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# Guidelines on how to collect sex-disaggregated water data

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Readers are encouraged to send comments, feedback and suggestions to Francesca Greco, [f.greco@unesco.org](mailto:f.greco@unesco.org), Project Coordinator and Editor.

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# Guidelines on how to collect sex-disaggregated water data

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This paper is the tool n.3 of WWAP Gender Toolkit

The WWAP Gender Toolkit is an output of the UN WWAP  
UNESCO Project on Gender Sensitive Water Monitoring,  
Assessment and Reporting

WWAP Gender Series n.2

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## List of abbreviations

CBO	Community-based organization
CSO	Civil society organization
FAO	Food and Agriculture Organization of the United Nations
FGDs	Focus group discussions
GGRETA	Groundwater resources governance in transboundary aquifers
HR	Human resources
M/F	Male/Female
MBOs	Member-based organizations
M&E	Monitoring and evaluation
MDGs	Millennium Development Goals
NGO	Non-governmental organization
SMs	Social movements
SDGs	Sustainable Development Goals
TBOs	Transboundary basin organizations
UN	United Nations
UN WWAP	United Nations World Water Assessment Programme
WASH	Water, sanitation and hygiene
WHO/UNICEF JMP	World Health Organization/United Nations Children's Fund Joint Monitoring Programme
WUG	Water User Group

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The paper was written by Vasudha Pangare based on her original work and experience and on the results of the Second Workshop of the WWAP Working Group on Sex-disaggregated Indicators (December 2014).

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# A Background

## A.1 Introduction

The United Nations World Water Assessment Programme (UN WWAP)<sup>1</sup> has launched a groundbreaking project to develop and test the collection of key gender-disaggregated water data. UN WWAP is developing a priority set of gender-sensitive indicators and a gender-disaggregated data methodology that will then be tested in the field by Member States in different regions.

This project will produce a comprehensive methodology for gender-disaggregated data gathering and will yield the first-ever set of sex-disaggregated data on topics such as women's water empowerment and participation in water-decision-making.

There is universal agreement in international and national policy circles that the collection of sex-disaggregated water indicators is of the utmost importance and priority.

For years, United Nations (UN) agencies, non-governmental organizations (NGOs), governments, activists, and water experts have been calling for a systematic approach to collecting sex-disaggregated water indicators. This project answers those calls. This ambitious project to disaggregate water data by gender is needed now more than ever: given global commitments to gender equality, in light of the importance of water as a resource, and given the many different threats to water resources the world's policymakers and decision-makers need baseline gender-sensitive data.

This project will prove the value of sex-disaggregated data and will provide strong support for the monitoring of current Millennium Development Goals (MDGs) and post-2015 development goals. It will:

- support the Sustainable Development Goals (SDGs) (UNSDSN, 2014);
- build capacity for national sex-disaggregation data-gathering projects;
- demonstrate the value of sex-disaggregated data and make the case (to national leaders and policy-makers) for gender mainstreaming;
- create baseline knowledge related to water, from which gender progress can later be evaluated; and
- serve as a basis for advocating change towards gender equality and women's empowerment.

The SDGs reaffirm the need to achieve sustainable development by promoting economic development, social inclusion, environmental sustainability, and good governance including peace and security. These goals are universal and apply to all countries, national and local governments, businesses, and civil society. In order to monitor the implementation of the SDGs, it will be important to improve the availability of and access to data and statistics disaggregated by income, sex, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts. There is a need to take urgent steps to improve the quality, coverage and availability of disaggregated data to ensure that no one is left behind.

The project seeks to fulfill the need for sex-disaggregated data related to water, particularly with a vision towards addressing Goal 5, to achieve gender equality and empower all women and girls, and Goal 6, to ensure availability and sustainable management of water and sanitation for all.

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<sup>1</sup> <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/water-and-gender/>

This Guideline, or Tool No. 3 of the Gender Toolkit<sup>2</sup>, provides guidelines on how to collect sex-disaggregated data and information relevant to the water-related indicators identified by the Working Group<sup>3</sup>, which was set up for the purpose. The aim is to provide a methodological framework that is suggestive rather than prescriptive, and can be used or adapted by a whole range of users, as described in subsequent sections.

## A.2 Purpose of the Guideline

### A.2a Harmonization of data and data collection process

The guideline aims to set universal standards for the collection of sex-disaggregated data related to water. It is envisaged that the methodology will be used and adapted to different regions, countries and by different users. It is therefore necessary to provide a framework for standardization of the quality of data, and the process through which it is collected. The purpose is also to ensure that the data and information collected is authentic and has been collected in an ethical manner, conforming to universal standards.

### A.2b Encourage wide use of the methodology

The guideline seeks to make the methodology easy to use and adapt, so that it can be used widely. The task of collecting sex-disaggregated data can seem difficult and overwhelming. The processes and methods described in the guideline will be helpful in preparing needs-based and context specific research designs that are easy to use. The organization or individual interested in collecting sex-disaggregated data related to water can select the indicator topics and methodology that best suits their purpose, depending upon the capacity, skills, budget, and resources available to them.

<sup>2</sup> <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/water-and-gender/>

<sup>3</sup> UN WWAP Working Group on Sex-disaggregated Water Indicators is an international working group set up specifically for the project.

## A.3 User groups and types of uses

The user groups have been identified in alignment with the Agenda 21 major groups. It is expected that each user group would select the indicator topics most relevant in their work and use the applicable methodology to collect sex-disaggregated data. The data can then be used for different purposes in different contexts. The types of uses described below are suggestive and not comprehensive.

*In Sri Lanka, women were encouraged to join a community based fishery organization by giving them training. Women were educated in fishery management, entrepreneurial skills and leadership formation. Out of a total of 145 fishery Community Based Organizations (CBOs), 38% of the societies were strengthened by the increased and improved participation of women (ADB, 2010). How could the private sector benefit from increased equality in participation of women? Sex-disaggregated data could provide the answer.*

### A.3a Business and industry

Water-related business and industry could use sex-disaggregated data for establishing benchmarks related to the impact on local communities of their business or industry related activities, for designing monitoring and evaluation methodology for assessment of impact. They could also use the data to advocate for policy changes or support from local or government authorities to deal with negative impacts or to inform about positive impacts. Sex-disaggregated data on how much contribution is made by men and women workers/participants to their business or industry could also provide insights on how economic returns could be improved.



### A.3b Transnational bodies such as transboundary river basin organizations, regional and local river basin organizations, governments and local authorities

Trans-national bodies, governments and local authorities could use sex-disaggregated data to provide benchmarks for designing monitoring and evaluation systems (for example, for gender-sensitive commitments, government schemes, government resolutions), for monitoring progress, policy-making, and aligning political commitments with SDGs. The data will provide insights for focusing investments for improvements in gender equality.<sup>4</sup> Gender concerns are particularly important when transboundary decision-making affects ecosystem services of rivers and lakes that are crucial for income generation (for example, fishery industries). Gender evaluations are recommended also in dam-building processes and relocation of communities. Regarding transboundary groundwater, gender issues come into play when, due to the shared utilization, the groundwater use in communities gets affected in terms of the depletion of well water in quantity and quality. Deteriorating water quality and quantity affects women's water-burdens first. Having stressed the gender-nature of the outcomes of transboundary water decision-making, it is worthwhile to also remember that inputs into the decision-making process have an equally important gender-aspect to be assessed: gender balance in transboundary basin organizations (TBOs) decision-making boards is currently heavily affected by the male-dominated professionals in Diplomacy and Engineering, usually members of Trans-boundary Water Organizations. TBOs could engage in monitoring such a trend and assessing their changes and their improvements through time with the help of sex-disaggregated indicators.

<sup>4</sup> Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. Gender equality is not a women's issue but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centered development.

*With 276 transboundary river basins and 200 transboundary aquifers (UN-Water, 2013) in the world, it could make a significant difference to the process of decision-making by trans-boundary river basin organizations if sex-disaggregated data is taken into account while identifying stakeholders.*

### A.3c Civil society organizations (CSOs)

This group includes member-based organizations (MBOs), non-governmental organizations (NGOs) and social movements (SMs). (This group also includes the Agenda 21 major groups of women, children and youth and indigenous people as it is assumed that they are more likely to use the toolkit in their role as members of civil society organizations). CSOs could use sex-disaggregated data for reviewing country profiles related to gender and water, identify gaps in information, and use the information for advocacy. They can use the disaggregated data for aligning with SDGs in project formulation and implementation, designing monitoring and evaluation systems for project implementation, and for assessments, either self-assessment or peer review. Disaggregated data can also be used by local level NGOs to develop and implement projects that are more focused on ground realities, rather than on generalised assumptions about the communities they work in.

*UN Women's report "Progress of the world's women 2015-2016" (2015) highlights the need for sex-disaggregated data: Women's socio-economic disadvantage is reflected in pervasive gender inequalities in earned income, property ownership, access to services and time use. The absence of sex-disaggregated data makes it difficult to establish if women are, across the board, more likely to live in poverty than men.*

### A.3d Scientific and technological community

The Scientific and Technology community could use sex-disaggregated data for monitoring country performance in aligning to SDGs, expert assessments, and aligning technological advancements with SDGs. Gender-sensitive analysis could also be conducted on the very nature of knowledge production regarding water: academic authors, experts and professionals could monitor their own gender balance and impact in the scientific community, as promoted by United Nations Educational Scientific and Cultural Organization (UNESCO) under the “Women in Science” initiative. Again, sex-disaggregated indicators will help assessing progress and changes through time.

*The Groundwater Resources Governance in Transboundary Aquifers (GGRETA) project is created to test a UNESCO International Hydrological Programme (IHP) methodology to assess 166 transboundary aquifers. In the GGRETA project, sex-disaggregated data is determined, measured and assessed, and an inventory of policy instruments that affect gender equality in science is undertaken (Groundwater CoP, n.d.). The gender analysis is currently used to improve the socio-economic and legal assessment of groundwater use.*

### A.3e Workers and trade unions

Trade Unions and workers associations could use sex-disaggregated data for assessments of impacts of policy, industry and technological interventions on the communities they represent, and advocate for improvements and changes in policy implementation such as those related to wage disparities, improvement of gender balance in staff recruitment in water related industry. Workers associations could also use sex-disaggregated data on unpaid water-related work to leverage the case for task-sharing options and gender equality actions to be implemented.

*International Labour Organization’s (ILO) publication (Kapsos and Bourmpoula, 2013) has introduced a new methodology to produce country-level estimates and projections of employment across five economic classes, building on earlier work to produce global and regional estimates of the working poor. The paper was unable to examine trends in employment disaggregated by sex and age due to non-availability of data and suggests that there is a great need to address this gap in future research related to employment and economic class.*

### A.3f UN Agencies

The toolkit would be useful to UN agencies in aligning their programmes with the SDGs, in designing monitoring and evaluation systems, conducting assessments, monitoring country performance and identifying and reviewing issues that need international attention. Sex-disaggregated data could provide benchmarks that can be used to appropriately target funding and investments.

### A.3g National governments/countries

The toolkit would be useful to national governments/countries who would like to improve water policy and programme implementation to make it more effective and socially inclusive. It would also be helpful in implementing gender audits, monitoring policy and programme performance and ensuring that specific gender equality targets are being met.

### A.3h Media

The toolkit would encourage gender sensitive media reporting of water related issues and to include a socially inclusive perspective, with greater awareness for collecting socially relevant information and data. Sex-disaggregated data could help building news and public campaigns to change the status quo and the mindset of public opinion regarding gender and water issues.

*In Uganda, the Directorate of Water Development measured the gendered levels of participation in water and sanitation committees and collected sex-disaggregated data on staff in different positions in the department. They found that the number of male staff was far greater than the number of women staff and decided to improve the gender balance in the water sector by 30% in 5 years. To address this challenge, a gender working group was formed which included representatives from the Ministries of Gender, Labor and Social Development (Ebila, 2006).*

Table 1. Matrix of users and suggested types of use

User group	Type of use
Business and industry	<ul style="list-style-type: none"> <li>– Designing monitoring and evaluation systems</li> <li>– Assessment of impacts</li> </ul>
Transnational bodies such as transboundary river basin organizations, regional and local river basin organizations, governments and local authorities	<ul style="list-style-type: none"> <li>– Policy-making</li> <li>– Aligning political commitments with SDGs</li> <li>– Designing monitoring and evaluation systems (for example, for gender-sensitive commitments, government schemes, government resolutions)</li> </ul>
Civil society organizations (CSO); Member-based organizations (MBO), Non-governmental organizations (NGO), Social movements (SM)	<ul style="list-style-type: none"> <li>– Advocacy</li> <li>– Aligning with SDGs in project formulation and implementation</li> <li>– Designing monitoring and evaluation systems for project implementation</li> <li>– Assessments: self-assessment, peer review</li> </ul>
Scientific and technological community	<ul style="list-style-type: none"> <li>– Assessments: Expert reviews</li> <li>– Scientific and technological advancement aligning with SDGs</li> </ul>
Workers and trade unions	<ul style="list-style-type: none"> <li>– Advocacy</li> <li>– Assessments</li> </ul>
UN Agencies	<ul style="list-style-type: none"> <li>– Aligning with SDGs</li> <li>– Designing monitoring and evaluation systems</li> <li>– Assessments</li> <li>– Target funds and investments</li> <li>– Monitor country performance in relation to SDGs</li> </ul>
National governments/countries	<ul style="list-style-type: none"> <li>– Gender sensitive and socially inclusive policy and programmes</li> <li>– Gender budgeting</li> <li>– Monitoring of policy and programmes with a gender perspective</li> </ul>
Media	<ul style="list-style-type: none"> <li>– Gender sensitive and socially relevant reporting</li> </ul>

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## B. Steps in data collection

### B.1 Identify the region and area where sex-disaggregated data related to water would be collected

There are five regions within which the research is likely to be located; Europe and North America, Asia and the Pacific, the Arab states, Latin America and the Caribbean, and Africa. Each region is characterized by specific problems related to water, and political, socio-economic and cultural contexts. These would have to be taken into consideration while planning and designing the scope of the research. Within the region, the user group would be required to determine whether the data would be collected at the national, transnational, sectoral, institutional or community level.

### B.2 Select the indicator topics for which the data would be collected

The next step would be to identify the topic or topics of indicators (listed in the following section) for which the data would be collected. This would depend upon the scope of the organization or user group that plans to collect the data and the purpose for which the data would be collected. In any case, the main recommendation is to always set up a list of indicators to assess both qualitative and quantitative topics in equal manner, when possible and to devote the majority of budget to qualitative enquiry, which is usually the more expensive of the two (requiring more face-to-face interviews).

### B.3 Assess available resources

The user group would need to assess the resources that would be required to conduct the survey or engage in data collection, such as financial resources, and staff (trained and untrained). The following questions would need to be answered:

- If resources are not adequate, how can additional resources be raised? Funds, partnerships?
- What type of staff/researchers will be required? Trained or untrained? Will specific training be provided to the researchers? Would it be necessary to specifically use male or female researchers in the field?
- Will translators/interpreters be required?

### B.4 Collect background information

Once the area or sector for the survey and the topics have been identified, it would be necessary to collect all available data and background information that will provide the context for the data collection. This could include:

- Legal situation on water, International Law, Traditional and Customary Law, Religious Law;
- Political situation and commitments: political system, also at local level and community level;
- Socio-economic situation assessment (poverty index, education, health etc.) with regional and local information harmonization; and
- Cultural context on: transparency/integrity, religion, prevailing gender roles and responsibilities.

### B.5 Select the sample size

The sample for desk review and field research methodologies would need to be decided based on the context, purpose and the size of data appropriate for the purpose of the research. The user would have to determine the size of the sample and the sampling method that would need to be used, and identify constraints (such as funds, resources, socio-cultural realities) that could impact the process of sample selection. While identifying the sample the user group would need to consider how the people from whom they plan to collect the information or



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data could be approached. Constraints may need to be overcome through various means such as using intermediaries, lobbying, advocating and entering into partnerships with other groups or organizations.

## B.6 Identify the methodology

The purpose and topics for which sex-disaggregated data is being collected would help to determine the methodology that would be used. Different methods for collecting information have been suggested in the following section. The user group would have to decide which methodology would be appropriate for which type of information, also depending upon budgets and other resources such as staff and field researchers. These resources would also determine whether quantitative or qualitative methods would be used. Each method has its own limitations and these should be identified and acknowledged. For more specific decisions on selected indicators and related methods, see Tool No. 4, Questionnaire (WWAP Working Group on Sex-Disaggregated Indicators, 2015).

## B.7 Validate the data

It may be necessary to use a combination of methodologies when validation of data is required. The researcher would have to be alert to the possibility of having obtained information that may be vague, untrue, or inappropriate. Sometimes it may be necessary to cross-check/validate in order to confirm that the information is correct, particularly when sensitive qualitative information is being collected. Where quantitative data is concerned, validation may be required if there are doubts about the authenticity of the data.

## B.8 Analyze the data and prepare the report

Data analysis and assessment should be impartial and objective. Reports should include all the relevant background information and details about the context and methodology used that have a bearing on the findings. The report should

start with providing information about the interviewer/researcher, and the language in which the research was conducted. Constraints faced in data collection need to be explained in order to maintain the integrity. Details, such as use of mediators and translators, as well as the language and social barriers faced need to be described.

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## C. Setting the code of conduct and ethics

Social research requires that a code of conduct or ethics be followed so as to maintain integrity and ensure that the research has been conducted in a responsible manner. The following would need to be kept in mind while conducting the research:

- Maintain high scientific standards and professional integrity in the collection, interpretation, analysis and dissemination of data;
- Pay attention to the moral and legal order of the society/community where the research is being conducted;
- Protect interviewees from undue harm arising as a consequence of their participation in the research. Be sensitive to the consequences to the interviewees as a result of participating in the research. If such consequences are likely, it may be necessary to drop the interviewee from the sample;
- Participation of the interviewees must be voluntary. They should be fully informed about the purpose of the interview or discussion and their consent should be taken before beginning the interview or discussion;
- Sensitive subjects need to be approached with care and dropped if necessary, if it is found that the interviewee is not comfortable to carry on the discussion or has misgivings about later consequences;
- In certain cultures it may be necessary to also obtain consent from another member or members of the society or household for conducting the interview or discussion (such as community elders, husbands, mothers, mothers-in-law in the community or higher officials in the government or institution if an employee is being interviewed);
- If certain questions are too intrusive and cannot be asked directly to the interviewee, it may be necessary to obtain information from a third party who can be trusted to provide honest and correct information; and
- Anticipate likely misinterpretation of data collected by reporting clearly and honestly.

## D. Process of data collection

### D.1 Indicator categories

Table 2 provides the indicator categories and sub-indicators that have been identified as “priority indicators” for the purpose of collecting sex-disaggregated data related to water:

### D.2 Regional relevance<sup>5</sup>

While the indicator topics have been formulated with a global perspective and with a view to applicability across the regions, not all the indicator topics would have equal relevance or importance in every region. The urgency to collect sex-disaggregated data is likely to vary from region to

<sup>5</sup> This section draws upon the information presented in the section on Regions in the United Nations World Water Development Report 2015: Water for a Sustainable World (WWAP, 2015). The report covers five regions, Europe and North America, Asia and the Pacific, the Arab region, Latin America and the Caribbean, and Africa.

region, particularly when the regional differences in water challenges are taken into account.

The purpose of this section is to draw attention to the main water challenges in each region that could guide the selection of focus areas for collection of sex-disaggregated data. While it is important and necessary to collect sex-disaggregated information related to all aspects of water use and management, resources are often limited and therefore priorities would need to be set. It would also make sense to “look ahead” and focus upon the indicator topics that are most relevant in each region for achieving future challenges while aligning with the SDGs. Collecting relevant baseline sex-disaggregated data would enable the monitoring of progress towards achieving the present and future water goals in each region.

While collecting sex-disaggregated data in each of these regions, it would be important to take into account the social and cultural characteristics

Table 2. Indicator topics and sub-indicators\*

Indicator	Sub-indicator
<b>1. Water governance</b>	
1.a	Number of Male/Female (M/F) paid staff in public water governance agencies, disaggregated by job category/level and decision-making capacity (and salary if available), at: national level; county/province/state level; town/village level (sample)
1.b	Number of M/F in paid and unpaid positions in local water governance formally structured entities (water users associations, etc.) at town/village level (sample); disaggregated by nature of relationship to the entity (e.g. “member”, “board”, “executive”, “leadership”, decision-making group, etc.) and types of tasks
1.c	Intensity of M/F in (sample/representative) meetings of public entity bodies sampled at national, sub-national, and local levels, including outcomes such as: ratio of contributions in decision-making meetings by women and men; percentage of decisions adopted from women’s contributions in meetings
1.d	M/F perceptions of gender discrimination (or equality) regarding women’s participation in decision-making entities
1.e	Number of M/F staff responsible for water issues (disaggregated by job level) in gender ministry/lead agency

\* These indicators were prepared by the WWAP Working Group on Sex-disaggregated Indicators.

Table 2 (cont'd)

1.f	Number of M/F staff responsible for gender issues (disaggregated by job level) in lead and other relevant agencies for the water sector
1.g.	Designated ministerial responsibility for gender in relation to water policies; the extent to which gender-specific agencies are included in water sector decision-making
1.h.	Presence and nature of gender sensitive training within responsible ministries/lead agencies. Participation of M/F staff
1.i.	The extent to which gender outcomes and gender-sensitive accountability indicators are included in Monitoring and Evaluation (M&E)/impact statements/benefits analyses of national-level Water, Sanitation and Hygiene (WASH)-sector projects (project proposals and/or outcomes assessments). Sample projects
1.j.	The presence and nature of gender-specific objectives and commitments (or gender strategy) in national and sector-level water policies.
1.k.	The nature and extent of gender-disaggregated data related to water and sanitation collected by responsible public entities at national and local levels (in relation to the totality of social indicators on water and sanitation collected).
<b>2. Safe drinking water, sanitation and hygiene</b>	
2.a	Percentage of households without water on premises, by sex of main person responsible for collecting drinking water and by type of household (using rural/urban sample)
2.b	Unpaid time spent by individual household members in supplying water, making it safe for use, and managing it (M/F informants)
2.c	M/F perceptions of the adequacy of current water supply/availability in both quality and quantity in the household
2.d	Percent households with access to "improved" sanitation facility, by household structure and by nature of "improved" facility
2.e	Intra-household M/F use of /access to improved sanitation facilities
2.f	M/F prioritization of gaining access to improved sanitation facilities; willingness to allocate household budgets for such access
2.g	M/F perception of the safety of sanitation facilities that are located outside the house; identified particular safety concerns
<b>3. Decision-making and knowledge production</b>	
3.a	M/F participation in past decade of two major global international water meetings (and nationally significant comparable meetings): World Water week (Stockholm); World Water Forum (World Water Council); (could be topic specific or region specific)
3.b	M/F inclusion on nationally and internationally convened scientific panels and advisory boards
3.c	Gender audit of World Health Organization/United Nations Children's Fund (WHO/UNICEF) Joint Monitoring Programme (JMP). (could be topic specific or region specific)
3.d	M/F perceptions of/knowledge of current total household use of water, by category of use and by primary use
3.e	Household member primarily responsible for managing the household water: M/F perceptions of the nature of their household decision-making process of water priorities and use M/F perceptions of the primary decision-maker on water issues within the household (if any) M/F perceptions of how intra-household conflicts related to water (if any) are resolved
3.f	M/F expressed priorities for water use within households
3.g	M/F perceptions of household gender equality in water decisions



Table 2 (cont'd)

<b>4. Transboundary water resources management</b>	
4.a	Number of M/F staff on transboundary water commissions (sample for pilot countries), disaggregated by job category/level and decision-making capacity (and salary, if available)
4.b	The extent to which gender outcomes and gender sensitive accountability indicators are included in M&E/impact statements/benefits analysis of transboundary agreement/activities
4.c	The presence and nature of gender-specific objectives and commitments (or gender strategy) in transboundary agreements
4.d	Intensity of M/F participation in (sample/representative) meetings of transboundary meetings, including outcomes such as: ratio of contributions in decision-making meetings by women and men; percentage of decisions adopted from women's contributions in meetings
<b>5. Water for income generation for industrial and agricultural uses, including unaccounted-for labour</b>	
5.a	% irrigated farms in region under survey; % irrigated farms managed by/owned by M/F
5.b	Average size of irrigated farms run by/owned by women/men
5.c	Gendered division of labour related to irrigated farming: gender-specific tasks related to irrigated crops, by nature of tasks; gender differentiated daily time-use of household members involved in irrigated farming work
5.d	Decision-makers and participants in household-based decision-making process regarding irrigation (M/F informants/perception); decisions regarding allocation of time and financial resources; crops to be irrigated
5.e	Decision-makers and participants in community-based decision-making process (if any) regarding irrigation (M/F informants/perceptions); decisions regarding allocation of time and financial resources; crops to be irrigated
5.f	M/F perceptions of gender discrimination (or equality) regarding women's participation in decision-making in relation to irrigation
5.g	M/F access to support services for irrigation; participation in technical training; M/F access to bank loans/credit; and incentives for the development of irrigated agriculture
5.h	M/F membership in and intensity of participation in community-based irrigation communities
5.i	% of directly water-related industries managed by/owned by M/F
5.j	% M/F employees in water-related industries
5.k	Presence of women's cooperatives in water-related industries

of each region and the unique challenges that these might present. Social and cultural norms of appropriate or inappropriate behaviour for example would determine whether it would be possible for a man to interview a woman in a household interview, or whether a woman could interview a male senior government official. In order to get honest and clear information, these norms of behaviour would need to be kept in mind and appropriate measures would need to be taken. For example, female researchers could be asked to interview women respondents. And if a woman

was required to interview a senior government official, she could be accompanied to the interview by a male colleague or a male community leader if deemed appropriate.

Table 3 provides an overview of regional water issues, suggests priority indicators for each region and highlights special aspects of the data collection process.

Table 3. Regional relevance for the indicator topics

<p><b>Africa</b></p> <p><b>Regional water issues:</b></p> <ul style="list-style-type: none"> <li>– Water governance</li> <li>– Universal coverage of drinking water supply and sanitation</li> <li>– Impact of climate change on water resources</li> <li>– Access to safe drinking water and improved sanitation</li> <li>– Management of transboundary water resources</li> <li>– Development of and access to irrigation infrastructure</li> </ul> <p><b>Suggested priority indicators for collecting sex-disaggregated data:</b></p> <ul style="list-style-type: none"> <li>– Indicator 1: Water governance</li> <li>– Indicator 2: Safe drinking water, sanitation and hygiene</li> <li>– Indicators 3 d, e, f, and g: Decision-making at the household level</li> <li>– Indicator 4: Transboundary water resources management</li> <li>– Indicator 5: Water for income generation for industrial and agricultural uses, including unaccounted-for labour</li> </ul> <p><b>Suggestions for data collection process:</b></p> <ul style="list-style-type: none"> <li>– Validation of information obtained from different sources may be required</li> <li>– Translation and facilitation would be important</li> <li>– It may be necessary to interview/meet with men and women separately while collecting information</li> <li>– Support and facilitation by key informants, community leaders may be required</li> </ul>
<p><b>Asia and the Pacific</b></p> <p><b>Regional water issues:</b></p> <ul style="list-style-type: none"> <li>– Access to safe drinking water and improved sanitation in rural, peri urban and urban areas</li> <li>– Impact of climate change and disaster risk reduction</li> <li>– Groundwater management</li> </ul> <p><b>Suggested priority indicators for collecting sex-disaggregated data:</b></p> <ul style="list-style-type: none"> <li>– Indicator 1: Water governance with respect to surface and ground water</li> <li>– Indicator 2: Safe drinking water, sanitation and hygiene</li> <li>– Indicators 3 d, e, f, and g: Decision-making at the intra-household level</li> <li>– Indicator 5: Water for income generation for industrial and agricultural uses, including unaccounted-for labour</li> </ul>

Table 3 (cont'd)

<p><b>Suggestions for data collection process:</b></p> <ul style="list-style-type: none"> <li>– Validation of information obtained from different sources may be required</li> <li>– Translation and facilitation would be important</li> <li>– It may be necessary to interview / meet with men and women separately while collecting information. Trust building would be an important pre-requisite to conducting individual and intra-household interviews</li> <li>– Support and facilitation by key informants, community leaders may be required in order to gain access to household members</li> </ul>
<p><b>Europe and North America</b></p>
<p><b>Regional water issues:</b></p> <ul style="list-style-type: none"> <li>– Well-functioning coordination at different levels—from national to river basin and sub-basin, between different sectoral users of water</li> <li>– Improving water use efficiency, including high-efficiency irrigation, wastewater reuse, volumetric pricing</li> <li>– Green growth strategies</li> </ul> <p><b>Suggested priority indicators for collecting sex-disaggregated data:</b></p> <ul style="list-style-type: none"> <li>– Indicator 1a to 1k: Water governance</li> <li>– Indicator 4: Transboundary water resources management</li> <li>– Indicator 5: Water for income generation for industrial and agricultural uses, including unaccounted—for labour</li> </ul> <p><b>Suggestions for data collection process:</b></p> <ul style="list-style-type: none"> <li>– Validation of information obtained from different sources may be required</li> <li>– Translation and facilitation would be important</li> </ul>
<p><b>Asia and the Pacific</b></p>
<p><b>Regional water issues:</b></p> <ul style="list-style-type: none"> <li>– Access to safe drinking water and improved sanitation in rural, peri urban and urban areas</li> <li>– Impact of climate change and disaster risk reduction</li> <li>– Groundwater management</li> </ul> <p><b>Suggested priority indicators for collecting sex-disaggregated data:</b></p> <ul style="list-style-type: none"> <li>– Indicator 1: Water governance with respect to surface and ground water</li> <li>– Indicator 2: Safe drinking water, sanitation and hygiene</li> <li>– Indicators 3 d, e, f, and g: Decision-making at the intra-household level</li> <li>– Indicator 5: Water for income generation for industrial and agricultural uses, including unaccounted—for labour</li> </ul> <p><b>Suggestions for data collection process:</b></p> <ul style="list-style-type: none"> <li>– Validation of information obtained from different sources may be required</li> <li>– Translation and facilitation would be important.</li> <li>– It may be necessary to interview/meet with men and women separately while collecting information. Building trust would be an important pre-requisite to conducting individual and intra-household interviews.</li> <li>– Support and facilitation by key informants, community leaders may be required in order to gain access to household members</li> </ul>
<p><b>Latin America and the Caribbean</b></p>
<p><b>Regional water issues:</b></p> <ul style="list-style-type: none"> <li>– Improving water governance and institutional mechanisms for water management</li> <li>– Universal coverage of drinking water supply and sanitation</li> </ul> <p><b>Suggested priority indicators for collecting sex-disaggregated data:</b></p> <ul style="list-style-type: none"> <li>– Indicator 1: Water Governance</li> <li>– Indicator 2: Safe drinking water, sanitation and hygiene</li> <li>– Indicators 3 d, e, f, and g: Decision-making at the intra-household level</li> </ul>

Table 3 (cont'd)

<p><b>Suggestions for data collection process:</b></p> <ul style="list-style-type: none"> <li>– Validation of information obtained from different sources may be required</li> <li>– Translation and facilitation would be important.</li> <li>– Support and facilitation by key informants, community leaders may be required</li> <li>– It may be necessary to have female researchers to interview female respondents and male researchers to interview male respondents.</li> </ul>
<p><b>The Arab States</b></p> <p><b>Regional water issues:</b></p> <ul style="list-style-type: none"> <li>– Increasing water scarcity due to climate change, climate variability and over-extraction of freshwater resources</li> <li>– Improving sustainable use of water and access to more reliable water services</li> <li>– Improved water governance for national and transboundary surface and groundwater resources</li> <li>– Dryland agriculture and women in irrigation</li> </ul> <p><b>Suggested priority indicators for collecting sex-disaggregated data:</b></p> <ul style="list-style-type: none"> <li>– Indicator 1: Water Governance</li> <li>– Indicators 3 d, e, f, and g: Decision-making at the intra-household level</li> <li>– Indicator 4: Transboundary water resources management</li> <li>– Indicator 5: Income generation in agriculture including unaccounted for labour</li> </ul> <p><b>Suggestions for data collection process:</b></p> <ul style="list-style-type: none"> <li>– Validation of information obtained from different sources may be required.</li> <li>– Translation and facilitation would be important</li> <li>– Special care would need to be taken while setting up intra-household interviews to gain access to male and female respondents of different ages</li> <li>– It may be necessary to have female researchers to interview female respondents and male researchers to interview male respondents</li> <li>– Support and facilitation by key informants, community leaders may be required</li> </ul>



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### D.3 Sources of information and appropriate methodology

After the indicator topics have been selected for which the sex-disaggregated data will be collected, it would be necessary to find out which sources would best provide the relevant information and what would be the appropriate method for obtaining this information or data. Table 4 provides a matrix of indicator topics, suggested sources of information and the proposed methodology for data collection. The user groups could use the matrix as a reference point for selecting the methodology that could be used to collect data for the indicator topics selected by them. The methodology would also be determined by whether the information to be collected is quantitative or qualitative. The different methods mentioned in the table are explained in the next section.

Table 4. Indicator topics and proposed methodology for collection of sex-disaggregated data

<b>1 Water governance</b>		
<b>1.a</b> Number of M/F paid staff in public water governance agencies, disaggregated by job category/level and decision-making capacity (and salary if available), at: national level; county/province/state level; town/village level (sample)		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Human Resources (HR) policy and related legal documents</li> <li>– Records of staff recruitment</li> <li>– Records of M/F job positions over the past 5 or 10 years (negotiable)</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Heads of relevant departments</li> <li>– Relevant office bearers or administration staff</li> </ul>	<ul style="list-style-type: none"> <li>– Number of male/female in various positions</li> <li>– Roles and responsibilities of M/F staff</li> <li>– Job specifications of M/F staff</li> <li>– Process of recruitment and selection of staff: Advertisements and Terms of Reference (TOR)</li> <li>– Training and</li> <li>– Capacity building opportunities for male and female staff with respect to upward mobility</li> <li>– Constraints in selection and recruitment</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Numbers and data related to the type of information required.</li> </ul> <p>See the records, identify people, select appropriate and relevant officials and staff who can give the information</p> <p>Study the process of policy formulation, decision-making, and opportunities available for participation by male/female staff, effectiveness of participation by male/female staff</p> <p>Individual interviews:</p> <ul style="list-style-type: none"> <li>– Current staff (sample)</li> <li>– Office bearers and administration staff as relevant</li> <li>– Heads of departments</li> <li>– Retired officials for historical perspective</li> </ul>
<b>1.b</b> Number of M/F in paid and unpaid positions in local water governance formally structured entities (water users associations, etc.) at town/village level (sample); disaggregated by nature of relationship to the entity (e.g. "member", "board", "executive", "leadership", decision-making group, etc.) and types of tasks.		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– HR policy if there is one</li> <li>– Records of staff recruitment</li> <li>– Records of appointments made to decision-making positions, such as board member</li> <li>– Records of M/F job positions over the past 5 or 10 years (negotiable)</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Relevant staff members, office bearers</li> </ul>	<ul style="list-style-type: none"> <li>– Disaggregate all information by paid/unpaid positions</li> <li>– Number of male/female in various positions</li> <li>– Roles and responsibilities of M/F staff</li> <li>– Job specifications of M/F staff</li> <li>– Process of recruitment and selection of staff: Advertisements and TOR</li> <li>– Training and</li> <li>– Capacity building opportunities for male and female staff</li> <li>– Constraints in selection and recruitment</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– From records get the numbers and data related to type of information required</li> </ul> <p>Focus Groups Discussions (FGDs):</p> <ul style="list-style-type: none"> <li>– Office bearers, paid staff, unpaid staff</li> </ul> <p>From the FGDs select individuals for individual interviews</p>

Table 4 (cont'd)

<p><b>1.c</b> Intensity of M/F in (sample/representative) meetings of public entity bodies sampled at national, sub-national, and local levels, including outcomes such as: ratio of contributions in decision-making meetings by women and men; percentage of decisions adopted from women's contributions in meetings.</p>		
<p><b>Sources of information</b></p> <p>Documents and records: – Minutes of meetings</p> <p>Key informants: – Office bearers – Members themselves – Local political leaders – Local department officials – Community leaders such as religious leaders, other significant persons</p>	<p><b>Type of information</b></p> <ul style="list-style-type: none"> <li>– Process of decision-making: who proposes, who accepts, is there a discussion; how is it monitored, facilitated, who facilitates</li> <li>– Who is responsible for operationalization of decisions?</li> <li>– How often are suggestions by M/F accepted?</li> <li>– Can decisions be changed? Is there space for interventions/suggestions by M/F?</li> <li>– Who sets the agenda for the meetings? Can new issues be added by M/F?</li> <li>– Capacity building opportunities for empowering M'F participation.</li> <li>– Effectiveness of decisions by M/F participation, any differences</li> </ul>	<p><b>Methodology</b></p> <p>Fact-finding: – Minutes and other written records</p> <p>Observation: – Participant and non-participant</p> <p>Interviews: – Past and present office bearers, members and others (M/F) in the community who are affected by the decisions</p>
<p><b>1.d</b> M/F perceptions of gender discrimination (or equality) regarding women's participation in decision-making entities</p>		
<p><b>Sources of information</b></p> <p>Documents and records: – Complaints registered and action taken regarding gender discrimination related to participation in decision-making entities, if any – Records of m/f staff assigned/recruited to decision-making entities</p> <p>Key informants: – Men and women members and office bearers</p>	<p><b>Type of information</b></p> <ul style="list-style-type: none"> <li>– Type and level of assignment and participation by men and women staff in decision-making entities</li> <li>– Differences in views and opinions of men and women, if any. Was this difference evident in the discussions? Was there any discussion about the differences? How were disagreements resolved?</li> <li>– Evidence that certain decisions were taken through participation by both men and women.</li> <li>– Why is it felt that men's or women's views are given more importance?</li> </ul>	<p><b>Methodology</b></p> <p>Fact-finding: – Records of decisions taken. Through the records, track a decision to understand the process</p> <p>FGDs separately with men and women</p> <p>Individual interviews separately with men and women</p> <p>Validation: – Cross checking through interviews and records</p>
<p><b>1.e</b> Number of M/F staff responsible for water issues (disaggregated by job level) in gender ministry/lead agency</p>		
<p><b>Sources of information</b></p> <p>Documents and records: – HR policy and related legal documents – Records of staff recruitment – Records of M/F job positions responsible for water issues over the past 5 or 10 years (negotiable)</p> <p>Key informants: – Heads of relevant departments – Relevant office bearers or administration staff</p>	<p><b>Type of information</b></p> <ul style="list-style-type: none"> <li>– Number of male/female in positions related to water issues</li> <li>– Roles and responsibilities of M/F staff at different levels</li> <li>– Job specifications of relevant staff M/F</li> <li>– Process of recruitment and selection of staff: Advertisements and TOR</li> <li>– Training and</li> <li>– Capacity building opportunities for male and female staff for upward mobility in the hierarchy constraints in selection and recruitment</li> </ul>	<p><b>Methodology</b></p> <p>Fact-finding: – Numbers and data related to the type of information required</p> <p>See the records, identify people, select appropriate and relevant officials and staff who can give the information</p>

Table 4 (cont'd)

		<p>Study the opportunities available for capacity development, decision-making and upward mobility for male/female staff for positions related to water issues</p> <p>Individual interviews:</p> <ul style="list-style-type: none"> <li>– Current staff (sample)</li> <li>– Office bearers and administration staff as relevant</li> <li>– Heads of departments</li> <li>– Retired officials for historical perspective</li> </ul>
<p><b>1.f</b> Number of M/F staff responsible for gender issues (disaggregated by job level) in lead and other relevant agencies for the water sector</p>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– HR policy and related legal documents</li> <li>– Records of staff recruitment</li> <li>– Records of M/F job positions over the past 5 or 10 years (negotiable)</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Heads of relevant departments</li> <li>– Relevant office bearers or administration staff</li> </ul>	<ul style="list-style-type: none"> <li>– Number of male/female in positions related to gender issues</li> <li>– Levels of positions related to gender in the water sector agencies</li> <li>– Roles and responsibilities, job specifications of M/F staff related to gender issues in the water sector agencies</li> <li>– Process of recruitment and selection of gender staff: Advertisements and TOR</li> <li>– Training and</li> <li>– Capacity building opportunities for male and female staff</li> <li>– Constraints in selection and recruitment</li> </ul>	<p>Fact-finding: Numbers and data related to the type of information required.</p> <p>See the records, identify people, select appropriate and relevant officials and staff who can give the information</p> <p>Study the opportunities available for capacity development, decision-making and upward mobility for male/female staff for gender positions in the water sector agencies</p> <p>Individual interviews:</p> <ul style="list-style-type: none"> <li>– Current staff (sample)</li> <li>– Office bearers and administration staff as relevant</li> <li>– Heads of departments</li> <li>– Retired officials</li> </ul>
<p><b>1.g</b> Designated ministerial responsibility for gender in relation to water policies; the extent to which gender-specific agencies are included in water sector decision-making</p>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Policy documents</li> <li>– Background material prepared for policy formulation if any</li> <li>– List of gender-specific organizations/agencies consulted and records of consultations for preparing the water policies and decision-making</li> </ul>	<ul style="list-style-type: none"> <li>– Number and type of consultations with gender specific agencies/organizations</li> <li>– Process of consultations</li> <li>– Evidence of inclusion of suggestions, interventions made by gender specific agencies, organizations, individuals in the water policies and decision-making</li> <li>– Feedback from gender specific agencies regarding their ability/inability to provide inputs.</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of records, policy documents, background material, records of consultations with gender-specific agencies and organizations</li> <li>– Study the process of policy formulation and identify gender specific content in the water policies. Look for evidence of how gender-related interventions were integrated in the water policies</li> </ul>

Table 4 (cont'd)

<p>Key informants:</p> <ul style="list-style-type: none"> <li>– Persons in the ministry responsible for policy formulation</li> <li>– Sample of gender-specific agencies, individuals, organizations consulted</li> </ul>	<ul style="list-style-type: none"> <li>– Uptake of gender-related inputs in water policy and decision-making</li> </ul>	<ul style="list-style-type: none"> <li>– Identify and study key decisions taken in the water sector in which gender-specific agencies, organizations, individuals have provided inputs</li> <li>– Identify and review constraints and issues in relation to integrating gender-related aspects/issues in water policies and decisions in the water sector</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– Key individuals in the ministry responsible for policy formulation</li> <li>– Key decision-makers in the water sector</li> <li>– Key gender specific consultants involved in policy formulation</li> </ul>
<p><b>1.h</b> Presence and nature of gender sensitive training within responsible ministries/lead agencies. Participation of M/F staff</p>		
Sources of information	Type of information	Methodology
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Policy regarding gender sensitive training for staff in the responsible ministries</li> <li>– List of trainers and agencies involved in the training</li> <li>– Training materials</li> <li>– Attendance M/F and participation</li> <li>– Reports of training programmes, including list of participants, activity reports, and other outputs from the training programme</li> </ul> <p>Tracer survey if available</p> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Trainers</li> <li>– Consultants</li> <li>– Participants</li> </ul>	<ul style="list-style-type: none"> <li>– When were training programmes initiated? Frequency of training. What is the policy for participation by staff? Is it compulsory? Who gets to participate? What levels of staff are required to participate? Is there any incentive for participation in gender sensitive training? Number of training programmes conducted since they were initiated?</li> <li>– Number of participants M/F. and level of job in the ministry. Can staff members request to participate in the training?</li> <li>– How were trainers selected? Qualification and experience of trainers. Was feedback taken from participants regarding the training? Was this feedback taken into consideration? Evidence that training programs were changed/modified based on feedback from participants</li> <li>– Content of training programmes, training methods used</li> <li>– Evidence of effectiveness of training: Tracer survey</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of reports, lists of participants, numbers and data related to the training programmes</li> <li>– Review of trainers, training content and materials, training schedules, reports</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– Trainers</li> <li>– Sample of participants from different training programmes</li> <li>– Top level officials or HR department officials in the ministries</li> </ul> <p>Validation:</p> <ul style="list-style-type: none"> <li>– Cross check information from different sources of information, from documents and records and interviews with trainers and participants</li> </ul>

Table 4 (cont'd)

1.i The extent to which gender outcomes and gender-sensitive accountability indicators are included in M&E/impact statements/benefits analyses of national-level WASH-sector projects (project proposals and/or outcomes assessments). Sample projects		
Sources of information	Type of information	Methodology
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– M&amp;E plans, systems and budgets</li> <li>– Records of gender outcomes</li> <li>– M&amp;E reports</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– M&amp;E managers</li> <li>– Relevant staff</li> </ul>	<ul style="list-style-type: none"> <li>– Identification and assessment of gender-sensitive indicators in M&amp;E plans</li> <li>– Gender outcomes recorded/measured in M&amp;E reports</li> <li>– Analysis of gender outcomes</li> <li>– Accountability mechanisms related to gender outcomes</li> <li>– Process for obtaining and integrating inputs in M&amp;E plans: opening for adding gender sensitive indicators</li> <li>– Target group of the project or intervention M/F</li> <li>– Budgets for M&amp;E: any additional costs for assessing gender indicators and outcomes</li> <li>– Number and type of outcomes met/not met</li> <li>– Constraints identified in integrating, assessing gender indicators and outcomes</li> <li>– Process for assessing gender outcomes, participation of target group M/F is assessment of outcomes</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of M&amp;E plans and related comments</li> <li>– Review of M&amp;E reports</li> <li>– Identify number and type of indicators, quantitative, qualitative</li> <li>– Gender outcomes</li> </ul> <p>FDGs:</p> <ul style="list-style-type: none"> <li>– FDGs with relevant project staff</li> <li>–</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– M&amp;E managers</li> <li>– Project staff</li> </ul>
1.j The presence and nature of gender-specific objectives and commitments (or gender strategy) in national and sector-level water policies		
Sources of information	Type of information	Methodology
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– National Water Policies and sectoral policies</li> <li>– Gender strategy document if there is one</li> <li>– Any other relevant document related to gender-specific objectives and commitments related to water</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Policymakers</li> <li>– Staff in departments related to water sectors</li> <li>– Gender advisors, consultants, agencies as applicable</li> </ul>	<ul style="list-style-type: none"> <li>– When and how were gender-specific objectives and commitments formulated and integrated in national and sectoral water policies</li> <li>– Relevance and nature of objectives and commitments</li> <li>– Processes in place for operationalization of gender-specific objectives and commitments</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of policy documents and identification of gender-specific objectives and commitments</li> <li>– Accountability processes, measures, reports.</li> <li>– Review of processes for operationalization of these objectives and commitments</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– With key informants M/F</li> </ul>



Table 4 (cont'd)

<b>1.k</b> The nature and extent of gender-disaggregated data related to water and sanitation collected by responsible public entities at national and local levels (in relation to the totality of social indicators on water and sanitation collected).		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Documents and records: – Reports and documents that provide data produced by public entities at national and local levels.  Key informants: – Officials responsible for data collection and processing of data.  Individuals responsible for collecting data from the field	– Is the data sex-disaggregated, gender-disaggregated? – Identify gaps in the data where disaggregated data needs to be collected – Number and type of indicators on which the data is collected. How much of this is disaggregated? – Constraints in collecting disaggregated data. – Efforts being made to deal with the constraints	Fact-finding: – Review of available data. Identify extent and nature of disaggregation.  Interviews: – With key informants
<b>2 Safe drinking water, sanitation and hygiene</b>		
<b>2.a</b> Percentage of households without water on premises, by sex of main person responsible for collecting drinking water and by type of household (using rural/urban sample)		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Documents and records: – Reports or data maintained by relevant government department/ authority on numbers of households with and without water supply on premises in urban and rural areas.  Key informants: – Sample of rural and urban households – Household members M/F	– Does the household have water on premises? – Who is responsible for collecting water? M/F, age of the person	Fact-finding: – Review of available data regarding number of households with and without water on premises.  Intra-household survey: – At the household level, (urban and rural sample) interview members of the household to find out sex and age of the main person in the household responsible for collecting water
<b>2.b</b> Unpaid time spent by individual household members in supplying water, making it safe for use, and managing it (M/F informants)		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – Sample of rural and urban households – Household members M/F	– Amount of unpaid time spent in supplying water, making it safe and managing it at the household level by main/different household members – Methods used for making water safe for use/consumption	Fact-finding: – Intra-household survey: At the household level (urban and rural sample) interview household members M/F to find out unpaid time spent in supplying and managing water and method used for making water safe for household use.
<b>2.c</b> M/F perceptions of the adequacy of current water supply/availability in both quality and quantity in the household		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – Sample of rural and urban households – Household members M/F	– Satisfaction with quantity of water M/F responses – Satisfaction with quality of water availability M/F responses – Number of liters of water available per day – Purpose for which water is used: (quantity if possible) Drinking, cooking, bathing, washing, other	Fact finding and intra-household interview: – Perception of adequacy can be measured on a scale of 1 to 10 with M/F household members, separately for quantity and quality

Table 4 (cont'd)

<b>2.d</b> Percentage of households with access to “improved” sanitation facility, by household structure and by nature of “improved” facility		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – Sample of rural and urban households – Household members M/F	– Existence of sanitation facility in the house and type of sanitation facility. in your house? – Types as per the WHO/UNICEF JMP for water and sanitation: – Flush toilet – Piped sewer system – Septic tank – Flush/pour flush to pit latrine – Ventilated improved pit latrine (VIP) – Pit latrine with slab – Composting toilet	Fact-finding: – Ask if the household has sanitation facility and what kind  Observation: – Ask to see the sanitation facility if possible
<b>2.e</b> Intra-household M/F use of /access to improved sanitation facilities		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – Members M/F	Who uses the sanitation for not using the facility	Intra-household interviews: – Ask M/F members of the household if they use the sanitation facility. – Reason for not using, if any members does not use it
<b>2.f</b> M/F prioritization of gaining access to improved sanitation facilities; willingness to allocate household budgets for such access		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – Sample of rural and urban households – Household members M/F	– How often is the sanitation facility used? – Everyday, always, rare – Willingness to pay for an extra toilet in the house.	Intra-household interviews: – Ask M/F members of the household how often they use the toilet and whether they would be willing to pay for an extra toilet in the house.
<b>2.g</b> M/F perception of the safety of sanitation facilities that are located outside the house; identified particular safety concerns		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – Sample of rural and urban households – Household members M/F	- Perception of safety M/F in using toilet located outside the house. - Perception of safety M/F in using communal toilet. - Main concerns related to safety M/F	Intra-household interviews: – Ask M/F members of the household to rate perception of safety on a scale of 1 to 10 for toilets outside the house, for communal toilets. – List main concerns by importance as perceived by M/F household members
<b>3 Decision-making and knowledge production</b>		
<b>3.a</b> M/F participation in past decade of two major global international water meetings (and nationally significant comparable meetings): World Water week (Stockholm); World Water Forum (World Water Council); (could be topic specific or region specific)		

Table 4 (cont'd)

Sources of information	Type of information	Methodology
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– List of participants at the World Water Week (Stockholm) and World Water Forum (World Water Council).</li> <li>– List of participants at significant regional and national meetings</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Convening organizations for these meetings</li> </ul>	<ul style="list-style-type: none"> <li>– Number of male and female participants</li> <li>– Capacity in which they participated M/F</li> <li>– Panel members, chairs, presenters, contributors, submitted papers.</li> <li>– Efforts made if any to increase number of female participants and to improve the nature of participation</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Desk review of participant profile for Stockholm World Water Week, World Water Forum, and other significant regional and national meetings</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– Officials in the convening organizations</li> </ul>
<b>3.b M/F inclusion on nationally and internationally convened scientific panels and advisory boards</b>		
Sources of information	Type of information	Methodology
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Documents and reports of nationally and internationally convened panels and advisory boards</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Convening organizations</li> </ul>	<ul style="list-style-type: none"> <li>– M /F members on nationally and internationally convened scientific panels and advisory boards</li> <li>– Type of participation M/F</li> <li>– Evidence of contribution by M/F members</li> <li>– Efforts made to increase and improve participation of female scientists/ advisors</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Desk review of participant profile of panels and advisory boards</li> <li>– Reports of meetings to study participation by M/F members</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– Officials of convening organizations</li> </ul>
<b>3.c Gender audit of WHO/UNICEF JMP. (could be topic specific or region specific)</b>		
Sources of information	Type of information	Methodology
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Reports, documents and publications of the WHO/UNICEF JMP</li> </ul> <p>Key informants: (if required)</p> <ul style="list-style-type: none"> <li>– Members of the Task Force</li> </ul>	<p>Adequate monitoring and analysis of M/F access to water supply and sanitation</p>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Desk review of reports</li> </ul> <p>Discussion with key informants, if required</p>
<b>3.d M/F perceptions of/knowledge of current total household use of water, by category of use and by primary use</b>		
Sources of information	Type of information	Methodology
<p>Key informants:</p> <ul style="list-style-type: none"> <li>– M/F members of the household</li> </ul>	<p>Total amount of water used in the household, prioritisation of water use, who uses water for what purpose.</p>	<p>Intra-household interviews:</p> <ul style="list-style-type: none"> <li>– With M/F household members</li> </ul> <p>Direct observation wherever possible.</p>
<b>3.e Household member primarily responsible for managing the household water:</b>		
<ul style="list-style-type: none"> <li>– M/F perceptions of the nature of their household decision-making process of water priorities and use</li> <li>– M/F perceptions of the primary decision-maker on water issues within the household (if any)</li> <li>– M/F perceptions of how intra-household conflicts related to water (if any) are resolved</li> </ul>		
Sources of information	Type of information	Methodology
<p>Key informants:</p> <ul style="list-style-type: none"> <li>– M/F members of the household</li> </ul>	<ul style="list-style-type: none"> <li>– Decision-making process within the household regarding water priorities and use.</li> <li>– How are decisions taken related to use of water in the household, M/F perceptions of prioritization of water use, differences of opinion about water use.</li> <li>– Does the primary decision-maker take into account views and opinions of other family members. How are differences resolved?</li> </ul>	<ul style="list-style-type: none"> <li>– Intra-household interviews with M/F family members on site.</li> <li>– Group discussion with family members</li> <li>– Structured self-assessment when possible</li> <li>– Interviewer/researcher would need to build trust with family members before discussing these questions.</li> <li>– Interviewer/researcher has to consider whether it is more appropriate to have individual interviews or talk to the family as a whole.</li> </ul>

Table 4 (cont'd)

<b>3.f M/F expressed priorities for water use within households</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – M/F members of the household	– Priorities for water for use for male members – Priorities for water use for female members	Intra-household interviews: – M/F household members  Interviews could be conducted in a group session in order to save time
<b>3.g M/F perceptions of household gender equality in water decisions</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: – M/F members of the household	– Process of decision-making related to water in the household – Perceptions of M/F members whether their views and opinions are taken into consideration – Perception of whether one or more M/F members usually take the decisions.	Intra-household interviews: – With M/F members of the household – Structured self-assessment when possible  This can be discussed after the interviewer has developed a relationship of trust with the household
<b>4 Transboundary water resources management</b>		
<b>4.a Number of M/F staff on transboundary water commissions (sample for pilot countries), disaggregated by job category/level and decision-making capacity (and salary, if available)</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Documents and records: – Records of staff recruitment; job positions and salaries, from transboundary water commissions  Key informants: – M/F staff in different job positions – Officials on Commissions	– Number of M/F staff disaggregated by job categories and positions. – Salary paid to M/F staff for various positions – M/F staff contribution/involvement in decision-making processes as per job position – Perception of M/F staff regarding their involvement/contribution to decision-making – Process of staff recruitment	Fact-finding: – Review of records and documents regarding staff recruitment; numbers, job positions disaggregated by M/F  Interviews: – With selected M/F staff in different positions.  M/F staff can be asked to rate their perception of decision-making authority on a scale of 1 to 10.
<b>4.b The extent to which gender outcomes and gender sensitive accountability indicators are included in M&amp;E/impact statements/benefits analysis of trans-boundary agreement/activities</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
– Documents and records: – M&E plans, systems and budgets – Records of gender outcomes – M&E reports – Transboundary agreements  Key informants: – M&E managers – Relevant staff – Officials on Commissions	– Identification and assessment of gender-sensitive indicators in M&E plans – Gender outcomes recorded/measured in M&E reports, impact statements – Inclusion of analysis of gender outcomes in M&E impact statements and agreements – Accountability mechanisms related to gender outcomes – Process for obtaining and integrating inputs in M&E plans: opening for adding gender sensitive indicators – Mention of M/F target group in impact statements and agreements	Fact-finding: – Review and analysis of documents and records  Interviews: – Identify key informants M/F staff and officials

Table 4 (cont'd)

<b>4.c The presence and nature of gender-specific objectives and commitments (or gender strategy) in transboundary agreements</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Transboundary agreements, gender strategy if there is one, and related documents</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Officials from commissions and related committees involved in negotiating agreements and preparation of documents</li> </ul>	<ul style="list-style-type: none"> <li>– Process for integrating gender issues in shared/ transboundary water agreements?</li> <li>– Issues identified in the gender strategy if there is one.</li> <li>– Process of preparation and adoption of the gender strategy.</li> <li>– Gender-specific objectives and commitments and their applicability</li> <li>– Reasons for absence of gender strategy, objectives and commitments and constraints in adopting them</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of documents to identify objectives and commitments present in the agreements.</li> <li>– Analysis of these documents to understand processes and applicability of objectives and commitments</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– With key informants for better understanding of the processes and for clarifications</li> </ul>
<b>4.d Intensity of M/F participation in (sample/representative) meetings of transboundary meetings, including outcomes such as: ratio of contributions in decision-making meetings by women and men; percentage of decisions adopted from women's contributions in meetings</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– List of attendees, minutes of meetings, other records related to the meetings.</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Officials M/F</li> <li>– M/F participants</li> </ul>	<ul style="list-style-type: none"> <li>– Number of men and women participating in the meetings. Frequency of participation by men and women.</li> <li>– Number and type of contributions of men and women in decision-making meetings</li> <li>– Possibility or chances of male/female contributions being adopted in decision-making meetings.</li> <li>– Age, educational background and qualifications of men and women who participate in these meetings</li> <li>– Details of informal meetings if any</li> <li>– Evidence of contributions made by M/F participants</li> <li>– Refer to levels of participation explained in the Methodology section of the Guideline</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Number of M/F participants, their ages, qualifications and other information from records</li> <li>– Number of meetings, frequency of participation by men and women</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– With key informants for clarifications</li> <li>– Expert interviews with members of commissions</li> <li>– Interviews with people affected by work of the commission/body</li> <li>– Perception of extent of participation by men and women, ability to make interventions, uptake of inputs and interventions</li> <li>– Perception of contributions made by M/F participants, whether heard, accepted, agreed upon, adopted</li> </ul> <p>Observation:</p> <ul style="list-style-type: none"> <li>– If possible, researcher can attend a meeting to get an idea of the type and level of participation by M/F participants</li> <li>– Refer to "Skills of a participant observer" in the Methodology section of the Guideline</li> </ul>

Table 4 (cont'd)

<b>4.e</b> How are gender issues integrated in your shared water projects/infrastructural investments? What are your gender-specific objectives and commitments with regard to these? Please specify and evaluate		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Documents and records:	<ul style="list-style-type: none"> <li>– Gender issues integrated in your shared water projects/infrastructural investments</li> <li>– Gender specific objectives and commitments</li> </ul>	Fact finding: <ul style="list-style-type: none"> <li>– Project documents and stated commitments</li> </ul>
<b>5 Water for income generation for industrial and agricultural uses, including unaccounted-for labour</b>		
<b>5.a</b> % irrigated farms in region under survey; % irrigated farms managed by/owned by M/F		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Documents and records: <ul style="list-style-type: none"> <li>– FAO data, regional and national records and reports, national census reports, government land records</li> </ul> Similar for local level surveys	<ul style="list-style-type: none"> <li>– FAO data: % of irrigated land in the region</li> <li>– Ownership M/F</li> <li>– Also other categories of ownership: private, family, business, common land, types of association, coop</li> </ul>	Fact-finding: <ul style="list-style-type: none"> <li>– Review of records and documents</li> </ul>
<b>5.b</b> Average size of irrigated farms run by/owned by women/men		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Documents and records: <ul style="list-style-type: none"> <li>– FAO data, national census reports, other national records, government land records</li> </ul> Similar for local level surveys	<ul style="list-style-type: none"> <li>– Disaggregation of data by M/F</li> <li>– Disaggregation by owned and managed by M/F</li> </ul>	Fact finding: <ul style="list-style-type: none"> <li>– Review of records and documents</li> </ul> Interviews: <ul style="list-style-type: none"> <li>– With heads of individual farms</li> </ul>
<b>5.c</b> Gendered division of labour related to irrigated farming: gender-specific tasks related to irrigated crops, by nature of tasks; gender differentiated daily time-use of household members involved in irrigated farming work		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
Key informants: <ul style="list-style-type: none"> <li>– M/F members of the household engaged in irrigated farming (sample)</li> </ul>	<ul style="list-style-type: none"> <li>– M/F tasks in irrigated agriculture</li> <li>– Location of plot in terms of the terrain (uphill, downhill, valley) and source of water for irrigation (rain water harvesting, groundwater, surface water, open well, etc.)</li> <li>– Distance from water source, use of pumps, pipeline, channels, etc.</li> <li>– M/F tasks in maintaining irrigation systems</li> <li>– Time spent in irrigation by men and women</li> <li>– Roles and responsibilities for men and women in irrigated farming with time schedules</li> <li>– Nature of irrigated farming: Family/household/family business, coop</li> </ul>	Intra-household interviews: <ul style="list-style-type: none"> <li>– Joint and separate interviews with men and women in the household</li> </ul> More time will be required for obtaining this information, cannot be done in a hurry



Table 4 (cont'd)

<b>5.d Decision-makers and participants in household-based decision-making process regarding irrigation (M/F informants/perception); decisions regarding allocation of time and financial resources; crops to be irrigated</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Key informants:</p> <ul style="list-style-type: none"> <li>– M/F members of the household engaged in irrigated farming (sample)</li> </ul>	<ul style="list-style-type: none"> <li>– Process of decision-making at the household level. M/F perception regarding the process and the decision-maker.</li> <li>– Decisions related to crops to be grown, irrigated, tasks of family members, use of resources.</li> <li>– Financial aspects: use of household income for irrigated crops. Source of credit (bank, family, community funds, etc.)</li> <li>– Availability of documents regarding the credit. Use of the money obtained through credit. Household member M/F eligible to get the credit. Payment plan (who will repay the loan?)</li> </ul>	<p>Intra-household interviews:</p> <ul style="list-style-type: none"> <li>– Discussion with M/F members of the household, jointly or separately as required.</li> </ul> <p>Cannot be done in a hurry</p> <p>If interviewer/researchers happen to observe the decision-making process, then take note of this.</p>
<b>5.e Decision-makers and participants in community-based decision-making process (if any) regarding irrigation (M/F informants/perceptions); decisions regarding allocation of time and financial resources; crops to be irrigated</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Minutes of meetings in which decisions are made, resolutions and notices regarding time schedules and allocation of water, records of management decisions</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Community leaders M/F, farmers M/F, government officials in case of formal irrigation systems</li> </ul>	<ul style="list-style-type: none"> <li>– Crops grown in the area, availability of irrigation water, time schedules for distribution of irrigation water, system of allocation, management systems, M/F involvement in management and decision-making, process of decision-making</li> <li>– Perceptions of M/F farmers regarding use of resources and management systems</li> <li>– Fees charged and process of collection</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of written records and documents</li> </ul> <p>FGDs:</p> <ul style="list-style-type: none"> <li>– With community leaders and farmers</li> </ul> <p>Observation:</p> <ul style="list-style-type: none"> <li>– Attending a community level meeting to understand decision-making process if possible</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– With key informants: community leaders, farmers, government officials</li> </ul>
<b>5.f M/F perceptions of gender discrimination (or equality) regarding women's participation in decision-making in relation to irrigation</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Key informants:</p> <ul style="list-style-type: none"> <li>– M/F farmers, community leaders, irrigation managers at the community level, government officials in the case of formal irrigation systems</li> </ul>	<ul style="list-style-type: none"> <li>– Suitability of time schedules for men and women farmers</li> <li>– M/F perceptions regarding allocation of water and irrigation time schedules</li> <li>– M/F perception of contribution to the decision-making process, opportunities for interventions, uptake of suggestions</li> </ul>	<p>FGDs:</p> <ul style="list-style-type: none"> <li>– Separately with men and women farmers</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– Selected M/F farmers, community leaders.</li> </ul>

Table 4 (cont'd)

<b>5.g M/F access to support services for irrigation; participation in technical training; M/F access to bank loans/credit; and incentives for the development of irrigated agriculture</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Government policy regarding irrigated agriculture, national as well as for the area under survey.</li> <li>– Bank resolutions regarding credit for farmers.</li> <li>– Records of technical training available to M/F farmers either through the government or non-government sources</li> <li>- Record of extension services available to farmers</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Government officials, extension workers, bank officials, male and female farmers</li> </ul>	<ul style="list-style-type: none"> <li>– Type of extension services available for men and women farmers</li> <li>– Levels, type and nature of technical assistance/formal education/ informal education/training available</li> <li>– Extent of participation by men and women farmers in extension</li> <li>– Constraints to M/F participation in extension and training</li> <li>– Type and qualification of trainers</li> <li>- Methods used to announce the training, location and process, suitability for participation by M/F farmers</li> <li>– Ease or difficulty in obtaining credit for men and women farmers.</li> <li>– Access to banks for M/F farmers for credit</li> <li>– Extent of gender-sensitivity of government resolutions and bank resolutions regarding incentives, extension and credit</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of documents and records</li> </ul> <p>FGDs:</p> <ul style="list-style-type: none"> <li>– With M/F farmers</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– With selected M/F farmers, government officials, bank officials, extension workers</li> </ul> <p>Observation:</p> <ul style="list-style-type: none"> <li>– Attending extension or training sessions to observe participation by M/F farmers</li> </ul>
<b>5.h M/F membership in and intensity of participation in community-based irrigation communities</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Membership lists</li> <li>– Minutes of meetings, resolutions passed</li> <li>– Constitution and Rules and Regulations of the CBO if applicable</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– M/F members</li> <li>– Leaders, office bearers as applicable</li> </ul>	<ul style="list-style-type: none"> <li>– Participation in collective decision-making on water allocation and use for agriculture</li> <li>– Level of participation: 5 levels procedure, document</li> <li>– Level of result of decision on plan/ action etc.</li> <li>– Reflection of the decisions, resolutions in practice</li> <li>– Constraints in participation for M/F members</li> <li>– How is the final decision taken? Who takes the final decision? Is an external (limiting) factor (formal or other authority) present?</li> <li>– Opportunities present for participation by M/F members as reflected in the rules and regulations</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of documents and records</li> </ul> <p>FGDs:</p> <ul style="list-style-type: none"> <li>– With key informants, M/F members</li> </ul> <p>Interviews:</p> <ul style="list-style-type: none"> <li>– With selected M/F members</li> <li>– Community leaders and office bearers</li> </ul>

Table 4 (cont'd)

<b>5.i % of directly water-related industries managed by/owned by M/F</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Government records related to ownership of industries in the survey area</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Government officials</li> <li>– Owners of water-related industries</li> </ul>	<p>Number and percentage of industries owned and/or managed by men and women</p>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Through various sources such as government records and industry owners.</li> </ul> <p>Information about management may not be reflected in ownership records. This information can be obtained directly from the owners</p>
<b>5.j % M/F employees in water-related industries</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Staff recruitment records in the water-related industries</li> </ul> <p>Key informants:</p> <ul style="list-style-type: none"> <li>– Owners, managers and HR department as applicable</li> </ul>	<ul style="list-style-type: none"> <li>– Numbers of M/F staff</li> <li>– Positions held by M/F</li> </ul>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of records</li> </ul> <p>If records are not complete then interviews with key informants to fill in the information gaps</p>
<b>5.k Presence of women's cooperatives in water-related industries</b>		
<b>Sources of information</b>	<b>Type of information</b>	<b>Methodology</b>
<p>Documents and records:</p> <ul style="list-style-type: none"> <li>– Government records from relevant authorities</li> </ul>	<p>Number and type of women's cooperatives</p>	<p>Fact-finding:</p> <ul style="list-style-type: none"> <li>– Review of records</li> </ul>

## D.4. Methods for collecting quantitative and qualitative data

### D.4a Fact finding

Fact finding refers to the collection of factual information through written records, audio-visual material and verbal communication. The process of fact finding may necessitate making initial contacts with key informants to find out where the information could be found, such as in documents and records, or through interviews and discussions with persons who have the knowledge and information that the researcher is looking for.

Sources for fact finding could include historical documents, laws, declarations, statutes, statistics, peoples' accounts of incidents or periods in which they were actually involved, report based on official statistics, ministerial records, debates, political speeches, administrative and government committee records and reports, mass media, novels, plays, maps, drawings, books, the internet and personal documents such as biographies, autobiographies, diaries and oral histories, and photographs (May, 2011).

The material used for fact finding could be public or private and can be divided into four categories according to the degree of accessibility; closed, restricted, open-archival and open-published (May, 2011). It is important to find out which category the source of information belongs to and obtain the necessary permission before using the material.

It is also important to verify the authenticity of the material and confirm if the data is genuine, by asking the following questions (May, 2011): Are the data from a primary or secondary source? Are they authentic copies of originals? Is there any evidence of tampering or the documents having been corrupted? Can authorship be validated and is the author reliable?

### D.4.b Interviews with key informants

#### 1. Individual interviews

There are three types of individual interviews that are used in social research; structured interview,

semi-structured interview, and unstructured or focused interview.

i) The structured interview is normally used in survey research such as when baseline household surveys are conducted. The questionnaire is structured and the same questions are asked to all the respondents in the same way. The responses are recorded in a way that will facilitate computation and comparison of the data. Most responses are what is commonly referred to as being close-end, providing options for responses that the respondent can choose from, as being most appropriate.

ii) In a 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. Semi-structured interviews can be used for obtaining qualitative data or information. The responses are still comparable but care needs to be taken to ensure that the interviewer remains objective.

iii) The unstructured or focused interview usually consists of what is more commonly referred to as "open-end" questions. The questions are usually broad and indicate the topic or subject about which information is required. The respondent has the freedom to respond at his or her own pace and express his/her views and opinions in the way that is most comfortable to the individual. This type of interview allows for more in-depth and qualitative discussions. Here too care need to be taken to ensure that the interviewer remains objective and refrains from expressing his/her own opinion during the course of the discussion.

#### ii. Importance of intra-household surveys and interviews for disaggregated data

In order to collect sex-disaggregated data at the household level it is important to obtain the responses of both women and men in the household. If household level interviews are conducted only with male or female members, then it will not be possible to get true sex-disaggregated data. There is a tendency to interview the "head" of the household whose responses are assumed to reflect the responses of all the individual members of the household. This approach does not take into account the differences in views and opinions of other

members in the household. The purpose of collecting disaggregated data within the household is to bring visibility to each member of the household and to record their views and opinions. Whether the interview is structured or semi-structured, it is important to speak to male and female members in the household separately.

### iii. Group interview or FGD

A group interview or an FGD enables the interviewer to obtain information from several respondents at the same time and can be used for collecting quantitative data and qualitative information. For example an FGD with members of a Water User Association (WUA) could provide basic information about the group members such as number of members, irrigation schedule, area under irrigation, average size of plots, crops grown; and also give an insight into the group norms and group dynamics. The researcher can observe interactions between different members while collecting the information. It would be important for the researcher to be prepared with a list of questions or issues for which information is required from the group and facilitate the discussion in a way that all the participants have an opportunity to share their views. Care needs to be taken to ensure that the researcher does not appear biased towards or against any of the participants, and remains objective.

### D.4c Structured self-assessment

In a structured self-assessment, a structured questionnaire, like a form, is provided, and the respondent is expected to write the responses directly onto the form or on separate sheets of paper. This method can be used for individuals as well as for groups, and for collecting both quantitative and qualitative information. This method can only be used quite obviously with respondents who are able to read and write. In exceptional situations respondents may be assisted with filling in the information, but this could introduce bias and should be avoided. One advantage of this method is that a larger number of respondents can be covered when time and number of researchers is limited.

### D.4d Participatory observation

Participatory observation is required when it is necessary or important to obtain information about a process such as how decisions are taken by a committee, or the functioning of a group, such as how a Water User Group (WUG) sets up the irrigation schedule, or the process by which a community group maintains its water supply system. The method requires the researcher to become a part or a member of the group, committee or society, but remain neutral and objective, keeping in mind the purpose for which the researcher is participating in the process or meeting. The researcher should be able to understand the language, participate unobtrusively, and make a note of all proceedings in a way that is not too obvious. This method allows the researcher to get “first hand” knowledge of the situation and help to validate reports. For example, a researcher would be able to observe the level and quality of participation by men and women in a meeting of a WUG. By attending a committee meeting of a transboundary committee, the researcher would be able to observe the number of male and female participants and their contribution to decision-making.

There are different levels of participation in the functioning of a group or committee. Some individuals may be present at every meeting, while others may attend only when the topic to be discussed is important to them. Yet others may attend occasionally in order to retain their membership, or for a specific personal reason. The different levels of participation are described below.<sup>6</sup>

**Core group:** a relatively small group of people whose passion and engagement energize and nurture the community

**Active participants:** members who are recognized as practitioners and define the community (though they may not be of one mind as to what the community is about)

**Occasional participants:** members who only participate when the topic is of special interest,

<sup>6</sup> Extracted from <http://wenger-trayner.com/resources/slide-forms-of-participation/>

when they have something specific to contribute, or when they are involved in a project related to the domain of the community

Peripheral participants: people who have a sustained connection to the community, but with less engagement and authority, either because they are still newcomers or because they do not have as much personal commitment to the practice. These people may be active elsewhere and carry the learning to these places. They may experience the community as a network.

Transactional participants: outsiders who interact with the community occasionally without being members themselves, to receive or provide a service or to gain access to artifacts produced by the community, such as its publications, its website, or its tools.

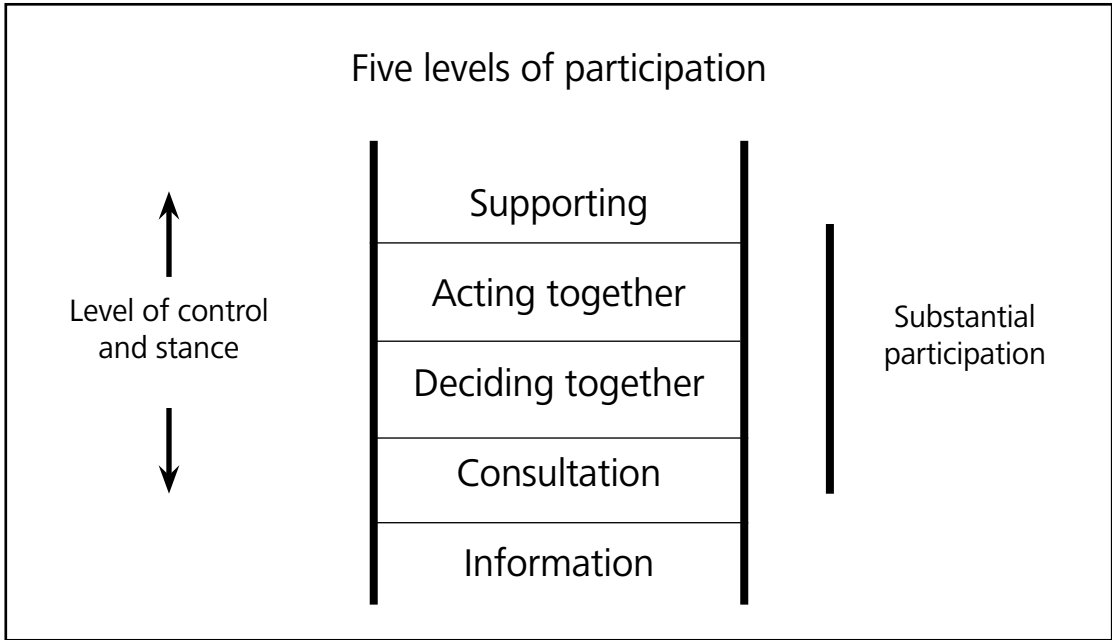
Similarly, within a specific meeting or group, people participate in different ways; some may participate actively in the discussion, others may

only lend support to the views of others, or provide information without getting into a discussion. The five levels of participation, as illustrated in Figure 1, would be useful in observing the qualitative participation of men and women in different groups.

#### D.4.e Alternate methods

In addition to the methods explained above, researchers could also use innovative methodologies such as “mobile-phones surveys” (particularly sensitive information) and other means of communication such as the radio in order to connect with the interviewees either as a group or individually. Care would need to be taken to ensure that the communication technology being used for data collection is being used or controlled by women or by both men and women as the case may be. Therefore it would be necessary to use alternate technologies with caution.

Figure 1. Five levels of participation (Wilcox, 1994)





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## E. Useful definitions

### Equality between women and men (gender equality)<sup>7</sup>

Refers to the equal rights, responsibilities and opportunities of women and men, and girls and boys. Equality does not mean that women and men will become the same but that women's and men's rights, responsibilities and opportunities will not depend on whether they are born male or female. Gender equality implies that the interests, needs and priorities of both women and men are taken into consideration, recognizing the diversity of different groups of women and men. Gender equality is not a women's issue but should concern and fully engage men as well as women. Equality between women and men is seen both as a human rights issue and as a precondition for, and indicator of, sustainable people-centered development.

### Gender<sup>8</sup>

Refers to the social attributes and opportunities associated with being male and female and the relationships between women and men, and girls and boys, as well as the relations between women and those between men. These attributes, opportunities and relationships are socially constructed and are learned through socialization processes. They are context/ time-specific and changeable. Gender determines what is expected, allowed and valued in a woman or a man in a given context. In most societies there are differences and inequalities between women and men in responsibilities assigned, activities undertaken, access to and control over resources, as well as decision-making opportunities. Gender is part of the broader socio-cultural context. Other important criteria for socio-cultural analysis include class, race, poverty level, ethnic group and age.

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<sup>7</sup> Extracted from <http://www.un.org/womenwatch/osagi/conceptsanddefinitions.htm>

<sup>8</sup> Ibid.

### Gender and water<sup>9</sup>

In most developing countries women and girls are responsible for collecting and using water for household purposes while mainly men make decisions about water resources management and development at both local and national levels. The United Nations Development Programme (UNDP) advocates the principle that policies, programmes and projects that address gender inequalities will ensure more equitable water resources management and human development opportunities for both women and men. Productive versus domestic use of water, women's and men's access to and control over water and land, credit and extension services as well as participation in water governance are examples of issues that need to be addressed.

### SDGs (UNSDSN, 2014)

Sustainable development goals, or SDGs, are accompanied by targets and will be further elaborated through indicators focused on measurable outcomes. They are action oriented, global in nature and universally applicable. They take into account different national realities, capacities and levels of development and respect national policies and priorities. They build on the foundation laid by the MDGs, seek to complete the unfinished business of the MDGs, and respond to new challenges. These goals constitute an integrated, indivisible set of global priorities for sustainable development. Targets are defined as aspirational global targets, with each government setting its own national targets guided by the global level of ambition but taking into account national circumstances. The goals and targets integrate economic, social and environmental aspects and recognize their inter-linkages in achieving sustainable development in all its dimensions.

### Drinking water

Water for drinking only (not for other domestic purposes).

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<sup>9</sup> Ibid.

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Improved sanitation facility (WHO/UNICEF, n.d.a. and n.d.b.):

Improved sanitation facility that hygienically separates human excreta from human contact.

Household water

Water at household premises used for purposes such as washing, cooking, cleaning, and gardening.

Gender discrimination

Gender discrimination takes place when men and women are treated differently with respect to rights, benefits, obligations and opportunities on account of their being male or female.

Lead agency

In a partnership of organizations, lead agency is the agency or organization that takes the responsibility of coordination, monitoring and management of a joint project or activity.

Empowerment (Smyth, 2010)

Self-generated positive change, a process leading to broader outcomes. People are empowered relative to themselves at a previous time.

## References

- ADB (Asian Development Bank). 2010. *Gender equality results case studies: Sri Lanka*. Mandaluyong City, Philippines, ADB. <http://www.adb.org/sites/default/files/publication/28746/gender-case-study-sri.pdf>
- Ebila, F. 2006. Uganda: Mainstreaming Gender Into Policy: Examining Uganda's Gender Water Strategy. United Nations Department of Economic and Social Affairs (UN DESA), *Gender Water and Sanitation case Studies on best Practices*. New York, United Nations (UN), pp. 88-95. [http://www.un.org/waterforlifedecade/pdf/un\\_gender\\_water\\_and\\_sanitation\\_case\\_studies\\_on\\_best\\_practices\\_2006.pdf](http://www.un.org/waterforlifedecade/pdf/un_gender_water_and_sanitation_case_studies_on_best_practices_2006.pdf)
- FAO (Food and Agriculture Organization of the United Nations). 2010. *Gender and Land Rights: Understanding Complexities; Adjusting Policies*. Economic and Social Perspectives, Policy Brief No. 8. Rome, FAO. <http://www.fao.org/docrep/012/al059e/al059e00.pdf>
- \_\_\_\_\_. n.d. Gender and Lands Rights Database. [http://www.fao.org/gender-landrights-database/data-map/statistics/en/?sta\\_id=1171](http://www.fao.org/gender-landrights-database/data-map/statistics/en/?sta_id=1171)
- Groundwater CoP (Groundwater Community of Practice). n.d. The GGRETA Project. <http://groundwatercop.iwlearn.net/ggreta>
- Kapsos, S. and Bourmpoula, E. 2013. *Employment and Economic Class in the Developing World*. ILO Research Paper No. 6. Geneva, Switzerland. International Labour Organization (ILO). [http://www.ilo.org/wcmsp5/groups/public/-/dgreports/-/inst/documents/publication/wcms\\_216451.pdf](http://www.ilo.org/wcmsp5/groups/public/-/dgreports/-/inst/documents/publication/wcms_216451.pdf)
- May, T. 2011. *Social research: issues, methods and process*. Maidenhead, England, McGraw Hill, Open University Press.
- WWAP Working Group on Sex-Disaggregated Indicators. 2015. *Questionnaire for collecting sex-disaggregated water data*. Gender and Water Series. WWAP. Paris, UNESCO. <http://www.unesco.org/new/en/natural-sciences/environment/water/wwap/water-and-gender/>
- Smyth, I. 2010. Talking of gender: words and meanings in development organisations. A. Cornwall and D. Eade (eds), *Deconstructing development discourse: buzzwords and fuzzwords*. Bourton-on-Dunsmore/Oxford, United Kingdom, Practical Action Publishers/Oxfam GB, pp. 143-151.
- UNSDSN (United Nations Sustainable Development Solutions Network). 2014. Proposed Sustainable Development Goals (SDGs) and Targets. Last update 11 April 2014. UNSDSN. <http://unsdsn.org/wp-content/uploads/2014/04/140417-Goals-and-Targets1.pdf>
- UN-Water. 2013. *Transboundary Waters. World Water Day 2013: International Year for Water Cooperation*. UN-Water. [http://www.unwater.org/fileadmin/user\\_upload/unwater\\_new/docs/transboundary\\_waters.pdf](http://www.unwater.org/fileadmin/user_upload/unwater_new/docs/transboundary_waters.pdf)
- UN Women. 2015. *Progress of the World's Women 2015-2016: Transforming Economies, Realizing Rights*. New York, UN Women, pp. 23-40. [http://progress.unwomen.org/en/2015/pdf/UNW\\_progressreport.pdf](http://progress.unwomen.org/en/2015/pdf/UNW_progressreport.pdf)
- WHO/UNICEF (World Health Organization/United Nations Children's Fund). n.d.a. WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation Website. Definitions and Methods. <http://www.wssinfo.org/definitions-methods/>
- \_\_\_\_\_. n.d.b. WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation Website. Definitions and Methods. Improved and unimproved water sources and sanitation facilities. <http://www.wssinfo.org/definitions-methods/watsan-categories/>
- Wilcox, D. 1994. *The Guide to Effective Participation*. London, Partnerships. <http://www.partnerships.org.uk/guide/index.htm>
- WWAP (United Nations World Water Assessment Programme). 2015. *The United Nations World Water Development Report 2015: Water for a Sustainable World*. Paris, UNESCO. <http://unesdoc.unesco.org/images/0023/002318/231823E.pdf>

There is universal agreement in international and national policy circles of the urgent need for a systematic approach to the collection of gender-disaggregated information related to water. For years, UN agencies, NGOs, governments, activists and water experts have been calling for a systematic approach to collecting gender-disaggregated information related to water.

The UN World Water Assessment Programme (WWAP) has launched a ground-breaking project for collecting and testing key sex-disaggregated water data. WWAP has developed a toolkit for Gender-Sensitive Water Monitoring, Assessment and Reporting, comprising of a: 1) List of indicators; 2) Methodology; 3) Guideline; and 4) Questionnaire for field enquiry.

WWAP provides here the third tool, a Guideline for the collection of sex-disaggregated water data in the field. It provides the researcher with instructions on how to use the questionnaire. It presents direction towards methodologies, creates awareness concerning cultural sensitivities, and points out preferential indicators for specific world regions and different users.

The set of sex-disaggregated indicators covers topics such as women's water empowerment and participation in decision-making related to water, income generation, and unaccounted for water-related working hours.

This project will prove the value of sex-disaggregated water data and will provide strong support for the monitoring of post-2015 development goals. It will:

- support the SDGs;
- build capacity for national sex-disaggregation data-gathering projects;
- demonstrate the value of sex-disaggregated data and make the case (to national leaders and policy-makers) for gender mainstreaming;
- create baseline knowledge related to water, from which gender progress can later be evaluated; and
- serve as a basis for advocating change towards gender equality and women's empowerment in the water realm and beyond.

A 2013 survey by the UN Statistical Commission reveals that gendered water data is among the least available of national-level indicators: 45.2% of countries do not produce any gender statistics related to water.

WWAP's project will help countries to change these statistics.



Government of Italy



Umbria Region