

# MACRO-MODULE 4

# GENDER GUIDANCE FOR WATER DATA SURVEY



United Nations  
Educational, Scientific and  
Cultural Organization



World Water  
Assessment  
Programme



# **MACRO-MODULE 4: GENDER GUIDANCE FOR WATER DATA SURVEY**

**Module 4.1: Planning a survey**

**Module 4.2: Knowing the area of the project**

**Module 4.3: How to select the indicators**

**Module 4.4: From the indicator to the question: how to build a  
questionnaire/interview**

**Module 4.5: Questionnaires/interviews submission**

## Module 4.1: Planning a survey

The steps of the survey and the different techniques are presented in the WWAP Training in sections dedicated in building capacity to execute field surveys

A “water and gender survey” is a statistical exercise for collecting, processing and disseminating data on water resources with a gender perspective



## Module 4.1: Planning a survey

# WORKING PROTOCOL

### To obtain reliable data....

- Define the purpose of the overall survey
- Collect background information of the study area
- Evaluate available resources
- Select project scale and sample size
- Select indicators
- Select applicable methodologies
- Build the questionnaires and/or interviews
- Distribute/administer questionnaire/interview



## Module 4.2: Knowing the area of the project: step

### 1. Define the purpose of the survey

- ✓ The survey design and the questions must reflect all stakeholders' interests



### 2. Collect background information

- ✓ Basic knowledge on the data population you are interested in surveying
- ✓ Previous research, references, etc

### 3. Evaluate the available resources

- ✓ budget available
- ✓ human resources
- ✓ Time available



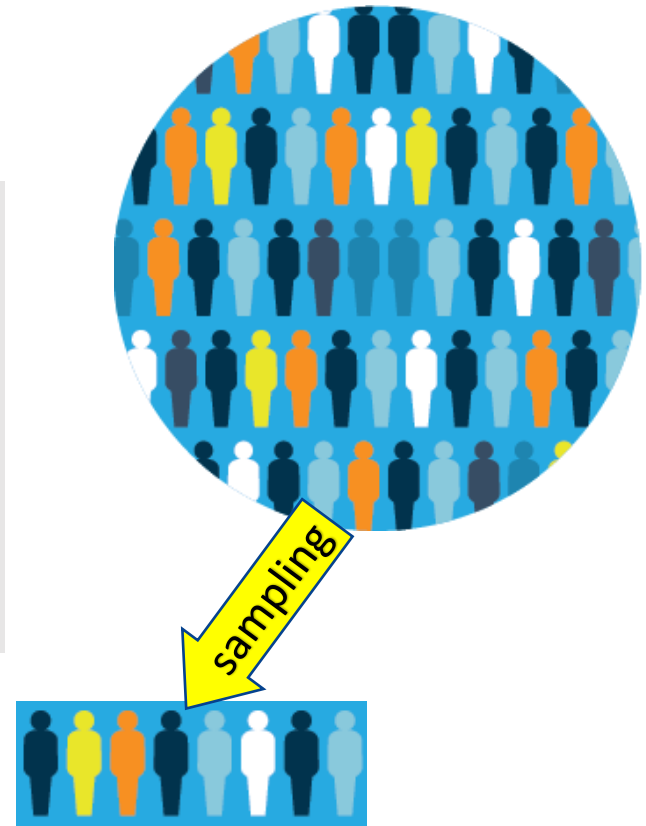
## Module 4.3: How to select the indicators

### 4. Select size of the project sample

In statistics, a **population** is the people target of the survey.

A **sample** is a sub-set of the population that is chosen when access to all population members is not feasible (for lack of time, money or other resources)

**Sample members should be representative of the entire population of the survey**





## Module 4.3: How to select the indicators

### 5. Select indicators

#### *What indicators to use?*

The choice makes the difference. If the wrong information is measured, or if it is measured in the wrong way, the data will be misleading and the quality of decisions will be affected.

#### **The choice of the indicators:**

- depends on the purpose of the survey
- should mirror the information needed for the survey
- must reflect the social and cultural conditions emerged from the study of the background, and must be feasible with the available resources.



## Module 4.3: How to select the indicators

### 5. Select indicators

#### Characteristics of a good indicator.

Is the indicator **Specific, Measurable, Attainable, Relevant and Trackable?**

Is it **S.M.A.R.T.?**

#### Specific

Does the indicator capture the essence of the desired result?  
Does it capture differences across areas and categories of people?

#### Measurable

Will the indicator show the desired change?  
Is it a reliable and clear measure?

#### Attainable

Are the result(s) realistic?

#### Relevant

Is it relevant to the intended outputs and outcome?

#### Trackable

Are data available at reasonable cost and effort?  
Are data sources known?

Iterative process among stakeholders, partners, program managers,...

## Module 4.3: How to select the indicators

### 6. Select methodologies for data collection

The methodology must:

- ✓ Achieve a high participation rate with a complete and accurate data
- ✓ Minimize the answer-burden of the respondent
- ✓ Satisfy the operational constraints

#### SURVEY METHODOLOGIES:

- i. Fact finding on the ground or through desk study
- ii. Individual interviews
- iii. Group interview or FG
- iv. Structured self-assessment questionnaires
- v. Participatory observation
- vi. Alternate methods

## Module 4.3: How to select the indicators

### 6. Select methodologies for data collection

#### **Fact finding (or desk study):**

Data collection process realized through written records, audio-visual material and verbal communication (historical documents, laws, declarations, statutes..).

#### **Individual interviews (conversation btw interviewer and respondent):**

##### **i) Structured interview**

The structured interview is typical of filed survey researches, like household surveys.

##### **ii) Semi-structured interview**

The questions are specified but the interviewer is free to discuss the answer provided by the respondent, to seek clarification and elaboration

##### **iii) The unstructured or focused interview**

The focused interview consists of the so-called “open-end” questions.



## Module 4.3: How to select the indicators

### 6. Select methodologies for data collection

#### Group interview or Focus Groups (FG)

A group interview (or FG) enables the interviewer to obtain information from several respondents simultaneously.

#### Structured self-assessment questionnaires

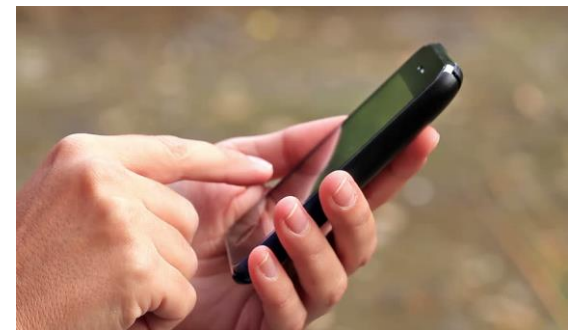
In a structured self-assessment questionnaire the respondent is expected to write the responses directly in a set up form or on separate sheets of paper.

#### Participatory observation

Participatory observation is required when it is necessary to obtain information about a process such as a committee, or a community group maintains its water supply system.

#### Alternate methods

“Mobile-phones surveys” or other means of communication, such as the radio, can be used. The application of this methodology requires that communication technologies are used or controlled by both women and men.



# Module 4.4: From the indicator to the question: how to build a questionnaire and interview

## 7. Structure of a questionnaire

**A questionnaire is a sequence of questions. In the creation of a questionnaire we should consider:**

- **Information we need**
- **The structure (the sequence of the questions)**
- **The time available for the questionnaires administration**

**The questionnaire should have a systematic framework and flow**

INDICATOR 5h	M/F membership and intensity of participation in community-based irrigation communities.
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- **Methodology:** Fact finding through community records in order to identify members; interviews with individual members, community leaders and office bearers; Participant observation by attending meeting(s) of the specific community; (Focus Group Discussion only if participant observation is not possible).

**Tip:** Participant observation is the preferred methodology here; therefore the researcher should make an effort to attend a community meeting.

**Questions:**

5h.1 Analyse the process for collective decision-making on water allocation and use for agriculture (refer to the five levels of participation, as explained in the Guideline). Identify the level of participation by different members who attend the meeting.

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- 5h.2 What are the constraints in participation for M/F members?

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5h.3 How is the final decision taken? Who takes the final decision? Is an external (limiting) factor (formal or other authority) present? Are there opportunities present for participation by M/F members as reflected in the rules and regulations?

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**EVALUATE TIME NEEDED FOR READING, UNDERSTANDING, AND WRITING**

# CLASS ACTIVITY

***Comment the following questions flow. Is this part of the questionnaire well structured? Why?***

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23. Do you have an irrigation system? (Y/N) if N go to the question n. 28

24. Which type of irrigation system do you have (pipeline, buckets, sprinkler)?

25. Who handles (management, maintenance ...) the irrigation system? (M/F)

26. Is there any cost related to the irrigation system? (Y/N) if N go to the question n. 28

27. How much is the cost for the irrigation system?

28. What are the type of extension services available to F/M farmers?

.....

## Module 4.4: From the indicator to the question: how to build a questionnaire/interview

### Data validation

**Validity** is the extent to which a questionnaire/interview really measures what it is intended to measure.

**Data validation** means verifying if you have measured what you have intended to.

Validation through cross-checking of:

- Documents
- Interviews



**Data validation is an essential part of any survey; it guarantees that a project builds on objective data**

# Code of conduct

A code of conduct promotes a good social and professional culture by demonstrating how people are expected to act



- The team of a gender survey should be composed by males and females
- The interviewer should be able to create a friendly environment
- Find the most suitable time for the interviews, considering that the time dedicated to the interview is time stolen to the daily activities and jobs
- Do not force people to answer and do not influence people's answer
- Take into account the people social hierarchy: before submitting the interviews ask permission to the head of the village (if she/he exists)
- Organize the interviews in the open-air whenever possible: it helps to create a confident and free environment for interviews
- Chose a private space to conduct the interview with women: the presence of males can influence their answers
- Give time to think about the question
- Listen to the respondent without interrupting



# CLASS ACTIVITY



Consider the following images representing interviews. Can you identify strengths and weaknesses in the different scenes?



**THANK YOU**

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GENDER GUIDANCE FOR WATER DATA SURVEY**