult\ agricultural\ population} x100$$

- Sub-indicator 5.a.1 (b): Measure of women's share

$$\frac{Number\ of\ women\ in\ adult\ agricultural\ population\ with\ ownership\ or\ secure\ rights\ over\ agricultural\ land}{Total\ adult\ agricultural\ population\ with\ secure\ rights\ over\ agricultural\ land} x100$$

Exercise 9

If a survey respondent's answers the minimum set of five questions in Figure 24 with the answers below, can this person be counted as "owning agricultural land or having secure rights to the agricultural land" in the calculation of Indicator 5.a.1?

Minimum set of questions to obtain information on Indicator 5.a.1

Questions	Response
Q1. Do you own any agricultural land or hold secure rights to any agricultural land, either alone or jointly with someone else?	Yes
Q2. Is there a formal document for any of the agricultural land you own or hold secure rights to that is issued by or registered at the Land Registry/Cadastral Agency, such as a title deed, certificate of ownership, or certificate of hereditary acquisition?	No (Skip to Q4)
Q3a. What type of documents are there for the agricultural land you own?	Not applicable
Q3b. Is your name listed on any of the documents as owner?	Not applicable
Q4. Do you have the right to sell any of the agricultural land either alone or jointly with someone else?	No
Q5. Do you have the right to bequeath any of the agricultural land held, alone or jointly with someone else?	No

Solution to exercise 9

The answer is NO. To be classified as having ownership or tenure rights, any one of the proxies (formal documentation, right to sell, right to bequeath) (Q2, Q4, Q5) has to be satisfied. In this case, none of the proxies are satisfied.

A Note on "(Self) Reported Ownership/Possession of Agricultural Land"

Q1 in Figure 24 captures information on self-reported ownership or self-reported possession of agricultural land. This concept (Q1== Yes) is relatively less reliable than documented ownership. However, in a situation where a country has scarce data on formal documentation along with missing information on alienation rights, reported ownership could still be a temporarily useful alternative for comparing ownership between men and women. Note that estimates computed based mainly on reported ownership weaken the international comparability of estimates across countries. Therefore, it is highly recommended that the minimum set of questions be included in the data collection in order to calculate the indicator using the correct methodology.

Reference: An e-learning course on indicator 5.a.1 is available from the FAO e-learning Academy @ https://elearning.fao.org/course/view.php?id=363

Indicator 5.c.1: Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment

Definition

This indicator measures government efforts to track budget allocations for gender equality throughout the public finance management cycle and to make these publicly available.

Note that this is an indicator of characteristics of the fiscal system and is not an indicator of quantity or quality of finance allocated for gender equality and women's empowerment. The indicator measures three criteria, namely:

1. The intent of a government to address gender equality and women's empowerment (GEWE) by identifying if it has related programmes/policies and resource allocations.
2. If a government has planning and budgeting tools to track resources for gender equality and women's empowerment throughout the public financial management cycle.
3. Transparency, by identifying if a government has provisions to make allocations for GEWE publicly available.

Key concepts

- Public financial management system: all aspects of a country's budget process – both upstream (strategic planning, medium-term expenditure framework, annual budgeting) and downstream (revenue management, monitoring and evaluation, audits and oversight).
- Systems to track processes and procedures to plan, approve, allocate and monitor public expenditures at the national and sectoral level. The system in place is overseen by a governmental body, in most cases the Ministry of Finance.

Computation method

UN Women, UNDP and the OECD are the co-custodian agencies for this indicator. To determine if a country has a system to track and make public allocations for gender equality, they share a questionnaire (in electronic format, via the Global Partnership for Effective Development Cooperation[50]) with countries' ministries of finance or agencies in charge of the government budget. This questionnaire is comprised of 13 binary (Yes/No) questions used to evaluate each of the three criteria mentioned above:

1. On policies/programmes and resource allocations for gender equality and women's empowerment;
2. On systems to track allocations for gender equality and women's empowerment
3. On making allocations for gender equality publicly available/transparency

[50] The Global Partnership for Effective Development Cooperation is a multi-stakeholder platform to advance the effectiveness of development efforts by all actors, to deliver results that are long-lasting and contribute to the achievement of the Sustainable Development Goals (SDGs).

The table below shows the criteria, questions and related concept definitions needed for the calculation of this indicator:

Table 1: Questions and concept definitions for the calculation of criterion 1 for Indicator 5.c.1: Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment

Criterion 1: Whether or not a government has programmes/policies and resource allocations to foster gender equality and women's empowerment.

Questions	Concept definitions
Question 1.1. Are there policies and/or programmes of the government designed to address well-identified gender equality goals, including those where gender equality is not the primary objective (such as public services, social protection, and infrastructure) but incorporates action to close gender gaps?	Programmes or policies that specifically target only women and girls • e.g. prenatal care programme, national action plan on gender equality
	Programmes or policies that target both women or girls and men or boys • e.g. campaigns against gender violence
	Programmes or policies which include action to close gender gaps • e.g. programme that considers women's needs in infrastructure design
Question 1.2. Do these policies and/or programmes have adequate resources allocated within the budget, sufficient to meet both their general objectives and their gender equality goals?	Programmes or policies that are designed to address well- identified gender equality goals are allocated sufficient resources to cover the costs of meeting those goals from funding that is included in the budget
Question 1.3. Are there procedures in place to ensure that these resources are executed according to the budget?	Procedures established in law or regulations

Table 2: Questions and concept definitions for the calculation of Criterion 2 for Indicator 5.c.1: Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment

Criterion 2: Whether or not a government has planning and budgeting tools to track resources for GEWE throughout the public financial management cycle

Questions	Concept definitions
Question 2.1. Does the Ministry of Finance/budget office issue call circulars, or other such directives, that provide specific guidance on gender-responsive budget allocations?	Call circulars refer to official notes issued by the Ministry of Finance or Budget. These circulars have instructions for government agencies on issues of bidding and budget demand

Question 2.2. Are key policies and programmes, proposed for inclusion in the budget, subject to an ex ante gender impact assessment?	There should be an assessment of individual resource allocations, in advance of their inclusion in the budget, specifically for their impact on gender equality.
Question 2.3. Are sex-disaggregated statistics and data used across key policies and programmes in a way which can inform budget-related policy decisions?	Whether there is routine availability of gender-specific data sets and statistics that would facilitate assessment of gender equality gaps, design of policy interventions, and the evaluation of impacts
Question 2.4. Does the Government provide, in the context of the budget, a clear statement of gender-related objectives (i.e. gender budget statement or gender-responsive budget legislation)?	Gender budget statements are documents that, either as part of the budget documentation or separately, provide a clear statement of gender-related goals and what the programmes are doing with respect to gender.
Question 2.5. Are budgetary allocations subject to "tagging" including by functional classifiers, to identify their linkage to gender equality objectives?	A functional classifier on gender would identify expenditure that goes to programmes or activities that address gender issues
Question 2.6. Are key policies and programmes subject to ex- post gender impact assessment?	There should be an assessment of resource allocation after their implementation for their impact on gender equality
Question 2.7. Is the budget as a whole subject to independent audit to assess the extent to which it promotes gender-responsive policies?	An independent and objective analysis conducted by an authority different from the central budget authority.

Table 3: Questions and concept definitions for the calculation of Criterion 3 for Indicator 5.c.1: Proportion of countries with systems to track and make public allocations for gender equality and women's empowerment

Criterion 3: Whether provisions are in place to make allocations for GEWE publicly available.

Questions	Concept definitions
Question 3.1. Is the data on gender equality allocations published?	Whether the information is publicly available.
Question 3.2. If published, has this data been published in an accessible manner on the Ministry of Finance (or office responsible for budget) website and/or related official bulletins or public notices?	Whether the information is published in a way that is clearly made available in hard copies that are distributed to parliamentarians and NGOs.

Question 3.3. If so, has the data on gender equality allocations been published in a timely manner?	Allocations for GEWE are published in the same quarter as when approved/exercised.

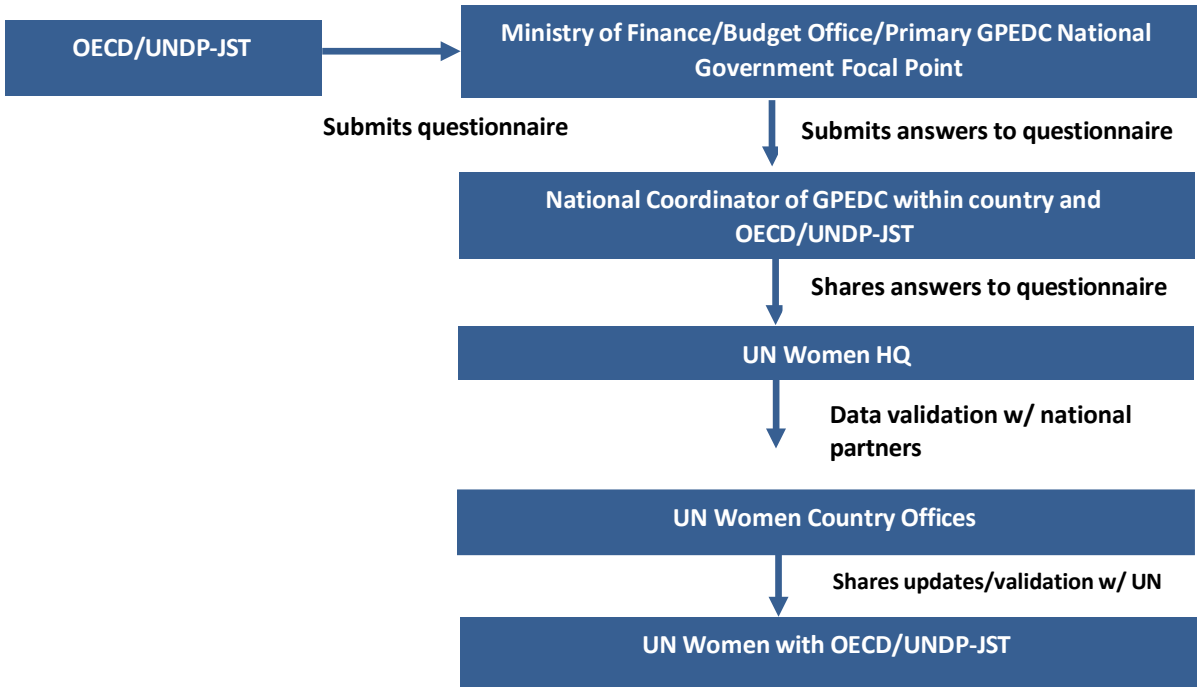
To derive the scoring on this indicator, 'Yes' responses are coded as 1 and 'No' responses are coded as 0. Based on how many questions are answered yes or no for each criterion, it is determined whether or not the respondent country meets each of the three criteria as follows:

Requirements per criterion	
A country will satisfy Criterion 1	if it answers "Yes" to 2 out of 3 questions in Criterion 1
A country will satisfy Criterion 2	if it answers "Yes" to 4 out of 7 questions in Criterion 2
A country will satisfy Criterion 3	if it answers "Yes" to 2 out of 3 questions in Criterion 3

Based on the response to the three criteria, countries are categorized as:

CLASSIFICATION	STATUS
"FULLY MEETS REQUIREMENTS"	Meets all 3 of the criteria
"APPROACHES REQUIREMENTS"	Meets one or two criteria
"DOES NOT MEET REQUIREMENTS"	Does not meet any criteria

Figure 25: *Data reporting process for Indicator 5.c.1.*



For the calculation of the global indicator, which aggregates all the national values submitted by each of the countries to the custodian agencies, the following formulas are used:

a) Method of computation for global aggregation of the Indicator 5.c.1 is defined as follows:

$$Indicator\ 5.c.1 = \frac{(Number\ of\ countries\ that\ \boldsymbol{fully}\ meet\ requirements)}{Total\ number\ of\ countries} x100$$

b) The following two country-classification global proportions will also be reported:

$$\frac{(Number\ of\ countries\ that\ \boldsymbol{do\ not\ meet}\ requirements)x100}{Total\ number\ of\ countries}$$

$$\frac{(Number\ of\ countries\ that\ \boldsymbol{approach}\ requirements)}{Total\ number\ of\ countries} x100$$

Exercise 6

Below is an example of responses to and Indicator 5.c.1 questionnaire. Based on these, identify the appropriate classification for Country A on SDG 5.c.1. Then, identify two or three actions that Country A could take to strengthen its system to track gender equality budget allocations.

Country A

Criterion 1: Which of the following aspects of public expenditure are reflected in your programmes and resource allocations?	
Q1.1: Are there policies and/or programmes of the government designed to address well-identified gender equality goals, including those where gender equality is not the primary objective (such as public services, social protection and infrastructure) but incorporate action to close gender gaps?	Y
Q1.2: Do these policies and/or programmes have adequate resources allocated within the budget, sufficient to meet both their general objectives and their gender equality goals?	N
Q1.3: Are there procedures in place to ensure that these resources are executed according to the budget?	Y
Criterion 2: To what extent does your Public Financial Management System promote gender-related or gender-responsive goals?	
Q2.1: *Does the Ministry of Finance/Budget Office issue call circulars, or other such directives, that provide specific guidance on gender-responsive budget allocations?*	Y
Q2.2: Are key policies and programmes proposed for inclusion in the budget, subject to an ex ante gender impact assessment?	N
Q2.3: Are sex-disaggregated statistics and data used across key policies and programmes in a way that can inform budget-related policy decisions?	Y
Q2.4: Does the government provide, in the context of the budget, a clear statement of gender-related objectives (i.e. gender budget statement or gender-responsive budget legislation)?	Y
Q2.5: Are budgetary allocations subject to "tagging", including by functional classifiers, to identify their linkage to gender-equality objectives?	N
Q2.6: Are key policies and programmes subject to ex post gender impact assessment?	N

Q2.7: Is the budget as a whole subject to an independent audit to assess the extent to which it promotes gender-responsive policies?	N
Criterion 3: Are allocations for gender equality and women's empowerment made public (in the last completed fiscal year)?	
Q3.1: Is the data on gender equality allocations published?	Y
Q3.2: If published, has this data been published in an accessible manner on the Ministry of Finance (or office responsible for budget) website and/or related official bulletins or public notices?	N
Q3.3: If so, has the data on gender equality allocations been published in a timely manner?	N

Solution to Exercise 6:

Classification – 'approaches requirements' because:

	Criterion 1	**Criterion 2**	**Criterion 3**
Country A	✓		

Checkmarks where criterion threshold is met per scoring approach.

Responses to question on strengthening the systems to track gender budget allocations should include at least two (2) of the following:

1. Implementation of ex-ante and/or ex-post gender impact assessments
2. Gender audit of the budget as a whole
3. Introduction of a gender marker or similar 'tagging' system to classification budgetary allocations as gender-responsive
4. Make public data on gender budget allocations available in accessible manner
5. Make public data on gender budget allocations available in timely manner

Indicator 7.1.2: Proportion of population with primary reliance on clean fuels and technology, by sex

Definition

This indicator is calculated as the number of people using clean fuels and technologies for cooking, heating or lighting divided by total population reporting any cooking, heating or lighting activity, expressed as percentage. In the case that people use many types of fuels for cooking, heating and lighting, only the main type of fuel used for cooking is considered, as cooking occupies the largest share of overall household energy needs[51].

Key concepts

- Clean fuel: A fuel is defined as 'clean' based on the emission rate targets and specific fuel recommendations included in the WHO guidelines for indoor air quality: household fuel combustion [52]. According to these guidelines, unprocessed coal and kerosene (among other types of fuels) are not considered clean.

[51] See UNSD https://unstats.un.org/sdgs/metadata/files/Metadata-07-01-02.pdf
[52] See WHO https://www.who.int/indoorair/publications/fuelforlife/en/

- Household air pollution: Air pollution generated by household fuel combustion, leading to indoor air pollution and contributing to ambient air pollution.

The classification of fuels[53] is done as follows:

Figure 26: Classification criteria for unclean and clean cooking fuels, as per WHO guidelines on indoor air quality

Clean cooking fuel	Unclean cooking fuel
• Electricity • Liquified Petroleum Gas • Natural gas • Biogas • Solar cooker	• Solid biomass fuel (e.g. wood, animal dung, crop wastes, charcoal) • Kerosene • Open fires

Note that the official SDG Indicator 7.1.2: 'Proportion of population with primary reliance on clean fuels and technology' is not explicitly disaggregated by sex. However, depending on the data source, it is possible to calculate how many women and men live in households using clean cooking fuels. As women are largely in charge of cooking (according to cultural norms) in many countries, and generally spend more time than men inside the household, the low air quality generated as a consequence of using unclean fuels affects them disproportionately. Therefore, regardless of whether the data is sex-disaggregated, this indicator remains gender-relevant either way.

Data source

Information about primary household fuels and technologies, particularly for cooking, is routinely collected in most countries using censuses and surveys. Household surveys used for this purpose typically include: Demographic and Health Surveys (DHS); Multiple Indicator Cluster Surveys (MICS); World Health Surveys (WHS); and other reliable and nationally representative country surveys.

Although some such surveys also include questions regarding type of fuel used for heating, this question is not included in all countries where heating is relevant, and there is a limited amount of available data capturing the type of fuel and devices used in home lighting altogether. Because these household surveys collect data from a nationally representative population sample and from both men and women in a household, disaggregating this data by sex to obtain the estimates for women is possible using survey data.

As shown in the following excerpt from a Standard DHS questionnaire, respondents are often asked to point out the type of fuel that they mainly use in the household for cooking.

[53] See WHO http://www.who.int/indoorair/guidelines/hhfc/en/

Figure 27: Excerpt of DHS questions on type of cooking fuel

What type of fuel or energy source is used in this heater?	ELECTRICITY ..... 01 PIPED NATURAL GAS ..... 02 SOLAR AIR HEATER ..... 03 LIQUEFIED PETROLEUM GAS (LPG)/COOKING G/ 04 BIOGAS ..... 05 ALCOHOL/ETHANOL ..... 06 GASOLINE/DIESEL ..... 07 KEROSENE/PARAFFIN ..... 08 COAL/LIGNITE ..... 09 CHARCOAL ..... 10 WOOD ..... 11 STRAW/SHRUBS/GRASS ..... 12 AGRICULTURAL CROP ..... 13 ANIMAL DUNG/WASTE ..... 14 PROCESSED BIOMASS (PELLETS) OR WOODCHI 15 GARBAGE/PLASTIC ..... 16 SAWDUST ..... 17 OTHER _____ 96 (SPECIFY)

In recent years, the World Bank, with support from the Energy Sector Management Assistance Program (ESMAP), has launched the Global Survey on Energy Access, using the Multi-Tier Framework (MTF) approach. The survey's objective is to provide more nuanced data on energy access, including access to electricity and cooking solutions. The MTF approach goes beyond the traditional binary measurement of energy access to capture the multidimensional nature of energy access and the vast range of technologies and sources that can provide energy access, while accounting for the wide differences in user experience[54]. An excerpt of the questionnaire of the Multi-Tier Framework Survey for Measuring Energy Access 2017–2018 is shown below.

Figure 28: Multi-Tier Framework Survey for Measuring Energy Access 2017–2018[55]

Fuel Type	Activity the fuel is used for							
	Lighting	Cooking	Heating	Cooling	Fire starter/ ignition	Boiling water	Home-based income activity	Other, specify
LPG/cooking gas								
Wood purchased								
Wood collected								
Charcoal								
Solar								
Kerosene								
Piped natural gas								
Coal/lignite								
Animal waste/dung								

[54] https://microdata.worldbank.org/index.php/catalog/3527/study-description

[55] For the full questionnaire, please visit: https://microdata.worldbank.org/index.php/catalog/3527/download/47092

Crop residue/ plant biomass								
Saw dust								
Coal briquette								
Biomass briquette								
Electric								
Pellets/processed biomass/wood chips								
Biogas (from animal waste or dung)								
Ethanol								
Garbage/plastic								

Computation method

For the total population:

$$\frac{Number\ of\ people\ using\ clean\ fuels\ and\ technologies\ for\ cooking\ ,heating\ and\ lighting}{Total\ population\ reporting\ any\ cooking,\ \ heating\ or\ lighting\ takes\ place\ in\ their\ households}\ x100$$

Data disaggregated by sex:

For women

$$\frac{Number\ of\ women\ living\ in\ households\ using\ clean\ fuels\ and\ technologies\ for\ cooking\ ,heating\ and\ lighting}{Total\ number\ of\ women\ reporting\ any\ cooking,\ \ heating\ or\ lighting\ takes\ place\ in\ their\ households}\ x100$$

For men

$$\frac{Number\ of\ men\ living\ in\ households\ using\ clean\ fuels\ and\ technologies\ for\ cooking\ ,heating\ and\ lighting}{Total\ number\ of\ men\ reporting\ any\ cooking,\ \ heating\ or\ lighting\ takes\ place\ in\ their\ households}\ x100$$

Data disaggregated by activity:

Cooking:

$$\frac{Number\ of\ people\ living\ in\ households\ using\ clean\ fuels\ and\ technologies\ for\ cooking}{Total\ number\ of\ people\ reporting\ any\ cooking\ taking\ place\ in\ their\ households}\ x100$$

Heating:

$$\frac{Number\ of\ people\ living\ in\ households\ using\ clean\ fuels\ and\ technologies\ for\ heating}{Total\ number\ of\ people\ reporting\ any\ heating\ taking\ place\ in\ their\ households} x100$$

Lighting:

$$\frac{Number\ of\ people\ living\ in\ households\ using\ clean\ fuels\ and\ technologies\ for\ lighting}{Total\ number\ of\ people\ reporting\ any\ lighting\ available\ in\ their\ households} x100$$

Exercise 7

Utilizing the Individual Recode of Bangladesh Demographic and Health Survey 2014, calculate the proportion of women in Bangladesh who primarily use clean fuels for cooking in their household.

Solution to Exercise 7:

The solution for this exercise will be provided using STATA. If other statistical analysis software is used, the code should be adjusted accordingly.

Step 1: Go to the DHS website: https://dhsprogram.com/data/dataset/Bangladesh_Standard- DHS_2014.cfm?flag=1

Step 2: Download the women's 'STATA' dataset for Bangladesh 2014 Step 3: Open the IR dataset

in STATA by double clicking

Step 4: Write STATA code as follows: Generate a new variable named 'cleancookingfuel' by typing generate cleancookingfuel=0. This should produce a new column in the data table containing 0s for all responses (or cells).

a) Replace the value of 0 with 1 in those cases in which respondents use clean cooking fuels. This can be done by typing replace cleancookingfuel=1 if v161==1|v161==2|v161==3|v161==4, where v161 is the recode variable for type of cooking fuel.

b) Replace for missing values by typing replace cleancookingfuel=. if v161==.

c) Tabulate the results using appropriate sampling weights, by typing tab cleancookingfuel [iw=v005/1000000]

Figure 29: Results table: proportion of women and girls relying primarily on clean cooking fuels

cleancookingfuel	Freq.	Percent	Cum.
0	14,905.904	83.45	83.45
1	2,957.0962	16.55	100.00
Total	17,862.9997	100.00	

As depicted in Figure 29, 16.55 per cent of women and girls aged 15–49 years live in households where clean fuels are used for cooking. As the table shows, nearly 83 per cent of women and girls aged 15–49 years primarily rely on unclean fuels for cooking.

Indicator 8.10.2: Proportion of adults (15 years and older) with an account at a bank or other financial institution or with a mobile-money service-provider

Definition

This indicator is measured as the percentage of adults (ages 15 or older) who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or personally using a mobile money service in the past 12 months[56].

Key concepts

- **Other financial institution**: Includes owning, receiving money or paying bills through accounts at a credit union, microfinance institution, cooperative, the post office. It also includes having a debit card in their own name.
- **Mobile money account** Includes respondents who personally use GSM Association (GSMA) Mobile Money for the Unbanked (MMU) services to pay bills or to send or receive money; or respondents receiving wages, government transfers or payments through a mobile phone.

Measuring this indicator can provide information about how many people have access to formal financial services such as savings, insurance, payments, credit and remittances. This is important because having access to a bank account can be an essential starting point for people to access a range of financial services, start a new business, purchase large goods and obtain loans to rebuild in case of loss. Disaggregating this information by sex can unveil the disparity in decision-making power, economic empowerment and capacity to cope with disasters between men and women.

Data sources

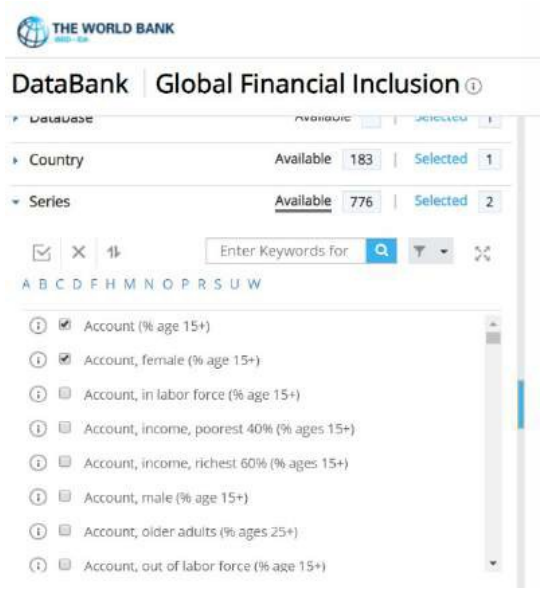
International estimates on account ownership are best obtained from the Global Findex

[56] See UNSD https://unstats.un.org/sdgs/metadata/files/Metadata-08-10-02.pdf

Database [57], a repository of data on financial empowerment that is largely obtained from international Gallup Surveys. The database contains data from surveys covering numerous countries.
The target population is the entire civilian, non-institutionalized population age 15 and above. Additionally, other individual-level surveys such as asset-ownership surveys or modules on asset ownership in other standardized surveys can be good sources of data for Indicator 8.10.2.

Figure 30 shows a snapshot of the Global Findex Database[58], which allows users to customize searches, select from 183 countries and set the desired time period for the data. This is especially useful for non- expert audiences who would like to derive estimates for this indicator, disaggregated by sex.

Figure 30: Snapshot of the Findex Database



Computation method

The following formula should be used to calculate estimates for this indicator:

$$\frac{\text{Number of women (ages 15+) who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or personally using a mobile money service in the past 12 months.}}{\text{Total number of women (ages 15+)}} \times 100$$

[57] See https://globalfindex.worldbank.org/#data_sec_focus
[58] https://databank.worldbank.org/reports.aspx?source=global-financial-inclusion

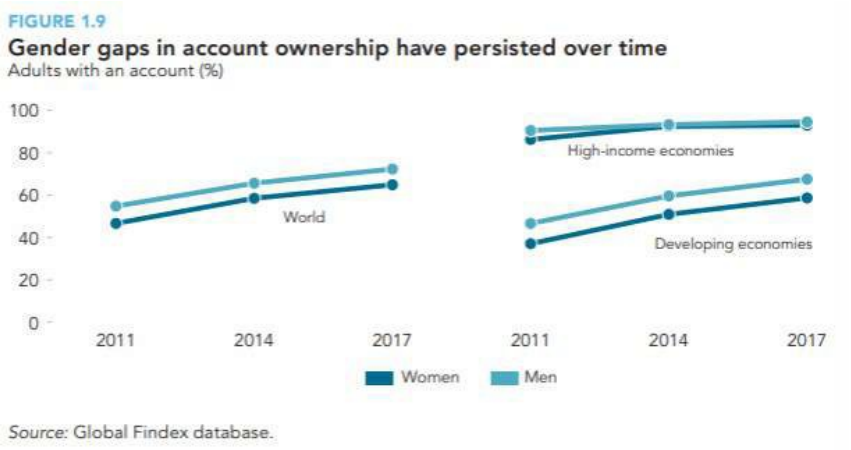
Sex disaggregation: Disaggregating this indicator by sex is important to identify the gender gaps in account ownership across countries and over time. A look at the 2017 estimates for gender gap in account ownership reveal that more men have bank accounts compared to women[59].

Figure 31: Proportion of men with bank accounts vs. women with bank accounts

Additionally, these trends have persisted over time:

[59] See The Global Findex Database https://globalfindex.worldbank.org/sites/globalfindex/files/2018-04/2017%20Findex%20full%20report_0.pdf

Figure 32: Gender gaps in account ownership over time



Exercise 3: How would the above formula change if you were to calculate these estimates for women only?

Solution to Exercise 3

When you want to disaggregate data by sex, the number of women with access to accounts must be compared to the total number of women in the relevant age group. Similarly, the number of men with access to an account must be divided by the total number of men in the age group. Thus, to obtain sex- disaggregated data for both men and women, you will have to undertake two separate calculations. In the case of the above formula, to calculate the proportion of women who have an account at a bank, use the following formula:

$$\frac{\textit{Number of women (ages 15+) who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or personally using a mobile money service in the past 12 months.}}{\textit{Total number of women (ages 15+)}} \textit{ X 100}$$

Indicator 11.1.1: Proportion of urban population living in slums, informal settlements or inadequate housing, by sex

Definition

This indicator is calculated as the number of people living in slums, informal settlement households or inadequate housing, divided by the urban/city population, multiplied by 100. This indicator could be further disaggregated by slums, informal settlement or inadequate housing, utilizing the classification provided in Figure 33. Refer to the metadata for additional information about informal settlements and inadequate housing[60]. In this training module, the focus will be on slums exclusively.

[60] See Metadata https://unstats.un.org/sdgs/metadata/files/Metadata-11-01-01.pdf

Figure 33: Criteria for defining slums, informal settlements and inadequate housing

Criteria defining slums, informal settlements and inadequate housing			
	Slums	Informal settlements	Inadequate housing
Access to water	X	X	X
Access to sanitation	X	X	X
Sufficient living area, overcrowding	X		X
Structural quality, durability and location	X	X	X
Security of tenure	X	X	X
Affordability[61]			X
Accessibility[62]			X
Cultural adequacy[63]			X

Indicator 11.1.1, in principle, is expected to be a composite indicator, with the main components of slum/informal settlements and the added component of affordability defining inadequate housing. Because traditionally most countries have reported progress on the proportion of population living in slums only, data on informal settlements and inadequate housing is not as widely available.

Slums represent one of the most extreme forms of deprivation and exclusion and are a critical factor for the persistence of poverty and exclusion. The agreed definition classifies a 'slum household' as an urban household in which the inhabitants suffer one or more of the following 'household deprivations'[64].

[61] See https://unstats.un.org/sdgs/metadata/files/Metadata-11-01-01.pdf. Housing is not adequate in terms of affordability if its costs threatens or compromises the occupants' enjoyment of other human rights.
[62] See https://unstats.un.org/sdgs/metadata/files/Metadata-11-01-01.pdf. Housing is not adequate in terms of accessibility if it if the specific needs of disadvantaged and marginalized groups are not taken into account (such as the poor, people facing discrimination; persons with disabilities, victims of natural disasters).
[63] See https://unstats.un.org/sdgs/metadata/files/Metadata-11-01-01.pdf. Housing is not adequate in terms of cultural adequacy if it does not respect and take into account the expression of cultural identity and ways of life.
[64] See UNSD https://unstats.un.org/sdgs/metadata/files/Metadata-11-01-01.pdf

Figure 34: Areas of household deprivation for calculating slum indicator

Slum inhabitants lack one or more of the following:				
1. Lack of access to improved water source	2. Lack of access to improved sanitation facilities	3. Lack of sufficient living area	4. Lack of housing durability	5. Lack of security of tenure

Key concepts[65]

- **Access to improved water service**: A household is considered to have access to improved drinking water if it has a sufficient amount of water (20 litres/person/day) for family use, at an affordable price (less than 10% of the total household income) as well as available to all household members without being subjected to extreme efforts (less than one hour a day for the minimum sufficient quantity). In addition, the facility (source of drinking water) is protected from outside contamination, in particular fecal matter.

  Improved drinking water sources include:
  - water piped-in to dwelling, plot or yard; public tap/stand pipe service with no more than five households
  - protected spring
  - rain-water collection
  - bottled water, if secondary source is also improved
  - bore hole/tube well
  - protected dug well

  A household is statistically classified as a slum household if it lacks access to (or have insufficient amount of) improved water[66]. In practice, however, the type of water source is typically the only statistical variable used to compute this section of the indicator.

- **Access to improved sanitation service**: A household is classified as having access to improved sanitation if an excreta disposal system, either in the form of a private toilet or a public toilet shared with a reasonable number of people, is available to household members. The excreta disposal system is considered adequate if it is private or shared

[65] See UN-HABITAT Training Module on Adequate Housing and Slum Upgrading. https://unhabitat.org/sites/default/files/2020/06/indicator_11.1.1_training_module_adequate_housing_and_slum_upgrading.pdf

[66] Where information on distance to water source is available, countries may calculate the lack of access to basic water, i.e. water source which is not improved or within 30 minutes distance from the person's dwelling.

by a maximum of two households [67]. Such improved sanitation facilities, thus, hygienically separate human waste from human contact.

Improved facilities include:

- flush/pour-flush toilets or latrines connected to a sewer,
- septic tank or pit;
- ventilated improved pit latrine;
- pit latrine with a slab or platform that covers the pit entirely; and,
- composting toilets/latrines.

- **Sufficient living area**: A dwelling unit provides sufficient living area for the household members if less than three people share the same habitable room. In other words, we can say that a dwelling can be classified as 'overcrowded' if three or more than three people sleep in the same room.

- **Housing durability**: A house is considered as 'durable' if it is built on a non-hazardous location and has a permanent and adequate structure able to protect its inhabitants from the extremes of climatic conditions, such as rain, heat, cold and humidity. To determine household durability, consider the following elements:

    - Permanency of structure: permanent building material for the walls, roof and floor; Compliance with building codes; the dwelling is not in a dilapidated state (in need of major repair).
    - Hazardous location: the dwelling is not located on or near toxic waste; not located in a flood plain; not located on a steep slope, and not located in a dangerous right of way (rail, highway, airport or power lines).

- **Security of tenure**: The members of the household have legal status against arbitrary unlawful eviction, harassment as well as any other threats. That is, the housing structure should have status, established through statutory or customary law or informal or hybrid arrangements, that safeguard the household members against forced evictions. This is typically materialized in the form of a formal title, or any other document as a proof of tenure arrangement.

Note that a household is a slum only if it is located in an *urban setting* and is deprived on one or more of the four aforementioned areas.

Data source

Data for this indicator can be computed from Census and some household surveys, including Demographic and Health Survey (DHS), Multiple Indicator Clusters Surveys (MICS), Living Standards and Measurement Surveys (MICS), World Health Survey (WHS), Core Welfare Indicator Questionnaires (CWIQ) and Urban Inequalities Surveys (UIS).

[67] Where information on whether a facility is shared or not is not available, countries may calculate only the type of sanitation facility, i.e. improved or not.

Computation method

Slum/informal settlements households (SISH):

$$= 100\left[\frac{Number\ of\ people\ living\ in\ SISH}{Urban/City\ population}\right]$$

Disaggregation by sex: although, this indicator does not directly call out for disaggregation by sex, it is worth calculating this for women and men separately, given that often more women than men live in slum households.

For women:

$$= 100\left[\frac{Number\ of\ women\ living\ in\ SISH\ household\ in\ urban\ areas}{Total\ number\ of\ women\ living\ in\ urban\ areas}\right]$$

For men:

$$= 100\left[\frac{Number\ of\ men\ living\ in\ SISH\ household\ in\ urban\ areas}{Total\ number\ of\ men\ living\ in\ urban\ areas}\right]$$

Note that SDG Indicator 11.1.1 classifies 'slum household' as households that meet at least one out of five listed criteria: (1) Lack of access to improved water source; (2) Lack of access to improved sanitation facilities; (3) Lack of sufficient living area; (4) Lack of housing durability; and (5) Lack of security of tenure. These criteria utilize the international definition of 'slum households' as agreed by UN-Habitat/United Nations Statistics Division/UN Cities. However, in practice, data for measuring security of tenure is not widely available; thus, slum status is often assessed using the first four criteria only[68].

Exercise 8

Calculate the estimates for the proportion of women and girls aged 15–49 years living in slum households in the Maldives using DHS survey data for the year 2016.

Solution:

Step 1: Open the DHS PR file in STATA for the Maldives DHS 2017

> For this exercise, we will use the DHS Person Recode File for the Maldives (2017). The Person recode includes information for households and their inhabitants. Not all the information from the household recode is included into the Person recode, but all variables used to assess whether or not a person lives in a slum household are included. Download this file and open the dataset in STATA.

[68] UN Women. 2018. Turning Promises into Action.

Step 2: Keep observations for ages 15 to 49 years only

The Person recode file includes information for household members of all ages. Since we want to calculate this indicator for women and girls ages 15-49 only, we can keep observations ages 15- 49 by typing keep if hv105>=15 & hv105<=49, where hv105 is the recode variable for age of household members.

Step 3: Calculate the proportion of women and girls who do not have access to basic water services

According to the official definition, improved drinking water services include having sufficient amount of water (20 litres/person/day) for family use, at an affordable price (less than 10% of the total household income) and available to household members without being subject to extreme effort (less than one hour a day for the minimum sufficient quantity). However, because we lack information on:

- amount of water per person, per day
- price at which the water is obtained
- quality of water, i.e. whether it is protected from contamination, we will use

'access to improved water source' to calculate a proxy.

1. For calculating improved water source:
    - Generate a new variable named 'improved_water' by typing gen improved_water = 0. This should produce a new column in the data table containing 0s for all responses (or cells).
    - Replace the value of 0 with 1 in those cases in which the type of water source is improved. This can be done by typing replace improved_water = 1 if hv201 == 11 | hv201 == 12 | hv201 == 13 | hv201 == 31 | hv201 == 52 | hv201 == 51 |hv201 == 71. As a result of this command, the new column will now have 0s and 1s, with 1s representing those people who have access to improved source of water.
    - Replace with . to transfer the missing values from the original variable by typing replace improved_water = . if hv201 == .
    - Tabulate the results using appropriate sampling weights, by typing tab improved_water [iw = hv005/1000000]

Step 4: Calculate the proportion of women and girls who do not have access to improved sanitation services

According to the official SDG Indicator, 11.1.1: 'Proportion of urban population living in slums, informal settlements or inadequate housing', improved sanitation service includes use of a facility with an excreta disposal system that hygienically separates human waste

from human contact.

To calculate such proportion, we will use 'access to improved sanitation' to calculate a proxy:

1. For the proportion of the population with access to improved type of sanitation facility:

- Generate a new variable named "improved_sanitation" by typing generate improved_sanitation = 0. This should produce a new column in the data table containing 0s for all responses (or cells).
- Replace the value of 0 with 1 if type of toilet facility is improved, by typing replace improved_sanitation = 1 if hv205 == 11 | hv205 == 12 | hv205 == 13 | hv205 == 15| hv205 == 21 | hv205 == 22. As a result of this command, the new column will now have 0s and 1s, with 1s representing those people who use an improved toilet facility.
- Replace for missing values by typing replace improved_sanitation = . if hv205 == .
- Tabulate the results using appropriate sampling weights, by typing tab improved_sanitation [iw = hv005/1000000]

Step 5: Calculate the proportion of women and girls who live in overcrowded households (e.g. lack sufficient living area). A dwelling unit is classified as overcrowded if three or more than three people share the same bedroom.

To calculate the proportion of population living in overcrowded households, use the following code:

- Generate a new variable named ''people_per_room" and equate it to the quotient of hv012 and hv216 by typing gen people_per_room=hv012/hv216
- Replace peopleroom as missing value by typing replace people_per_room=. if hv216>98|hv216==.|hv012==.
- Generate new variable named 'sufficient_living_area" and assign a value of 0 to it.
  This can be done by typing gen sufficient_living_area=0
- Replace all values of 0 with 1 if house is overcrowded. This can be done by typing
  replace sufficient_living_area=1 if people_per_room<3 Replace for missing values by typing replace sufficient_living_area=. if people_per_room==.
- Tabulate the results by typing tab sufficient_living_area [iw=hv005/1000000]

Step 6: Calculate the proportion of women and girls who live in households that lack structural durability and quality.

To calculate the proportion of population living in households that lack structural durability, use the following code:

- Generate a new variable and assign a value of 0 by typing gen durable_house=0. This should produce a new column in the data table containing 0s for all responses (or cells).
- Replace the value of 0 with 1 for house that lacks structural durability by typing replace durable_house=1 if hv213>29. As a result of this command, the new column will now have 0s and 1s, with 1s representing those people whose house lacks structural durability
- Replace for missing values by typing replace durable_house=. if hv213==.|hv213>95
- Tabulate the results by typing tab durablehouse [iw=v005/1000000]

Step 7: Keep only urban households as the slum indicator is calculated for urban households only

- To keep only urban households, type keep if hv025==1. This will keep only urban households and drop the observations for rural households.

Step 8: Calculate the composite slum indicator

A dwelling is classified as a slum if it meets at least one out of five listed criteria: (1) Lack of access to improved water source; (2) Lack of access to improved sanitation facilities; (3) Lack of sufficient living area; (4) Lack of housing durability; and (5) Lack of security of tenure. Since we do not have data for the dimension on security of tenure dimension, we will create a composite variable using the first four dimensions only. To calculate the composite slum indicator, code as follows:

- Generate a new variable named "slum" and assign a value of 0 to it by typing gen slum=0. This should produce a new column in the data table containing 0s for all responses (or cells).
- Replace all values of 0 with 1 if the household lacks one or more of the four dimensions. This can be done by typing replace slum=1 if improvedwater==0| improvedsanitation==0|sufficient _living_area ==0|durablehouse==0. As a result of this command, the new column will now have 0s and 1s, with 1s representing those people whose house lacks at least one of the four dimensions.
- Replace for missing values by typing replace slum = . if improvedwater == . | improvedsanitation == . | sufficient_living_area == . | durablehouse == .

- Tabulate the results by typing tab slum [iw=hv005/1000000]

Step 9: Finally, to calculate the proportion of women and girls who live in slum households, disaggregate the data by sex. To obtain these estimates, code as follows:

- To disaggregate the slum indicator by sex, cross tab slum and sex (recode variable HV104) by typing tab slum hv104 [iw=hv005/1000000], cell column row. This will generate a result table with estimates on proportion of population living in slum households, separately for women and men.

Figure 35: Results table: proportion of women and men living in slum households in Maldives, 2016

slum	sex of household member: male	female	Total
0	2,122.286	2,307.43	4,429.716
	47.91	52.09	100.00
	52.74	51.34	52.00
	24.91	27.09	52.00
1	1,901.566	2,187.3583	4,088.924
	46.51	53.49	100.00
	47.26	48.66	48.00
	22.32	25.68	48.00
Total	4,023.852	4,494.788	8,518.6403
	47.24	52.76	100.00
	100.00	100.00	100.00
	47.24	52.76	100.00

4.3.4. Additional statistics on gender and the environment

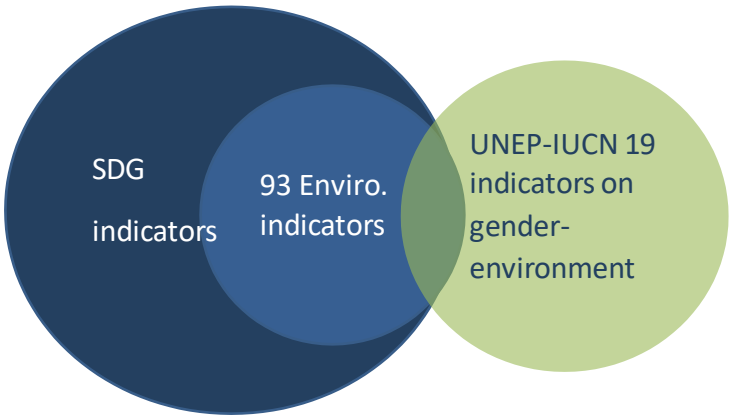
The links between gender and environment are not well understood and gaps in data availability impede progress assessment on the environmental dimension of sustainable development[69]. Substantial gaps exist in terms of indicators and data availability to measure this relationship between gender and the environment. Through recent work and consultations[7071] between international agencies, disaster management agencies, NSOs and other government and academic bodies, some key priority areas to measure these connections in Asia and the Pacific have been identified.

The SDGs have a total of 93 environment indicators as of early 2020, most of which lack a gender

[69] ESCAP, UN Women, UN Environment, IUCN. 2018. Mainstreaming gender on environment statistics for the SDGs and Beyond.
[70] http://communities.unescap.org/system/files/agenda_gender_statistics_in_climate_change_22apr2019.pdf
[71] https://www.unescap.org/events/expert-meeting-statistics-gender-and-environment-asia-and-pacific

perspective. In 2019, UNEP and IUCN identified a list of 19 indicators that could be used to measure the connections between gender and the environment[72]. Besides those 19, and the additional gender- environment indicators in the SDG set, experts in the Asia-Pacific region highlighted the need to expand the set of indicators to better understand the gender-environment nexus[73].

Figure 36: Gender-environment indicators: proposals by UNEP & IUCN



The group of Experts on Gender and Environment Statistics[74] identified a set of 35 indicators that are especially relevant to measure the gender-environment nexus in the context of Asia and the Pacific (as well as 11 additional context indicators), and classified them across six thematic areas:

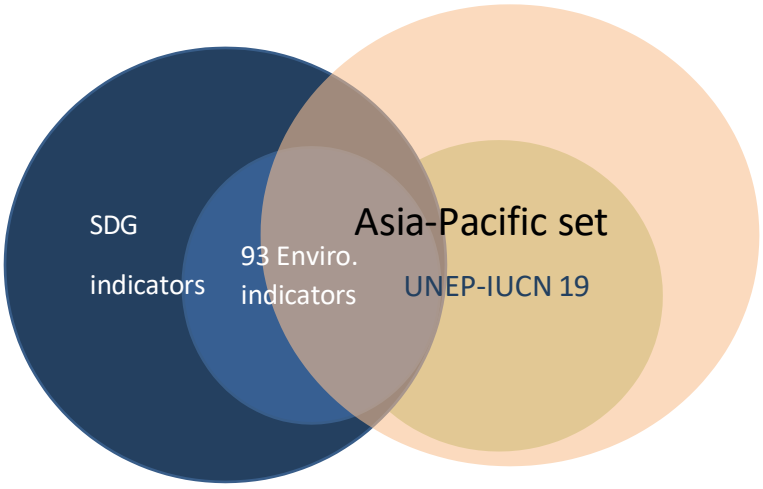
A. Land and biodiversity
B. Natural resources including food, energy and water
C. Climate change and disasters
D. Sustainable consumption, production and waste
E. Health, well-being and sanitation
F. Environmental decision-making

Figure 37: Gender-environment indicators: Asia-Pacific proposal

72 https://wedocs.unep.org/bitstream/handle/20.500.11822/27615/Gender_Environment_Statistics.pdf?sequence=1&isAllowed=y

73 https://data.unwomen.org/news/experts-call-better-measurement-gender-environment-nexus-asia-pacific

74 https://www.unescap.org/events/expert-meeting-statistics-gender-and-environment-asia-and-pacific



A second consultation with a group of experts identified some gap areas and a specific call for identifying indicators in some such areas, including:

- Exposure to disasters
- Women in environmental conservation roles
- Environment-related conflict, migration and displacement
- Rural women's leadership on environmental issues
- Gender-based violence in the context of environment
- Small-scale industries; environment-related employment and livelihoods
- Harnessing women's traditional ecological knowledge
- Sustainable production and consumption including sustainable agricultural practices, organic farming and waste management

After this consultation, Member States and experts agreed on a set of indicators that should be prioritized for measurement in the region[75]. Many of them align with existing international commitments such as the SDGs, the Sendai Framework for Disaster Risk Reduction, the Global Set of Climate Change Statistics and Indicators, and other key agreements along the three Rio Conventions.

To support countries in the collection of Gender and Environment Data, UN Women, in partnership with many other UN Agencies, developed survey tools. These include a Model Questionnaire, an Enumerators Manual, Sampling guidelines, as well as survey scripting tools. Numerous countries have already utilized these guidelines to implement national specialized surveys on gender and the environment, and release related survey reports. These surveys are able to generate data on more than 100 indicators on gender and the environment, and can inform national reporting to global environmental frameworks, including the SDGs, United Nations Climate Change Conference, United Nations Convention to Combat Desertification, and

[75] See: https://data.unwomen.org/publications/efforts-towards-measuring-gender-environment-nexus-asia-and-pacific

United Nations Convention on Biological Diversity.

5. KEY TAKEAWAYS

- *Gender statistics must be integrated throughout the SDG indicator framework across all three pillars of sustainable development: economic, social and environmental statistics*
- *Along with compiling data for gender-specific indicators, sex-disaggregating other indicators, across all three pillars, it is important to understand issues of equality*
- *Time-diaries are best suited to capture the simultaneity of activities when calculating estimates for Indicator 5.4.1: Proportion of time spent on unpaid domestic and care work, by age, sex and location.*
- *When calculating the estimates for Indicator 5.2.1, the proportion of ever-partnered women and girls subjected to violence, make the distinction between type of violence and perpetrator of violence. Indicator 5.2.1 only focuses on violence perpetrated by an intimate partner in the 12 months preceding the survey date.*
- *Use survey data to calculate the estimate for prevalence of violence as that is more likely to provide more accurate estimates. Police registries and administrative records are not adequate to calculate the prevalence of violence as they always produce estimates that are extremely underreported.*
- *For the calculation of women's representation in local governments, exclude women who have been appointed or nominated by government officials from higher-ranking tiers of government. Only women elected through a democratic process should be included.*
- *For the calculation of Indicator 7.1.2, the proportion of the population with primary reliance on clean fuels and technology, only the primary fuel used in the house is considered. In the case that the respondent reports using different fuels for cooking, heating and lighting, the main type of fuel used for cooking is considered.*
- *For the calculation of Indicator 11.1.1, the proportion of the urban population living in slums, informal settlements or inadequate housing, only the urban population is considered.*
- *For the calculation of Indicator 5.a.1 (a), the proportion of the total agricultural population with ownership or secure rights over agricultural land, women who belong to households that are engaged in agricultural practices should be considered part of the adult agricultural population.*
- *To start filling gaps on the connections between gender equality and the environment, a number of tools have been developed following international statistical standards. A model questionnaire, along with other survey tools, are available for countries who wish to implement specialized surveys to report progress on this topic to the SDGs, the*

Rio Conventions, the Sendai framework, and other commitments.