

MODULE 5

METHODS FOR GENDER DATA COLLECTION AND ESTIMATION

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 training on methods of data collection and estimation from a gender perspective. 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, Power Point 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 who wish to understand how to integrate a gender perspective into all stages of the data collection and estimation process and to understand the principles of gender sensitivity.
- **Academics** who wish to focus or inform their research through the use of gender data or want to analyse data in a gender-sensitive way.
- **Civil society organizations** that wish to gain knowledge of the gender biases in data collection and estimation processes for advocacy or communication purposes.
- **Anyone** who wishes to find out how to avoid and overcome gender biases in statistical processes and integrate a gender-sensitive perspective into the collection and estimation of gender data.

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

This module is mainly targeted at expert statisticians and data producers. In order to fully benefit from this module, it is important that the learner have some knowledge of statistical processes, including data collection processes. This module builds heavily on existing information on data collection and estimation. Because a wide range of information on this topic was already available, the module does not cover the topic in detail. Thus, it is important that the learner refer to the materials listed in the “additional resources” file in order to obtain comprehensive information on this topic.

Learning objectives

The expected learning outcomes for this module include:

- After going through this module, the learner is expected to understand the importance of integrating gender across the data collection and analysis process.
- The learner is expected to become familiar with the gender biases in common data collection tools and methods and learn how to avoid them.
- Finally, the learner will also be introduced to some ways of integrating gender across the data estimation and analysis process.

Note to the trainer: Depending on the pace of trainer and trainees, it is expected that training for this module can be delivered in 30 minutes to 1 hour.

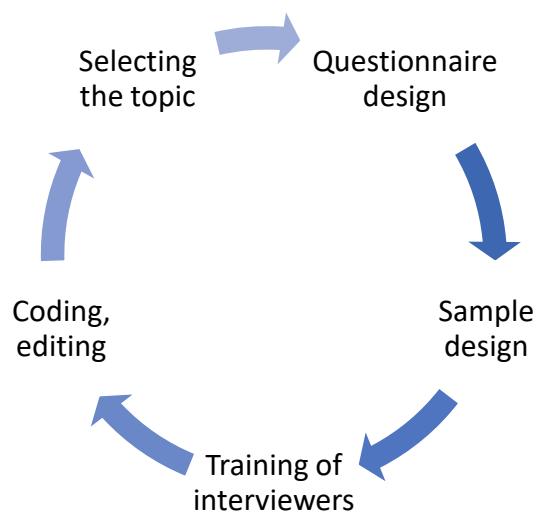
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1. Integrating gender into data collection

Official gender statistics produced at the country level draw on three main data-collection instruments: administrative records or registries, household surveys and population censuses. Increasingly, new and emerging data sources – such as Big Data sources and geospatial information – are also being utilized to produce official statistics but these are beyond the scope of this syllabus (refer to Annex 1 for information on some of these non-traditional sources). In order to integrate a gender perspective into the data collection, it is important to review the entire data collection process¹.

Figure 1: Integrating gender throughout all steps of the data-collection process



Mainstreaming requires integrating a gender perspective at all the stages of this process. This can range from selection of topics to be covered in the surveys or census (and fields to be filled out in registries), the design of the questionnaire, the sampling process, training of interviewers and supervisors, field operations, to finally, coding and editing the data. As a result, this addresses and minimizes the scope for any form of gender bias in the data².

1.1. Census

Population censuses are an essential source of information about national populations and household composition. Given their universal coverage, they can be especially useful for generating data on vulnerable and marginalized groups, and they are essential to design sampling frames for other population surveys. In many countries, census data are the only option for indicators that call for disaggregation by migration status, disability and race/ethnicity, as many surveys do not cover representative samples of these population groups. Census data can also be a useful source of information on specific groups of women and girls, such as older women, who are often left out in standardized household surveys.

¹ UNSD. 2013. "Introduction." *Gender Statistics Manual*. <https://unstats.un.org/unsd/genderstatmanual/Chapter-3-Introduction.ashx>

² Ibid.

As census data cover nearly every person in a country, they can be used to generate estimates disaggregated at multiple levels simultaneously (e.g. estimates for rural women of a certain ethnicity who live in a specific location and have a disability) without running into sample size concerns. It is important to keep in mind, however, that census questions are often only asked to household heads – typically males – and therefore census data is not suitable for the calculation of some gender indicators, particularly those pertaining to issues that males might not be knowledgeable about or willing to talk about, such as reproductive health, violence, sexual orientation of household members, etc.

The United Nations Statistics Division (UNSD) recommends that census questionnaires integrate a gender perspective, as follows³:

- Members of the team designing the questionnaire have been trained in gender-specific measurement issues related to each of the topics covered by the census
- There is a short note on the questionnaire on how to identify the head of the household
- Categories of answers for marital status are detailed enough to capture various types of informal unions
- Questions on children ever born and children surviving allow separate answers for each sex
- Questions on fertility and child survival have a short note reminding the interviewer that he or she needs to seek information from the mother or, when the mother is missing, from another woman in the household.
- Questions on pregnancy-related deaths have a short note reminding the interviewer that he or she needs to read them for all deaths of women aged 15 to 44
- The reference period for questions on economic activity, recent births and household deaths is clearly shown in the question
- Probing questions are included after questions on economic activity to ensure such activities are clearly understood and classified
- There is a short note on the use of activity lists for answering the questions on economic activity
- Questionnaire tests should cover both women and men with different social backgrounds.

Many countries are increasingly integrating questions on sexual orientation in their census questionnaires. Although this is very pertinent information, data collection exercises to date reflect significant underreporting of all categories besides straight male / straight female. This might be a result of the stigma associated with such categories in some countries, as well as the fact that heads of household are the primary respondents for census questionnaires, and they might not disclose the sexual orientation of all household members. The United Kingdom's Government's Office of National Statistics has been increasingly adapting census topics and modes of collection with changing times. One such advancement is in terms of using digital technology for collecting data as well as allowing people to identify themselves as they wish, i.e. categories and questions that go beyond sex (see Box 1).

³ UNSD. 2013. "Population and Housing Census". *Gender Statistics Manual*.
<https://unstats.un.org/unsd/genderstatmanual/Population-and-housing-census.ashx>

Box 1: UK Census 2021: Collecting information beyond sex

The Government of the United Kingdom provides the following Guidance on integrating questions related to sex, gender identity and sexual orientation for the UK Census 2021:

- Question on sex: What is your sex?

If you are one or more of non-binary, transgender, have variations of sex characteristics, sometimes also known as intersex, the answer you give can be different from what is on your birth certificate.

If you are not sure how to answer, use the sex registered on your official documents, such as passport or driving license, or whichever answer best describes your sex.

A later question gives the option to tell us if your gender is different from your sex registered at birth, and, if different, to record your gender.

- Question on gender: Is your gender the same as the sex you were registered as having at birth?

If your gender is not the same as the sex recorded on your birth certificate when you were born (for example, you are transgender or non-binary), tick "No".

If you answered no, please enter the term you use to describe your gender. This is also voluntary, so you can leave it blank if you prefer.

If you would like to record that you have variations of sex characteristics, sometimes also known as intersex, you can use this write-in box. If you would like to, you can also write-in your gender (for example: 'intersex, non-binary').

- Question on sexual orientation: Which of the following best describes your sexual orientation?
(Straight/Heterosexual; Gay or Lesbian; Bisexual; Other sexual orientation)

UNSD⁵ recommends the following for the preparation of census manuals and training of interviewers:

- Both women and men are selected as training instructors and appear as trainers presented in the audio-visual materials
- Gender-related measurement issues are reflected in the manual through descriptive examples and illustrated sketches
- The language and all the examples given in the manual or during training exercises are free of gender-based biases or other stereotypes related to the characteristics measured
- Training examples need to be reviewed so as not to foster gender-based or other stereotypes related to the characteristics measured
- Training provides guidelines regarding sex-selective underreporting or misreporting.

⁴ Government of the United Kingdom. 2019. Census Rehearsal for the 2021 Census.

<https://www.ons.gov.uk/census/censustransformationprogramme/questiondevelopment/genderidentity/guidanceforquestionsonsexgenderidentityandsexualorientationforthe2019censusrhearsalforthe2021census#guidance-for-the-sex-question-for-the-2019-rehearsal>

⁵ UNSD. 2013. "Population and Housing Census." *Gender Statistics Manual*.

<https://unstats.un.org/unsd/genderstatmanual/Population-and-housing-census.ashx>

During the training, special attention should be dedicated to issues such as: the criteria to identify the household head; the recording of the members of the household; selecting women as respondents when information on children ever born and children surviving is needed; the use of economic activity lists, including lists of own-account productive activities; the use of probing questions.

1.2. Administrative records and registries

Administrative records make up the bulk of the data collection activities of many national governments. These records and related documents contain a wide range of data on demographic, social, economic, cultural and environmental topics⁶. Administrative records are compiled for regulatory purposes or to support and document the administration of various government programmes, such as immigration regulations, social security benefits, education and public health services⁷.

For the generation of gender statistics, the most relevant administrative records are civil registration and vital statistics. While these can be cost-effective sources of data collection for variables such as births, marriages, divorces, adoption, deaths and causes of deaths, the quality of this data and coverage of population remains low in some countries⁸. From a gender perspective, women and girls face unique barriers, including national laws that require the signature of a husband or father on official registration documents; stigma associated with registering teen births or single mothers⁹; and barriers linked to direct and indirect costs associated with registration, such as fees, travel time and low levels of education/literacy. In addition, it is important to note that religious or customary marriages, as well as births from teen and unwed mothers, often remain unregistered¹⁰.

To respond to the issues of gender bias in administrative records and registration systems, the Centre of Excellence on Civil Registration and Vital Statistics¹¹ has proposed the following measures:

- Consistently registering sociodemographic characteristics of the individual, including sex, place of residence, ethnicity, etc.
- Once registered, calculating vital registration-based statistics by breaking down the estimates by sex, wealth, urban/rural, race, ethnicity and other features that may result in social exclusion.
- Asking about marriage registration and certification in regular household survey instruments.
- Identifying and combating social or cultural reasons for the underregistration of women and girls' deaths, as well as recognizing and relying on women's first-hand knowledge to more accurately report on deaths and probable causes of death within households.
- Encouraging the uptake of WHO's verbal autopsy protocol for asserting causes of death, with a special focus on better capturing causes of maternal death.

⁶ UNSD. <https://unstats.un.org/unsd/dnss/docViewer.aspx?docID=2443>

⁷ UNSD. 2017. "Administrative records: General Purpose and Description." *MSITS 2010 Compilers Guide*.

<https://unstats.un.org/wiki/display/M2CG/B.++General+purpose+and+description+of+administrative+records>

⁸ UN Women. 2018. *Gender Equality in the 2030 Agenda for Sustainable Development*. <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>

⁹ Data 2X. 2019. "CRVS and Gender". <https://data2x.org/wp-content/uploads/2019/05/CRVSSandGenderBrief.pdf>

¹⁰ Centre for Excellence on CRVS Systems. 2019. Knowledge Briefs on Gender and CRVS: Brief 1: Paper 2. Ottawa: International Development Research Centre. <https://idl-bnc-idrc.dspacedirect.org/bitstream/handle/10625/57452/IDL-57452.pdf?sequence=2&isAllowed=y>

¹¹ Centre for Excellence on CRVS Systems. N.D. "Knowledge Brief Series on Gender and CRVS." <https://crvssystem.ca/news-and-events/knowledge-brief-series-gender-and-crvs-0>

1.3. Household surveys

Household surveys are important sources of social statistics. They provide data for a wide range of indicators, covering areas such as population, labour, income, health and nutrition, violence and safety, etc.¹² Often, surveys are the best-suited data-collection vehicle to generate information on sensitive issues, such as violence against women, reproductive health, crime statistics and governance issues.

UNSD (2015)¹³ recommends a general model for integrating a gender perspective into survey instruments and the data collection process. Some of the recommendations are provided below. However, please refer to the detailed list of recommendations on the UNSD website.¹⁴

- Selecting topics for surveys:
 - To ensure the survey data is widely used, it is important that it responds to the needs of data users, including policymakers. Prior to designing survey questionnaires, NSOs should assess the data needs in line with country priorities as set out in National Development Plans or Strategies. Priority development areas for the country should help identify priority topics and related indicators for data generation.
 - With extensive user-producer dialogues between technical experts, data analysts, policymakers, journalists, academics and researchers, priority gender areas can be identified and related data can eventually be produced and used.

- Questionnaire design and testing:
 - Two important issues need to be taken into consideration for questionnaire design: who will be the survey respondent, and how to structure the information we wish to find out.
 - Traditionally, heads of household – typically men – were automatically designated as survey respondents. Although this may provide accurate information for some questions, heads of household may fail to provide accurate information about intra-household inequalities, intimate details, use of time, or feelings of different household members. Therefore, it is important that both men and women are interviewed to obtain an accurate picture.
 - As questions about women should be asked to women themselves directly, it is recommended that survey questionnaires are split into groups of questions, each addressed to a different respondent. For instance, questions about the characteristics of the household may be asked only to one household member, while questions about individual income or feelings of safety should be asked to women and men both, separately.
 - The language used to formulate the questions and the order in which the questions are posed will determine the quality of the answers obtained. Therefore, it is important to ensure that survey questions do not introduce any gender bias and that the enumerators are adequately trained to ask the question exactly as it appears in the questionnaire.

¹² UN Women. 2018. Gender Equality in the 2030 Agenda for Sustainable Development. <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>

¹³ UNSD 2013.

¹⁴ See UNSD 2013.

- Coding experts, field supervisors, data-processing staff and data analysts, who may not necessarily have a background in gender, must consult (and receive training from) subject matter experts to gain knowledge on gender issues.
- Gender bias should be avoided when drafting, posing the questions and recording respondent's answers (refer to Box 2).

Box 2: Guidance on avoiding gender bias in questionnaires

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- *Include notes and explanations of concepts and terms for the interviewers to refer to when conducting the interview.*
 - *To reduce underreporting of issues related to women, especially regarding experiences of violence, include probing questions in the questionnaire.*
 - *Potential answers to questions should be categorized and pre-coded in such a way that answers related mainly to women are given the same importance as those mainly related to men.*
 - *Questions should be short and free from ambiguity and use everyday common terms so that, regardless of their level of education, respondents can answer.*
 - *Questions should not be leading and must maintain their meaning when translated into a different language.*
 - *Questionnaires should be tested in the field to make sure that both men and women understand the questions in the same way.*
-

- **Manuals:**
 - Manuals should include detailed explanations of gender-related terms and concepts for interviewers and supervisors.
 - Manuals should have detailed explanations on questions that may lead to underreporting or sex-selective underreporting (for example, domestic violence or economic activity).
 - The manual's language should be free from gender-based bias.
 - The supporting examples in the manuals should not reinforce gender stereotypes.
- **Sampling:**
 - Samples selected should be able to capture a wide range of factors known to have distinct gender patterns. For instance, the samples should cover all groups and subgroups of population, different types of households, agricultural holdings and economic units.
 - Sample designs should ensure sufficient statistics are produced for groups of both women and men in sufficient detail. For instance, sampling methods and size should allow for data disaggregation at multiple levels (refer to Module 7 for more details).
- **Selecting and training interviewers and supervisors:**
 - Interviewers need to be trained on how to handle the interview when sensitive questions need to be asked. This is especially relevant for violence-related questions, reproductive

health questions or in the case of women's earnings. For sensitive questions, the interviewer should make sure no one else is around besides the respondent.¹⁵

- For violence- and crime-related questions, specialized training is necessary for enumerators. It is important to allocate sufficient time to conduct this training (typically each person trained should undergo training for one to two months minimum).¹⁶
 - Interviewers should be trained on how to proceed in case multiple members of the household need to be interviewed.
 - The sex of the interviewer does play a role in obtaining certain types of information from the respondents. This is especially true for violence- or reproductive-health-related questions. For instance, women are more likely to disclose information on these topics to women interviewers than men interviewers. Thus, it is important to keep this in mind prior to hiring enumerators.
- Data coding and editing:
 - Pre-coded responses should be used in questionnaires to facilitate consistency, comparability and conceptual soundness of data.
 - Gender specialists must be consulted when data is being coded and edited. Additionally, when data is being imputed, this consultation can prevent assumptions based on gender stereotypes.

Besides these general recommendations, specialized surveys might require other targeted recommendations to ensure the quality of the data and avoid bias. For instance, specific recommendations exist for specialized violence against women surveys and time-use surveys.

1.3.1. Time-use surveys

Time-use data are the basis for obtaining gender statistics related to several topics: time allocation patterns; unpaid work; participation in all forms of work; working time, work locations and the scheduling of economic activities; work-family balance; the investment of time in education and health; welfare and quality of life; and intrahousehold inequality¹⁷. UNSD's recommendations to avoid gender biases in time-use data include¹⁸:

- Classification of activities for time-use:
 - All activities identified through time-use surveys should be classified utilizing an international standard classification. The United Nations recommends the use of ICATUS¹⁹.
 - It is important that the data collected be as detailed as possible. For example, instead of one category comprising all forms of care, more categories should be defined, such as

¹⁵ For more details on training interviewers to ask about domestic-violence-related issues, refer to the DHS Domestic Violence Module https://dhsprogram.com/pubs/pdf/DHSQMP/domestic_violence_module.pdf. Similarly, you can refer to UNFPA's kNOwVAWdata training module.

¹⁶ UNFPA. kNOwVAWdata training module. <https://asiapacific.unfpa.org/en/knowvawdata>

¹⁷ UNSD. 2013. "Time-use surveys," *Gender Statistics Manual*. <https://unstats.un.org/unsd/genderstatmanual/Time-use-surveys.ashx>

¹⁸ Users are strongly encouraged to consult UNSD's detailed publication, *Guide to Producing Statistics on Time Use: Measuring Paid and Unpaid Work* https://unstats.un.org/unsd/publication/SeriesF/SeriesF_93E.pdf for complete information on this topic.

¹⁹ For a detailed list of activities, refer to ICATUS <https://unstats.un.org/unsd/statcom/48th-session/documents/BG-3h-ICATUS-2016-13-February-2017-E.pdf>

care of children, care of ill adults, care of the elderly and care of the disabled. Fetching water and fetching firewood are not considered forms of care, and thus should be included as separate activities among other types of non-market work.

- Activities for which larger gender differences are suspected must not be clustered at the stage of coding, analysis and presentation of data.
- Contextual information:
 - Contextual information such as the place where the activity took place as well as who was the recipient of the activity (e.g. child, dependent adult, independent adult, etc.) are crucial for coding and interpreting data meaningfully.
- Recording simultaneous activities:
 - 24-hour time diaries are best suited for collecting data on simultaneous activities (both primary and secondary activities). When estimates of time use are based only on primary activities, many activities – such as caring for children, older persons, ill or disabled persons, for example – are often underestimated. These “missing” activities would typically be reported as secondary or simultaneous activities.
- Coverage of relevant individual and household characteristics:
 - Data regarding respondent’s sex, age, marital status, presence of children, level of education and employment status, etc. should be collected so that time use estimates can be disaggregated at the level of particular groups of women and men.
- Sampling:
 - The sample should cover all relevant population groups and subgroups as well as all seasons relevant to agricultural or other seasonal activities.
 - To measure intrahousehold inequalities, data on time use must be collected for multiple members in the household.

1.3.2. Violence against women surveys

Data on the prevalence of violence against women can only be collected accurately using surveys²⁰, as registries of violence cases fail to record many of the less severe violence instances. Survey data can provide a wide range of information: occurrence of violence, groups of women and girls who are at a higher risk of violence, characteristics of perpetrators, barriers faced by women in seeking support and attitudes towards violence against women. Information on violence against women can be compiled utilizing specialized surveys or dedicated violence modules attached to other multipurpose surveys.

²⁰ UNFPA <https://asiapacific.unfpa.org/sites/default/files/pub-pdf/kNOwVAWdata%20Methodology.pdf>

Box 3: Dedicated surveys vs. modules attached to parent surveys

Dedicated surveys

- Offer greater opportunity to train interviewers specifically on how to deal with highly sensitive issues.
- Maximize disclosure and preserve the safety of the victims.
- Include a wider range of questions on different types of violence.
- Allow for collecting more details about the background characteristics of victims and perpetrators.

Modules attached to parent surveys

- The challenge of ensuring data quality and respondent safety is generally greater.
 - Underreporting can happen as they are primarily designed for capturing information on other issues.
 - Underreporting can also happen as the wording or ordering of questions may not facilitate disclosure of violence.
 - They are typically less costly.
-

Gender bias can occur at different stages of the data-collection process. These range from bias at the conceptual and measurement level, at the questionnaire design stage, in terms of the sample coverage and finally, related to the interviewers. Some of UNSD's recommendations on how these biases can be avoided include²¹:

- Concept and measurement:
 - The survey should include the different acts of violence instead of having one broad category of violence, leaving it up to the respondent to speculate about the meaning of it. For instance, having a list of acts under physical violence – such as: hitting, pushing, pulling hair, kicking, etc. – are more likely to garner an accurate response than just asking if they have experienced physical violence.
 - Severity of violence should not be assumed based on the act of violence the woman experienced but rather, on the frequency of the act and the consequences suffered by the victim.
 - The concept of partner violence should include all types of formal as well as informal partnerships, ranging from marriage, co-habitation, and other informal unions (current as well as past).
- Questionnaire design:

²¹ <https://unstats.un.org/unsd/demographic-social/Standards-and-Methods/files/Handbooks/gender/Integrating-a-Gender-Perspective-into-Statistics-E.pdf> ; for more detailed information on this issue, readers are encouraged to refer to UNSD's publication https://unstats.un.org/unsd/gender/docs/Guidelines_Statistics_VAW.pdf

- Designing the questionnaire in a way that facilitates the participation of respondents and encourages them to disclose sensitive information, with the belief that safety will be ensured, is key.
- The survey must be presented as a general survey on women's health or safety issues instead of a survey on violence. This is important to avoid suspicion from other family or community members and also encourage the woman's participation the survey.
- The flow of questions should be from issues and questions that are non-threatening and less sensitive to more personal and sensitive.
- Wording the questions carefully is essential to prevent underreporting of the experience of violence. For instance, words such as "rape" and "violence" should be avoided. Instead, behaviour-specific terms should be used, as they yield much higher disclosure of identical experiences.
- Sample coverage:
 - Large sample sizes are needed to allow analysis on different population groups (e.g. age, location, sex) as well as characteristics of specific subgroups of the population (e.g. ethnic minorities, single mothers, unemployed women).
- Selection of interviewers:
 - It is recommended that all interviewers for a survey on violence against women must be women. This increases the probability of disclosure of sensitive information.
 - Field supervisors must be women in face-to-face interview situations, since they must travel with interviewers to oversee their work.
 - In contexts where local norms prohibit women from working in public spaces, it is better to have a team of women and men interviewers working together to gain better access to households.
 - Age is another important factor to be considered. Interviewers seen as too young may experience distrust from respondents or it may be considered inappropriate for a young woman to be interviewing an older woman about her experience of violence.
- Training interviewers:
 - Training interviewers is key to reducing bias in data collection. It ensures that interviewers understand the purpose of the survey, are skilled to conduct the interview and build rapport with respondents, and understand the ethical considerations, including confidentiality, safety and support for respondents.
 - Sensitivity training is needed for the interviewer to be able to pose sensitive questions in a respectful manner and accurately assess the feelings or reactions of respondents.
 - Training should also include practical steps to control the interviewing environment and ensure the safety and privacy of respondents.
 - Interviewers should be trained to identify their own emotional reactions and reduce their own stress as experiences of trauma and violence can be emotionally draining for them, which can affect the quality of interviews.

2. Methods of gender data estimation

Analysing data from a gender perspective requires examining the differences in women's and men's lives²². A comprehensive gender data analysis may therefore require multivariate techniques. Illustrating all these techniques is beyond the scope of this module²³.

Some recommendations to mainstream gender across the data production and estimation process include:

2.1. Research question

As a first step, it is important to identify research questions that specifically refer to inequalities between women and men in all aspects of life, as well as issues that pertain specifically to women or to men only. Such research questions should be in line with information needs required to design, implement and monitor public policies. In addition, questions can also arise from anecdotal or qualitative evidence of existing inequalities that need to be proven through the production of official statistics.

The use of internationally agreed indicators to generate estimates that respond to these questions might facilitate the process of data collection, analysis and estimation, as international guidance and methodology is widely available online.²⁴

2.2. Identifying appropriate concepts, methodologies and measurement tools

It is important to assess whether internationally agreed methodology and guidelines exist to guide the estimation process to generate data that provides answers to the research questions. For example, if you wish to calculate sex-disaggregated unemployment rates, you will need to first understand related key concepts and definitions and address questions, such as: 'what does it mean to be unemployed?', 'what if someone has a job but was absent from work in the past seven days?', 'what if someone has a seasonal job?', 'what if someone runs their own family business?', etc.

In the case of unemployment rates, internationally agreed methodology exists that provides guidance on how to calculate the indicator and detailed explanations on concepts, definitions, formulas and methods for data estimation. The international statistical community recommends that, where possible, internationally agreed definitions, standards and classifications are used to calculate national estimates. Depending on the topic, such methodological guidelines can be found in different locations. A non-exhaustive list of repositories includes the following:

- Global SDG metadata repository: <https://unstats.un.org/sdgs/metadata/>
- ILOSTAT metadata: <https://www.ilo.org/ilostat/faces/ilostat-home/metadata>

²² UNFPA. 2014. *Gender Manual*. <https://www.unfpa.org/sites/default/files/pub-pdf/141006-UNFPA-GenderManual2014-02-SCREEN.pdf>

²³ For more information on mainstreaming gender in survey data analysis, refer to Module 6. For more information on how to use survey data to calculate SDG indicators, refer to Module 3 and Module 7.

²⁴ <https://unstats.un.org/sdgs/metadata/>

For more details on how to integrate gender into population and housing census, please refer to UNSD's Gender Statistics Manual: <https://unstats.un.org/unsd/genderstatmanual/Population-and-housing-census.ashx>.

- UIS Metadata for the global and thematic indicators for the follow-up and review of SDG 4 and Education 2030: http://uis.unesco.org/sites/default/files/documents/metadata-global-thematic-indicators-sdg4-education2030-2017-en_1.pdf
- WHO Indicator Metadata Registry: <http://apps.who.int/gho/data/node.wrapper.imr?x-id=1>
- FAOSTAT: <http://www.fao.org/faostat/en/#data>

2.3. Tabulation plans for estimation: A useful technique to assist the survey designer in bringing precision to the user's need for information (set of questions or objectives of the survey) is to produce tabulation plans and dummy tables. Dummy tables are draft tabulations that include everything except the actual data. The tabulation outline should specify the table titles, column stubs, identifying the substantive variables to be tabulated, the background variables to be used for classification, and the population groups for analysis (survey objects or elements or units). It is also desirable to show the categories of classification for each variable in as much detail as possible, though these may be adjusted later when the sample distribution over the response categories is better known.²⁵

Even when the indicator of choice does not speak directly to gender inequalities, it is important to keep in mind that gender gaps might still exist. For all population-based indicators, it is important to consider disaggregating the data by sex consistently. In addition, depending on the issue, a combination of sex with other disaggregation variables might be relevant as well. Keep in mind that estimates should allow information to be compared between men and women, and among different categories of women and men (e.g., rural vs. urban women, wealthy vs. poorer men, etc.). Thus, tabulation plans should consistently include disaggregation at various levels, including utilizing several disaggregation variables simultaneously (e.g. rural poor women vs. urban rich women). In addition, it is important to think of potential variables that could correlate with gender indicators and include analysis of those variables in the tabulation plan. For instance, gender segregation in the labour market might be partially determined by the gender gap in education. Therefore, producing sex-disaggregated estimates on occupations and representation at managerial levels should be included in the tabulation plan, along with sex-disaggregated educational attainment.

²⁵ UNSD, https://unstats.un.org/unsd/demographic/meetings/egm/Sampling_1203/docs/no_8.pdf

3. KEY TAKEAWAYS

- *Gender should be integrated at all stages of the data-collection process, starting with selecting the topic, designing the questionnaire, manual and sample, training the interviewers and finally, coding and editing the data.*
 - *Gender should be integrated in the data-collection process of all primary data sources, such as administrative records and registries, household surveys and population censuses.*
 - *When designing a census, questionnaires should include detailed notes for interviewers on who to interview, how to probe for questions related to economic activities, and specific directions to select women as respondents for information regarding children, pregnancy-related death, reproductive health, etc.*
 - *Both women and men should be selected as training instructors and guidelines and manuals should include gender-sensitive examples.*
 - *To integrate gender in the collection of administrative records and registries, sociodemographic information should be recorded.*
 - *The estimates generated from administrative records should be consistently disaggregated by sex and other sociodemographic variables.*
 - *Civil Registration and Vital Statistics systems emphasize the need to identify sociocultural reasons for under registration of women and girls' deaths, recognize reasons underlying women and girls' deaths, as well as undertake WHO's verbal autopsy for asserting cause of death.*
 - *Gender should be made an integral part of all stages of survey data collection, starting with selecting gender-relevant topics, designing gender-sensitive questionnaires and manuals, selecting samples that cover all groups and subgroups of population, and allow for multi-level disaggregation, training interviewers and supervisors to handle sensitive questions and including pre-coded responses.*
 - *Gender specialists should be consulted when conducting time-use and violence against women surveys.*
 - *Research questions referring to inequalities between women and men should guide survey design.*
 - *Indicator data produced from surveys should ideally respond to internationally agreed classifications and methodologies.*
 - *Survey and census tabulation plans should consistently include disaggregation at various levels, including utilizing several disaggregation variables simultaneously.*
 - *As this module is a brief summary of materials produced by other partners, such as UNSD, it is strongly recommended that users refer to the links included in the list of additional resources attached to this module for further details.*
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