

REFERENCE MATERIAL FOR GENDER MAINSTREAMING IN THE WATER RESOURCES SECTOR

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Reference Material for Gender Mainstreaming in the Water Resources Sector

The Japan International Cooperation Agency (JICA) aims to achieve gender equality and women's empowerment through gender mainstreaming in its development projects. Gender mainstreaming in development projects refers to the incorporation of a perspective that promotes gender equality and women's empowerment in all stages of a project (i.e., planning, implementation, and monitoring and evaluation). Gender mainstreaming enhances the effectiveness of the JICA's projects by addressing different issues and needs of the people of any gender and hence contributes to the realization of an inclusive society, where everyone can fulfill their potential. Through gender mainstreaming in the water resources sector, people of all genders are expected to be able to access and enjoy the benefits of water resources sector, which will lead them to various socio-economic services and opportunities. Implementing activities in the water resources sector with a gender perspective can promote the impact of development and facilitate sustainability. This is achieved by ensuring the human rights of various people regardless of gender that comprise society, and by incorporating the knowledge, experiences, and needs of women as users and managers of water and sanitation facilities and as promoters of sanitation practices at home and in their communities.



Gender is a term that refers to socially and culturally constructed attributes associated with being female or male. Many societies not only categorize humans as "female" or "male" based on biological features but also give specific values to each and prescribed their respective roles and behaviors. Thus, gender not only refers to "sex" in a biological sense but also associates sex with specific roles and behaviors expected to women and men by society.



A perspective of gender (or gender perspective) is a perspective that focuses on gender issues, needs, and impacts arising from the different social roles and power relations of women and men in all spheres of the society, including policies, programs, institutions, and organizations. In development projects, this perspective is indispensable to deliver equitable benefits to women, girls and all other beneficiaries regardless of their gender.

Purpose of Reference Material

The Reference Material serves as a guide for all stakeholders of JICA's projects to understand gender issues, the importance of gender mainstreaming in the water resources sector, and sample methods of how to incorporate a gender perspective into each stage of a project cycle.ⁱ The Material especially focuses on the following three sub-sectors selected in accordance with JICA's project strategies and priority issues.

- (1) **Urban water supply:** Development of water supply and sewerage and strengthening capacity of water utilities.
- (2) **Rural water supply and sanitation:** Water supply administrative services, operation and

ⁱ It must be noted that involvement of men is important for addressing gender issues, and also gender issues faced by men must be addressed in the efforts for transforming patriarchy. Capturing and addressing gender issues faced by other genders (other than 'women' and 'men') are also important in gender mainstreaming.

maintenance by residents, sanitation.

- (3) **Integrated water resource management:** Developing responsible entities that coordinate local interests and rationally promote the sustainable use and conservation of water resources, forming and operating consultative bodies, and establishing a system to solve issues surrounding water resources based on social consensus building.

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Chapter 1. Major gender issues and their causes in the water resources sector

This chapter outlines six major gender issues and their causes that must be understood for gender mainstreaming in the water resources sector.

- (1) No attention has been paid to the benefits, employment, and empowerment of women because of lack of gender perspectives in water resource-related policies and plans, measures, technology development, and business management.
- (2) The opportunity costs related to women's and girls' access to safe water are high.
- (3) Health risks for women and girls are high.
- (4) Women's opinions tend not to be reflected in decision-making regarding water supply and sanitation projects.
- (5) Opportunities to acquire skills related to operation and maintenance are limited.
- (6) The key role of women in integrated water resources management is not recognized.

(1) **Hardly any attention has been paid to the benefits, employment, and empowerment of women because of lack of gender perspectives in water resource-related policies and plans, measures, technology development, and business management.**

Many societies operate on the gender bias that men are better suited to technical and professional posts. This is reinforced by far fewer girls entering the science, technology, engineering, and mathematics (STEM) fields; further, opportunities for women to acquire expertise and skills are limited. As a result, men often occupy most key posts or technical positions in many public organizations related to water resources, such as competent authorities, research institutes, water utilities, and private companies. It is difficult to reflect women's opinions in water resource-related policies and plans, measures, organizational management, and technological development, and the attention paid to women's current situation and needs is insufficient. Under this situation, water resource policies, projects implemented, or new technologies may not benefit women and may even be detrimental to them and society as a whole with regard to cost-effectiveness through an increase in women's workloads. In addition, there are several issues, such as limited opportunities for female technical staff to acquire expertise and skills, insufficient progress of gender mainstreaming within organizations, and low gender awareness among staff. According to the Asian Development Bank (ADB), the success and the sustainability of water and sanitation projects are closely related to the extent of contributions to gender equality and women's participation in the project. In other words, by implementing activities from a gender perspective, high-performance results for water and sanitation projects can be achieved using various indicators, including maintenance, procurement, cost recovery, and awareness of sanitation.¹

(2) **The opportunity costs related to women's and girls' access to safe water are high.**

The roles and responsibilities of women and men related to water are often assigned based on the existing stereotyped gender norms, such as productive activities that lead to cash income are considered the role of the male head of the household, whereas reproductive activities (childbearing, childcare, and household chores) are considered female roles. Specifically, women who play a significant role in unpaid domestic work (cooking, fetching water, gathering firewood, caring for the family) are usually the "collectors," "users," and "managers" of the water used in the household. In many cases, women and girls are responsible for the water fetching labor, especially in rural and impoverished urban areas where access to water resources is limited and water must be fetched from wells and rivers. According to the World Health Organization (WHO) and the United

Nations Children's Fund (UNICEF), in 2017, women and girls were responsible for fetching water in 80% of households without running water on their premises^{2,3} in many cases. Multiple trips back and forth between the house and the water source are made in a day to fetch water for the entire family. The time consumed for this water collection labor does not only include the travel time on foot, but also the time spent waiting in line. WaterAid, a British NGO, estimates that the total time spent by women and girls worldwide fetching water is over 200 million hours per day.⁴ In addition, according to UNICEF, girls between the ages of 5 and 14 spend 40% more time than boys of the same age on unpaid domestic activities, including fetching water. As women and girls spend much time fetching water, opportunities for girls to attend school and for women to perform production activities that could generate income are limited, leading to opportunity costs.

(3) Health risks for women and girls are high.

As mentioned above, water fetching labor, which is primarily performed by women and girls in many societies, involves carrying heavy water over long distances, often on foot along undeveloped roads, which places an excessive burden on the body and increases the risk of injury and bone deformation. In addition, washing clothes is often the role of women because of stereotyped gender division of roles, but the limited amount of water available at home often forces women to do laundry in rivers and ponds, where they are at risk of contracting mosquito and parasite-borne diseases.⁵ In addition, there is a risk of sexual and gender-based violence (SGBV), including sexual violence, when on the road to fetch water and at water sources.

In addition, toilets are important from a public health perspective, but in rural and impoverished urban areas, there are often no toilets in any households or within the community. If there are toilets, they are inadequately maintained, are not separated for women and men, or safety is not ensured, and women are forced to take actions that negatively affect their health, such as drinking as little water as possible to reduce the number of times they use the toilet. Furthermore, the unavailability of separate toilets for women and men in schools and the lack of access to the appropriate type and number of menstrual products can also cause girls to avoid attending school. In addition, water and sanitation may be related to the deaths of one million women each year due to childbirth in unsanitary conditions, whereas 26% of newborn deaths and 11% of maternal deaths can be attributed to infectious diseases.⁶ In addition to these health risks, there is also the risk of SGBV, such as sexual harassment and sexual violence, when toilets are not built in safe locations or when privacy is not maintained due to damaged toilet facilities.

(4) Women's opinions tend not to be reflected in decision-making regarding water supply and sanitation projects.

In general, women play a key role in securing, transporting, using, and managing domestic water, as well as in promoting sanitation behaviors at home and in their communities. Nevertheless, in many societies, women's participation and opportunities to speak during the decision-making process of water supply and sanitation projects are limited. It hinders the reflection of women's needs and opinions. According to the United Nations (UN-Water, 2021), "fewer than 50 countries have laws and policies that specifically mention women's participation for rural sanitation and water resources management".⁷ For example, women need water for domestic use and home vegetable gardens, but men have higher priorities for agricultural water. This provides a lower priority for men for the projects and technologies that reduce women's burden, including water collection labor and women's needs, such as benefits from safe water and sanitation, are less likely to be met. This

situation stems from gender norms and stereotypes that men are key decision-makers in the community.

(5) Women's opportunities to acquire skills related to operation and maintenance are limited.

In rural water supply projects, local residents form water management committees to operate and maintain the water supply infrastructure and collect fees. However, women's participation in the training programs offered within the project may be less than that of men. This situation may be influenced by stereotypes and social norms that assume that "men are good at advanced tasks such as machine operation, while women are responsible for simple manual labor," as well as patriarchal norms that assume that women require their husbands' permission to participate in anything outside the home. In addition, low literacy rates among women may be a disincentive for them to participate in training because of social norms that dictate that women do not need to read and write.

Thus, applying the division of roles between women and men based on traditional social norms to the maintenance of water supply and sanitation facilities as a given, and even distinguishing what knowledge and skills each gender should acquire, may hinder proper maintenance of the facilities. Therefore, women who actually use, manage and maintain the facilities on a daily basis will not acquire the necessary knowledge and skills.

In addition, the notion that "men are better at tasks such as operating machinery," based on the stereotyped gender roles and gender norms in society, is one of the factors that has reduced women's interest in machinery and technology and prevented women from entering the industrial engineering field, which is socially undesirable.

(6) The important role of women in integrated water resources management is not recognized.

Integrated water resource management fosters responsible entities that coordinate interests and rationally promote the sustainable use and conservation of water resources based on scientific and technical evidence to make effective use of limited water resources. Meanwhile, it also aims to form and operate a well-functioning consultative body and build a system to resolve issues surrounding water resources based on social consensus building. In this context, it is important for women, as users, suppliers, and managers of various natural resources, to be actively involved with men. Understanding how women use natural resources together with the resulting impacts and reflecting these in projects will lead them to "maximize the economic and social well-being in an equitable manner,"⁸ which is the goal of integrated water resources management. The importance of gender equality in water resource management has been recognized since the 1977 United Nations Water Conference, and efforts have been made to date. However, gender norms and stereotypes, such as men deciding critical issues, remain strong, and solid progress has not been made in reflecting the needs of women and their participation in the decision-making processes (see "2-2 International frameworks to achieve gender equality in the water resources sector" for international efforts). In this situation, as with the disadvantages caused by the lack of gender perspectives in water resources policies described in (1) above, it is also highly likely that measures that do not incorporate women's knowledge and experience might result in further gender inequality. For example, a policy could provide economic benefits only to men by limiting women's access to natural resources for water resource conservation and jeopardizing their existing benefits, or by creating a consensus on water resource allocation.

Chapter 2. Importance of gender mainstreaming in the water resources sector

Following the gender issues and their causes presented in the previous chapter, this chapter explains the importance of a gender perspective in development projects from two aspects: realization of gender equality and women's empowerment, and increase of development effectiveness. It also outlines international frameworks for achieving gender equality in the water resources sector.

2-1 Why is gender mainstreaming important in the water resources sector?

(1) By planning projects that reflect differences in gender needs related to water and sanitation, project effectiveness will increase, and sustainability of the projects' impact will be ensured.⁹

As discussed in the previous chapter, understanding that needs related to water supply facilities vary for women and men owing to the difference in the stereotyped gender roles. Moreover, planning projects based on the needs of each gender will greatly contribute to enhancing the project effectiveness from the perspective of enabling the beneficiaries to equally benefit from the project and to use and maintain the facilities and equipment in a sustainable manner. For example, women's burden for fetching water will be reduced significantly by taking into account their needs owing to the gender division of labor in the development of water supply facilities and installing communal taps with washing facilities as close to the house as possible. In addition, the introduction of foot-operated pumps instead of hand pumps and the installation of platforms to make it easier for women and children to carry containers on their heads and backs at water collecting stations. This will make the system more user-friendly for women and children and ensure more suitable use of the water supply facilities. Alternatively, while privacy and safety must be considered when installing toilets, women and girls may not use it during the daytime, if the entrance is in an easily noticeable place, which may limit the effectiveness of the project.

(2) Promoting active participation of women in projects and the decision-making process on them will enhance project effectiveness and sustainability.

As described above, women's participation in the decision-making process is essential to address the challenges and needs faced by women and girls. For example, the participation of women in water management committees will ensure that their voices are reflected in the project, leading to facilities and equipment that are easy to use for all the community members, and their proper maintenance. It is also important to establish rules to include women in leadership positions (such as chairperson, vice chairperson, accountant). Because in some cases, simply establishing a rule to include women as members of the water management committee only results in their participation in a nominal way in which they do not have a real voice. In some cases, women's involvement in the management of water rates and other activities promoted diversity in water resource management and increases transparency in the use of funds.

In addition, although women are engaged in unpaid labor related to the maintenance of water supply facilities, such as cleaning and picking up waste, it is highly possible that only men participate in training related to maintenance, which indicates that men are responsible for technical jobs, such as pump repair technicians, which generate wages. However, if women, who are also users of water supply facilities, will be able to participate in these training sessions as much as men, they are likely to help strengthen the maintenance system of such facilities. Furthermore, if women, who are responsible for the day-to-day management of household finances, are given control of funds for the maintenance of the facility, the transparency of fund management could

improve as well as the sustainability of the impact.

In addition, women have traditional knowledge of natural resource management, including water resources, risk reduction from disasters, and extensive networks within their communities. Thus, by encouraging their active participation, women are expected to contribute to "maximizing economic and social well-being in an equitable manner without losing the sustainability of ecosystems,"¹⁰ which is the goal of integrated water resources management.

(3) Promoting women's participation in decision-making will contribute to their economic empowerment within their families and communities.

Promoting women's active participation in projects and decision-making processes, as described in (2), will foster women's self-esteem and confidence, and change the perception of their families and community members about women's contribution and abilities. This change is important in the process of women's empowerment, and it is expected to create a positive cycle for further transformation of families and communities.

In addition, improved access to water will enable women to use their time they spent fetching water, for economic activities including livelihood improvement. For example, in water supply projects, it is possible to promote women's economic empowerment by providing technical guidance and financial support for them to start livelihood improvement activities. Furthermore, in the implementation of a project, it is important to identify female-headed households and households with special needs, economic needs, and empowerment activities, as these will contribute to the women's empowerment.

(4) Improving access to water and sanitation facilities will improve the quality of life for women and girls.

By reducing the labor of water collection, the burden on women and girls who are responsible for this task will be eliminated or reduced in many countries, and the following effects are expected:

- Reduced burden on the body caused by water fetching labor
- Improved girls' school enrollment and attendance rate
- Decreased risk of SGBV victimization while fetching water
- Increased time to engage in livelihood improvement activities owing to more free time due to reduced burden of nursing care at home and in the community due to reduced waterborne infections

In addition, the following effects are expected by improving access to sanitary facilities:

- Ensuring privacy when bathing or using the toilet
- Reduced health risk by eliminating the avoidance of using the toilet
- Reduced burden on the body through improved menstrual hygiene management
- Reduced suffering from risks such as SGBV when using community restrooms or defecating outdoors
- Improved girls' enrollment and attendance rates (owing to the installation of toilets in schools)

It should be noted that the decrease in women's water collection labor mentioned above in (3) and (4) itself does not directly imply that the project will contribute to gender equality. This is because the fact that women are mostly responsible for water fetching and the other unpaid care and domestic works could be due to the gender inequality in the society. Moreover, it is possible

that people had a watering place nearby, however, now they must travel longer distances to access more hygienic and well-maintained water supply facilities. This increase in travel distance may decrease leisure time and increase the likelihood of SGBV occurrences. Therefore, it is important to conduct surveys to understand the actual situation at the project site from a gender perspective, and based on these surveys, to conduct specific awareness-raising, training, and other activities for gender equality and women's empowerment.

2-2 International frameworks to achieve gender equality in the water resources sector

(1) The 2030 Agenda for Sustainable Development and Sustainable Development Goals (SDGs) (2015)

Gender equality and women's empowerment are considered a prerequisite for achieving the Sustainable Development Goals (SDGs) of the 2030 Agenda for Sustainable Development. In other words, gender equality and women's empowerment are the means to realize all 17 goals and 169 targets, and actions for achieving gender equality and women's empowerment are required.

Among the 17 goals, Goal 5, which addresses gender equality and women's empowerment, aims to empower women and eliminate gender-based discrimination and build a society in which all people equally enjoy their rights and opportunities, and share responsibilities. The following is a list of targets of Goal 5, which is related to the water resources sector. Relevant points are highlighted in orange.

- 5.1 End all forms of discrimination against all women and girls everywhere.
- 5.2 Eliminate all forms of violence against all women and girls in the public and private spheres.
- 5.4 Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies (...).
- 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life.
- 5.6 Ensure universal access to sexual and reproductive health and reproductive rights.
- 5.c Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

The table below shows other Goals, Targets and Global indicators relevant to both the water resources sector and gender equality and women's empowerment, except for Goal 5.

Goal	Target	Global indicator
3. Ensure healthy lives and promote well-being for all at all ages	3.9 By 2030, reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.	3.9.2 Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene
6. Ensure availability and sustainable management of water and sanitation for all	6.1 By 2030, achieve universal and equitable access to safe and affordable drinking water for all.	6.1.1 Proportion of population using safely managed drinking water services
	6.2 By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women	6.2.1 Proportion of population using (a) safely managed sanitation services and (b) a hand-washing facility with soap and water

	and girls and those in vulnerable situations.	
	6.4 By 2030, [...] reduce the number of people suffering from water scarcity.	6.4.1 Change in water-use efficiency over time 6.4.2 Level of water stress
	6.5 By 2030, implement integrated water resources management at all levels.	6.5.1 Degree of integrated water resources management

*: Highlights in orange indicate relevance to achieving gender equality and women's empowerment.

Reference: Prepared based on the information

<https://www.mofa.go.jp/mofaj/gaiko/oda/sdgs/statistics/index.html> (Accessed April 20, 2022)

(2) Dublin Statement of the International Conference on Water and the Environment (1992)

One of the four principles of the Dublin Statement¹¹ of the "International Conference on Water and the Environment" held in 1992 called for the necessity of addressing the needs arising from women's stereotyped gender roles and the need for their participation, as follows:

Women play a central part in the provision, management and safeguarding of water. This pivotal role of women as providers and users of water and guardians of the living environment has seldom been reflected in institutional arrangements for the development and management of water resources. Acceptance and implementation of this principle requires positive policies to address women's specific needs and to equip and empower women to participate at all levels in water resources programmes, including decision-making and implementation, in ways defined by them.

(3) United Nations Conference on Environment and Development (Earth Summit, 1992)

Principle 20 of the Rio Declaration on Environment and Development stated the importance of the role and participation of women as follows:

Women have a vital role in environmental management and development. Their full participation is therefore essential to achieve sustainable development.

(4) Fourth World Conference on Women (1995)

In the Platform for Action, the following three strategic objectives related to "Women and the Environment" have been identified:

- 1) Involve women actively in environmental decision-making at all levels.
- 2) Integrate gender concerns and perspectives in policies and programmes for sustainable development.
- 3) Strengthen or establish mechanisms at the national, regional and international levels to assess the impact of development and environmental policies on women.

(5) Policy and Strategy for Mainstreaming Gender in the Water Sector in Africa (2011)

In 2011, the African Ministers' Council on Water (AMCOW) released the "Policy and Strategy for Mainstreaming Gender in the Water Sector in Africa" with seven strategic goals for gender mainstreaming to be achieved by all member states, member agencies, and water-related institutions.

- 1) Support and strength policies for gender mainstreaming.
- 2) Adequate human and financial resources allocated to gender mainstreaming.

- 3) Planning and implementation of activities from a gender perspective in project implementation in the water sector.
- 4) Undertake information collection on strategic research and operational status on gender, share, and use the collected information.
- 5) Human and organizational capacity building to support gender equality activities at all levels.
- 6) Strengthening mechanisms for cooperation and coordination for gender mainstreaming in the water sector.
- 7) Development and implementation of monitoring and evaluation systems and indicators to support gender equality activities in the water sector.

(6) United Nations Gender, Water and Sanitation: A Policy Brief (2006)

In 2006, the Task Force on Gender and Water (GWTF) and other related UN agencies released the policy brief on “Gender, Water and Sanitation” toward the International Decade for Action “Water for Life” 2005-2015. The brief identifies the following issues that require special attention: equitable access to water, equitable land tenure distribution and productive use of water, access to sanitation facilities, capacity building, participation and equity in decision-making, protection of resources (indigenous people’s perspectives), resource mobilization, private sector participation and water prices and rights, and conflicts and crises over water. Thereafter, it summarizes the actions that each of the following entities must take: central government, local and municipal governments, communities and civil society, donors, and international organizations. The following is a summary of the actions to be taken by major donors and international organizations:

- Engaging women leaders, especially scientists and ministers in the environment and water sectors, as role models to promote gender mainstreaming at all levels of water management
- Promote gender mainstreaming in the water and sanitation sector (linking gender goals that promote gender equality and women's empowerment)
- Collecting and sharing useful practices and compiling norms and guidelines for gender mainstreaming
- Investing in capacity building in the water sector, with a greater focus on people with special needs
- Use of media to disseminate information on gender issues in the water sector
- Strengthening the capacity of officers in charge of gender (in donor agencies)
- Creating a framework for knowledge sharing among water and gender professionals across institutions
- Support for the development and implementation of water policy frameworks from a gender perspective at the national and international levels

Chapter 3. Mainstreaming gender perspective in project cycle

Gender mainstreaming in a project means integrating a gender perspective in all the stages of the project: planning, implementation, monitoring, and evaluation. This Reference Material presents the following five practical steps to mainstream a gender perspective in a project.

- **Step 1 “Social and gender analysis”**: Conduct a social and gender analysis. Specifically, identify gender issues through analyzing related policies, structures, organizations, and different experiences, challenges and needs of women and men in the region, in view of promoting gender equality and women’s empowerment.
- **Step 2 “Formulation of an activity plan”**: Formulate a plan of activities to address the gender issues identified at Step 1.
- **Step 3 “Setting gender indicators”**: Set quantitative and qualitative indicators to objectively measure the effects of the activities.
- **Step 4 “Implementation and monitoring with a gender perspective”**: Establish a gender-responsive implementation structure. With a gender perspective, implement activities, and monitor the progress, results, and impacts (unexpected positive and negative effects of project implementation).
- **Step 5 “Evaluation with a gender perspective”**: Evaluate implemented activities that had incorporated a gender perspective, and their results and impacts.

The table below shows the five steps for gender mainstreaming applied in three project phases: project formulation phase, project implementation phase, and after project completion. Step 1 to 3 fit into the project formulation phase, Step 4 is the project implementation phase, and Step 5 is the phase after project completion. Although a gender perspective must be incorporated throughout all phases, it is particularly important to mainstream a gender perspective in the project formulation phase (Step 1 "Social and gender analysis" to Step 3 "Setting gender indicators").

Project formulation phase			Project implementation phase	After project completion
Step 1 Social and gender analysis	Step 2 Formulation of an activity plan	Step 3 Setting gender indicators	Step 4 Implementation and monitoring with a gender perspective	Step 5 Evaluation with a gender perspective

The following table indicates where to refer in the Reference Material according to the project cycles of technical cooperation, Official Development Assistance (ODA) loan and ODA grant.

Scheme	Project cycle	Where to refer in the Reference Material
Technical Cooperation	At the time of preparing the Terms of Reference (TOR) for the data collection survey, detailed design study and basic design study	Step 1 (Analysis)
	At the time of drafting Main Point Discussed in the Record of Discussion (R/D) (activities related to gender), PDM, and Ex-Ante Evaluation document	Step 2 (Activity planning), Step 3 (Indicators)
	At the time of preparing the TOR of the project, implementing the project, and reviewing a monitoring sheet	Step 4 (Implementation and monitoring)
ODA loan	At the time of preparing the TOR for the data collection survey and Preparatory Survey, and drafting Project Planning Documents (1)	Step 1 (Analysis)

	At the time of preparing Minutes of Discussion (M/D), Project Planning Document (2)/(3), Records of hearings, and drafting Ex-Ante Evaluation document	Step 2 (Activity planning), Step 3 (Indicators)
	At the time of supervising the project and reviewing Project Status Report	Step 4 (Implementation and monitoring)
ODA grant	At the time of preparing the TOR for the data collection survey and Preparatory Survey, and drafting Project Planning Record (1)	Step 1 (Analysis)
	At the time of preparing Minutes of Discussion (M/D), Project Planning Document (2)/(3), and Ex-Ante Evaluation Document	Step 2 (Activity planning), Step 3 (Indicators)
	At the time of supervising the project and reviewing Project Monitoring Report	Step 4 (Implementation and monitoring)

Details of Steps 1 to 5 are explained in the following sections.

Step 1. Social and gender analysis

The first thing to perform in gender mainstreaming of a project is to identify gender issues through social and gender analysis. Specifically, a survey is to be conducted to collect and analyze gender-disaggregated data and related information in the target countries and areas to understand the current situation and issues of each gender. It is especially important to understand 1) behaviors and actions of people of different genders and their beliefs and values, 2) social and cultural norms and practices affecting those people, and 3) issues that they face based on their gender.

The table below is a "List of Survey Items and Contents for Social and Gender Analysis" to be referred to when preparing a survey. It shows exemplary survey items with respective survey questions. When a survey content is related only to a specific sub-sector, the name of the sub-sector is shown in a square bracket, "[sub-sector]". The list also includes 'Basic information' that helps better understand the current situation and issues related to gender in the sector and the sub-sectors. Furthermore, since every project is expected to contribute to Goal 5 of the SDGs, including the elimination of sexual and gender-based violence (SGBV), it is desirable to collect and analyze a wide range of data; thus, the survey items include those related to Goal 5. It should be noted that these survey items and contents are examples. Thus, in accordance with the purpose and scope of the project, survey items and contents should be modified or added.

List of survey items and contents

Survey items	Survey contents
Policies and systems	
Status of gender issues in the water resources sector in relevant laws and policies, and measures taken	<input type="checkbox"/> Status of gender relations and gender issues in laws, policies, strategies, and action plans in the water resources sector <input type="checkbox"/> Status of gender issues in the water resources sector in relevant policies and measures taken to promote gender equality  Check not only policy documents in the sector, but also how <u>gender issues in the water resources sector are positioned in relevant policies for gender equality promotion formulated by ministries and agencies in charge of promoting gender equality</u> (e.g., Ministry of Women's Affairs, Ministry of Gender Affairs).
Laws, regulations, and policies related to water resources	<input type="checkbox"/> Legal mechanisms that guarantee access to water for all <input type="checkbox"/> How relevant policies and plans stipulate the promotion of participation and division of roles of women and men, such as in water management committees <input type="checkbox"/> How women's roles as water users and managers are defined in relevant policies and plans <input type="checkbox"/> How relevant policies and plans promote the participation of stakeholders, including women, in decision-making
Laws, regulations, and policies related to sanitation	<input type="checkbox"/> How relevant policies and plans define the role of women in the promotion of sanitation practices
Laws, regulations, and policies on integrated water resources management	<input type="checkbox"/> How relevant policies and plans stipulate the promotion of participation and division of roles of women and men in integrated water resources management
Laws and regulations related to land ownership	<input type="checkbox"/> Do the relevant laws and regulations (such as Civil Code, Land Registration Law Act) guarantee equal rights to women regarding ownership and use of land? <input type="checkbox"/> Do relevant customary laws (such as land ownership and inheritance, head of household and freedom of movement) also guarantee equal rights for women? Keep in mind that even though statutory law is gender equal, there is

	 gender-based discrimination in the customary law applied simultaneously.
Labor law	<input type="checkbox"/> Regulations on active employment of women (such as fixed percentage) and application of equal wages for women and men
Organizational structure	
Gender mainstreaming policies and systems at the executing agencies	<input type="checkbox"/> How gender equality and women's empowerment is being promoted throughout the institutions and organizations involved in the implementation of the project <input type="checkbox"/> What kinds of systems have been established and what efforts are being made for gender mainstreaming? (e.g., whether or not there is a focal point in charge of promoting gender mainstreaming) <input type="checkbox"/> Status of women's participation in decision-making (e.g., percentage of female executives and managers) <input type="checkbox"/> Status of the implementation of gender training for executives and staff
	 <u>Even if there are no female managers, it is desirable to hear from female staff members in relevant departments</u> about the status of implementation of gender-related activities. In addition, since increasing the number and retention of female technical workers is important, it would be helpful to identify their needs as well.
Gender balance of staff	<input type="checkbox"/> Gender balance of staff (general, technical, managerial) (by number, percentage, and age)
Employment and training of female engineers, status of their ability and skills	<input type="checkbox"/> Existence of female engineers with the necessary abilities and skills, the number of female engineers, and the reason if there are fewer female than male engineers <input type="checkbox"/> Existence of measures to increase the number of female engineers (e.g., quota system), and if any, the details of such measures <input type="checkbox"/> Issues and needs faced by female engineers <input type="checkbox"/> Existence of capacity-building mechanisms that meet the needs of female engineers, and if any, their details
Response to harassment and SGBV cases	<input type="checkbox"/> Ways to identify and handle sexual harassment and SGBV incidents at construction sites, and the existence of reporting channels
	As for the targeted executing agency, depending on the progress of decentralization and privatization, <u>information should be collected not only on the central supervisory ministries, but also on, for example, subordinate organizations, public institutions, and private companies responsible for operations and customer service of related facilities</u>
Collaboration with specialized gender organizations	<input type="checkbox"/> Existence of any collaboration such as with the Ministry of Women's Affairs, Ministry of Gender, in the implementation of the project, and if any, the kind of collaboration
Gender equality efforts by other donors and NGOs	
Support from other donors, international organizations, NGOs	<input type="checkbox"/> Support for gender issues in particular (existence and content of approaches)
Initiatives of the private sector	<input type="checkbox"/> Activities that address gender issues
Access status and issues in the target area	
Access to water supply facilities and issues	<input type="checkbox"/> Percentage of people with access to safe water (by region and gender) <input type="checkbox"/> Division of labor among genders in securing, transporting, using, and managing water <input type="checkbox"/> Distance to the water source and time required to fetch water <input type="checkbox"/> Safety issues when fetching water (including SGBV, accidents, and injuries) <input type="checkbox"/> Incidence rate of water-borne infections (by gender and age)
Access to and issues on sanitation facilities	<input type="checkbox"/> Access to sanitation facilities (by region and gender) <input type="checkbox"/> Sanitation status of toilets and hand washing facilities in households (number and percentage) <input type="checkbox"/> Percentage of people who defecate in the open (by gender) <input type="checkbox"/> Condition of existing toilets <input type="checkbox"/> Use of toilets in remote locations or protection of privacy during outdoor

	<p>defecation, risks of becoming a victim of SGBV, women's and girls' sense of insecurity</p> <ul style="list-style-type: none"> <input type="checkbox"/> Status of separate toilets for women and men, hand washing facilities, and sanitation in schools (number/percentage) <input type="checkbox"/> Status of facilities related to menstrual hygiene in schools (boxes for used menstrual products, showers, lounges, and spare menstrual products etc.) <input type="checkbox"/> Incidence of infectious diseases (by gender and age) <input type="checkbox"/> Percentage of births in modern facilities <input type="checkbox"/> Maternal mortality rate (relationship between births in unsanitary conditions and mortality) <input type="checkbox"/> Construction and sanitary status of toilets and hand washing facilities in hospitals and maternity hospitals (number and percentage)
Gender division of labor	
Water use and management	<ul style="list-style-type: none"> <input type="checkbox"/> Gender roles in water use (such as collection of user fees) <input type="checkbox"/> Gender roles in the maintenance of water supply facilities <input type="checkbox"/> Gender bias with respect to the above roles (excessive burden on either gender)
Sanitation and awareness	<ul style="list-style-type: none"> <input type="checkbox"/> Gender roles in the maintenance and management of sanitation facilities <input type="checkbox"/> Gender roles in promoting sanitation behavior (awareness-raising) <input type="checkbox"/> Gender bias with respect to the above roles (excessive burden on either gender)
Information and knowledge	
Water use and management	<ul style="list-style-type: none"> <input type="checkbox"/> Gender gap in information and knowledge (including access) on appropriate water use and management
Sanitation and awareness	<ul style="list-style-type: none"> <input type="checkbox"/> Gender gap in information and knowledge (including access) on appropriate sanitation practices <input type="checkbox"/> Information and knowledge on menstrual hygiene management (by gender and age) <input type="checkbox"/> Existence of stigma and practices related to menstruation
Capacity enhancement	
Participation in training	<ul style="list-style-type: none"> <input type="checkbox"/> Participation rate in capacity building courses and training (by gender and age) <input type="checkbox"/> Participation of women in technical training <input type="checkbox"/> Existence of restrictions to participate in training based on division of roles by gender
Participation in decision-making	
Water supply	<ul style="list-style-type: none"> <input type="checkbox"/> Status of women's participation such as in water management committees (e.g., percentage of female committee chairs and members) <input type="checkbox"/> Obstructive factors in case of low women's participation
Sanitation	<ul style="list-style-type: none"> <input type="checkbox"/> Status of women's participation in the decision making of the construction and maintenance of sanitation facilities, and obstructive factors if women's participation is not progressing
Integrated water resource management	<ul style="list-style-type: none"> <input type="checkbox"/> Status of women's participation in the decision making related to integrated water resource management, and obstructive factors if women's participation is not progressing
Other related information	
Educational level	<ul style="list-style-type: none"> <input type="checkbox"/> School attendance and enrollment rates (primary and secondary education levels, by gender) <input type="checkbox"/> Literacy rates (by age group and gender) <input type="checkbox"/> Number and percentage of students enrolled in STEM fields, by gender
Labor participation	<ul style="list-style-type: none"> <input type="checkbox"/> Labor participation and unemployment rates (by gender) <input type="checkbox"/> Number and percentage employed in STEM fields (by gender)
Sexual and gender-based violence (SGBV)	<ul style="list-style-type: none"> <input type="checkbox"/> Number of SGBV incidents within the region/community (by location, form, age of perpetrator, age of victim, and gender)
Social norms, customs, and other social context	<ul style="list-style-type: none"> <input type="checkbox"/> Norms governing gender roles (e.g., at home, profession, involvement in decision-making) <input type="checkbox"/> Existence and content of norms that restrict women's behavior <input type="checkbox"/> Background factors of gender norms and practices (religion, customs etc.)

Segments requiring special attention	<input type="checkbox"/> Number and percentage of female-headed households <input type="checkbox"/> Number and percentage of poor households (by gender) <input type="checkbox"/> Number and percentage of other vulnerable groups (by class, ethnicity, religion, migrants etc.)  Depending on the diverse attributes of women (age, class, ethnicity, religion, disability, education level, family/household type, <gender of the head of the household, marital status, number of children> income level) the situation, issues faced, needs, and impacts of the development projects are different. Therefore, it is important to understand the women that are in the project target area.
Differences in gender-based support needs	
Water supply facilities	<input type="checkbox"/> Location of water supply facilities <input type="checkbox"/> Specifications of water supply facilities and equipment  Women who spend excessive time and physical burden owing to water fetching tend to select their water source based on access, quality, quantity, reliability of facilities, and time and efforts required. For example, if water for domestic and agricultural purposes is used from the same faucet, men would want the communal faucet to be located near the field while women would want it near their house. When laundry facilities are not provided, women often wash their clothes in more distant water sources, such as rivers or lakes, rather than transporting water to do the laundry.  It should be noted that while reducing the time spent fetching water contributes to reducing women's working hours, it does not necessarily lead to a reduction in existing gender inequality (because the burden of water fetching labor is originally placed much more on women and this may itself be based on gender inequality). To promote gender equality and women's empowerment, such extra time could be used to strengthen women's capacity to engage in livelihood-enhancing activities, improve access to finance, and raise awareness and change behavior regarding local gender unequal social norms in the first place.
Sanitation facilities	<input type="checkbox"/> Location and specifications of sanitation facilities <input type="checkbox"/> Time, days of the week, and place where it is easy to participate in the implementation of awareness-raising activities.  Girls have menstrual hygiene needs and need access to menstrual products, disposal of used sanitary napkins, privacy, and facilities for changing and showering, the lack of which can affect school attendance and academic continuity.
Construction sites (for infrastructure only)	
Employment and working environment of construction workers	<ul style="list-style-type: none"> • What is a percentage of construction workers by gender? • What are the reasons if female workers are fewer than male? e.g., gender norms, including fixed gender division of labor, specification of eligibility for men only in recruitment and/or any requirements that look neutral but exclude women indirectly in the local contexts, and risks of SGBV for engaging in construction. • Do female construction workers face challenges? What are they? e.g., restrooms/toilets and/or changing rooms set up only for men use, gender harassment to the women by their co-workers and/or residents near the sites, and lack of a reporting system for those issues. Is there any culture or custom for paying less to women even if they engage in same work as men? (wage discrimination)
SGBV risks	Have female construction workers and/or local women near the construction sites experienced SGBV?



[Tips on survey methodology]

Social and gender research methods include literature review, interviews (including Key Informant Interviews and Focus Group Discussions), field observations, and inspections. It is also useful to use "gender analysis tools" (referred to the attached list of reference materials at the end of the document) specifically developed to gain more accurate understanding of gender relations, such as gender division of roles and labor, and access and control over resources. Other points to be considered in conducting surveys are as follows.

- * Interview both women and men to see if there are differences in their perceptions.
- * When forming groups for interviews or discussions, carefully assess if target groups should be gender-mixed or single-gender. It depends on the cultural practices and social norms of the target country/area as well as the content and purpose of the information to be gathered. If women have difficulties expressing their opinions in front of men, it is desirable to interview women and men separately. On the other hand, mixed group discussions may provide the participants with an opportunity to deepen their discussions while understanding each other's perceptions.
- * Girls and boys may also have different needs and perspectives, thus make an effort to collect their voices.
- * For sensitive contents such as SGBV, it is preferable that staff of local NGOs with experience and expertise conduct individual interviews rather than group interviews. Carefully protect anonymity and confidentiality of the respondents.

In order to identify gender issues based on the collected data and information, the following points should be taken into account during the analysis.

- Division of labor: Are there any stereotyped gender division of labor?
- Access: Are there any gender disparities in the access to resources, services and the benefits derived?
- Control: Who manages and owns resources and services? Who controls benefits (are there any gender-based biases)?
- Decision making: Are there any gender-based biases in participation in decision-making?
- Organizational capacity: Do relevant institutions have policies, experience, and capacity to promote gender equality and women's empowerment?
- Sexual and Gender-Based Violence (SGBV): Are there any SGBV within the scope of the water resources sector?
(Example: risk of SGBV owing to long distances to fetch water and lack of toilets in safe locations)

In addition, to ensure the project help the promotion of gender equality and women's empowerment, consider the following points:

- Will the benefits from the planned project be equally enjoyed by all beneficiaries regardless of gender? If there are any possibilities that they may not be equally beneficial to all, what are the reasons? What should be done to make them equally beneficial?
- What are the entry points for eliminating inequalities, such as gender-based prejudices, and social, cultural, and institutional constraints, and further promoting gender equality in a society?

Against the gender issues identified in Step 1, Step 2 and the subsequent Steps propose effective activities and present some points to keep in mind during implementation: Step 2 lists up gender-responsive activities for helping develop Activities section of a Project Design Matrix (PDM) (see "List of Effective Activities for Solving Gender Issues" in Step 2), and Step 4 introduces tips for the implementation of the activities set in Step 2.

Step 2. Planning gender-responsive activities

In order to address gender issues identified in the previous Step, an activity plan needs to be developed and reflected in the PDM. In planning activities, it is important to take into account all three of the following aspects.

(1) Actions to strengthen agency of women and girls (Agency)

Actions to empower women and girls to overcome their relatively disadvantaged positions through strengthening their capabilities and increasing their opportunities.

(Examples: acquiring skills and knowledge for maintenance of facilities, training women engineers, promoting women's participation in the decision-making process of village water supply and sanitation projects)

(2) Actions to change people's mindset, attitudes and behaviors (Relations)

Actions to transform gender power relations by addressing patriarchal social norms, people's attitudes and behaviors.

(Examples: efforts to raise awareness and promote understanding among influential people in the community and women and men around them (e.g., through training and campaigns), and campaigns to raise awareness and promote understanding among men in collaboration with influential male leaders)

(3) Actions to transform policies and institutional mechanisms (Structure and systems)

Actions to review and develop relevant policies and institutional mechanisms to promote gender equality and women's empowerment.

(Examples: introduction of a quota system¹² for women at the executive level in organizations, incorporation of women's needs and gender perspectives into policies in the water resources sector)

These three aspects are interrelated, and it is necessary to work on all these three when promoting gender mainstreaming activities to address the identified gender issues. For example, the promotion of women's participation in the decision-making process of village water supply and sanitation projects, given as an example in (1) above, is by itself an activity that aims to increase women's agency. However, simultaneously, as illustrated in (2) above, it is difficult to achieve this goal without raising gender awareness among local leaders and men and gaining their understanding on the role women play in water supply and sanitation both at home and in the community, and based on these, achieve an understanding on the significance of women's participation. Without it, even if it can be achieved temporarily, sustainability may not be ensured.

In addition, if the results of the promotion of women's participation are confirmed, it is expected that they will be incorporated into water supply or sanitation policies in the target countries, and that such activities will be promoted in projects other than JICA. Below are the examples of effective activities to tackle gender issues.

List of useful measures to address gender issues

Identified gender issues	Useful strategies and measures (example)
Policies and systems	
Efforts to address gender issues are not positioned in laws and policies	<input type="checkbox"/> Apply water supply and sanitation policies with a gender perspective (e.g., include an understanding of the needs of poor and vulnerable women without access to water supply and sanitation in the policies of the Water Corporation,

related to the water resources sector	which is the executing agency, ensure their participation in the decision-making process, and develop an action plan to implement these policies (ADB Georgia project ⁱⁱ).
Organizational structure	
Low awareness of gender issues among executives and staff	<input type="checkbox"/> Conduct gender training for executives and staff (e.g., 80% of the Water Corporation executives and staff understand gender and development issues in the water and sanitation sector (ADB Georgia project)) <input type="checkbox"/> Introduce of a quota system to increase the number of female executives (e.g., 30% of the audit committee members of the Water Corporation are assigned to women (ADB Georgia project))  Training contents of gender training include what is gender, the impact of gender bias on organizational operations and systems, the significance of gender mainstreaming (e.g., sound organizational operations, higher project results and sustainability), creating action plans to promote gender mainstreaming, and response to harassment and SGBV.
Gender mainstreaming and gender issues are not adequately addressed.	<input type="checkbox"/> Conduct level-specific gender training (see examples of activities above) <input type="checkbox"/> Develop an action plan to promote gender mainstreaming  In promoting gender mainstreaming in executing agencies, it is important to secure a budget from the viewpoint of feasibility. It is necessary to fully understand the financial situation of the executing agencies and the possibility of budgeting, and to discuss budget allocation with the counterpart government from the project design stage.
Female executives and managers are few, making it difficult for women's voices to be reflected in organizational decision-making	<input type="checkbox"/> Develop a human resource plan with a gender perspective to increase the number of female executives and managers (Examples: formulation of personnel plans, including evaluation and management systems, with the aim of increasing the number of female executives and managers; introduction of personnel databases by gender.) (ADB Georgia project) <input type="checkbox"/> Introduce a quota system to increase the number of female executives and managers (see examples of initiatives above) <input type="checkbox"/> Strengthen the capacity of female executives and managers (e.g., at least 30% of participants in training for technical, financial, administrative, and leadership skills acquisition should be women) (ADB Georgia project) <input type="checkbox"/> Conduct consultations to reflect women's voices (e.g., at least two consultations for planning, design, operation, and maintenance of water supply and sanitation projects, with at least 30% of participants being women) (ADB Georgia project)
Women in technical positions are few	<input type="checkbox"/> Encourage to hire female engineers, introduction of quota system <input type="checkbox"/> Strengthen the capacity of women in technical positions (e.g., identify training needs of female engineers and technical staff; make sure that at least 30% of participants in training for technical, financial, managerial, and leadership skills acquisition are women; and at least 50% of participants in Communication and Information Technology (ICT) related training are women) (ADB Georgia project) <input type="checkbox"/> Create a comfortable work environment for women (e.g., childcare facilities, childcare leave) (e.g., implementation of networking events for female engineers and staff (ADB Georgia project)) <input type="checkbox"/> Conduct training of female students in collaboration with universities and vocational training schools (e.g., 50% of internship placements for students graduating from undergraduate programs in STEM fields are allocated to female students; educational institutions encourage female students to apply

ⁱⁱ The ADB Georgia project, which provides examples of policy, institutional, and organizational arrangements of the government and executing agencies, refers to the ADB's Sustainable Water Supply and Sanitation Sector Development Program (2021-2025) conducted in Georgia. Please refer to the respective URLs for the project's summary (<https://www.adb.org/projects/51132-002/main>) and the Gender Action Plan developed in the said project (<https://www.adb.org/sites/default/files/project-documents/51132/51132-002-gap-en.pdf>).

	(ADB Georgia project))
 Since the introduction of a quota system and active promotion of women's employment are matters related to the personnel of the executing agencies, there could be cases where it will be difficult to actively incorporate them in the project. ADB's efforts are helpful in this regard, and as in the Georgia project mentioned above, ADB clearly positions these as activities that should be undertaken within the project's gender action plan and in many cases specific quantitative targets are set.	
Lack of clarity in response to harassment and SGBV	<input type="checkbox"/> Clarify how to prevent and identify harassment and SGBV in the workplace and put into practice by staff <input type="checkbox"/> Clarify mechanisms and procedures for responding to cases of harassment and SGBV <input type="checkbox"/> Implement of training on prevention of harassment and SGBV
Status of access and issues in the target area	
To understand the current situation, data and information are not collected separately for women and men. Thus, it is impossible to grasp the difference in the situation where women and men are placed	<input type="checkbox"/> Collect data by gender in baseline surveys conducted prior to the project <input type="checkbox"/> Collect data and information to understand the gender status of the target area
Gender issues related to water supply and sanitation have not been identified or incorporated into the project	<input type="checkbox"/> Identify gender issues and needs through public consultation <input type="checkbox"/> Encourage women's participation in public consultations
Gender division of labor	
There is a bias in the division of roles between women and men in the use and maintenance of facilities	<input type="checkbox"/> Clarify the division of roles between women and men in the use and maintenance of facilities without gender bias <input type="checkbox"/> Encourage women's participation such as in technical training, training on infectious diseases <input type="checkbox"/> Conduct gender awareness training for the community
Providing unpaid work at home and the community is perceived as a role for women	<input type="checkbox"/> Actively employ women <input type="checkbox"/> Conduct gender awareness training for the community  Gender awareness-raising about division of roles by gender and women's roles is effective for men when conducted by men's groups
Participation in decision-making	
Women often have a weak voice in their communities	<input type="checkbox"/> Assign a certain percentage of membership and leadership such as of water management committees, sanitation committees to women <input type="checkbox"/> When it is difficult to have women and men in the same room, establish women-only committees as needed
Needs	
Needs related to facility location, specifications, and design differ between women and men, and women's needs are not easily reflected	<input type="checkbox"/> Conduct gender-specific hearings or public consultations such as on facility location, specifications, design <input type="checkbox"/> Formulate facility installation and design plans that consider the needs of different genders <input type="checkbox"/> Conduct satisfaction surveys by gender (in ex-post project phase)  Depending on identified women's needs, the following initiatives incorporate the following activities into the installation and design planning of water supply and sanitation facilities: [Water supply facilities and equipment] <ul style="list-style-type: none"> - Install as close to the house as possible (If the distance is too far, also consider installing electric lights and conduct public awareness activities with SGBV risks) - Install a foot-operated pump (not a hand-operated pump) - Install laundry facilities (near a community faucet)

	<ul style="list-style-type: none"> - Install a platform on which to place water containers (so that the containers can be easily placed on the head) - Connection to facilities where sanitation management is important, such as delivery facilities <p>[Sanitation facilities and equipment]</p> <ul style="list-style-type: none"> - While giving maximum consideration for privacy and safety, also consider convenience (if entrances are easily visible, they will not be used, especially during the day) - Pour-flush toilets (simple stall toilets that use hand pails) may increase the workload of women fetching water. Thus, simultaneously, check if there is a place to fetch water nearby
Female-headed households and the poor have difficulty paying usage and maintenance fees in some cases	<input type="checkbox"/> Establish lower fees or provide subsidies for the poorest groups, such as female-headed households
Construction of infrastructure	
<ul style="list-style-type: none"> - Employers tend to hire men over women for construction work of infrastructure. - Women face challenges in the working environment. 	<input type="checkbox"/> Promote women's employment as construction workers through, for example, setting a percentage of women among all employees (a quota system). <input type="checkbox"/> Promote/arrange a female-friendly working environment, such as <ul style="list-style-type: none"> ➢ equal pay for equal work regardless of their gender, ➢ ensure privacy and safety for women through different ways, including setting up separate toilets for women and men (and possibly all-user toilets), separated break space for women and men, and lighting for nighttime work; and <input type="checkbox"/> Write down above in an agreement with a contractor.
Risks of SGBV increase among female construction workers and local women around the site during a period of construction.	<input type="checkbox"/> Take safety measures at the sites, including education of gender equality and women's empowerment as well as human rights to construction workers. <input type="checkbox"/> Write down prevention and responding to Sexual Exploitation, Abuse, and Harassment (SEAH) in an agreement with a contractor.

Good practices in gender mainstreaming

The following shows good practices in gender mainstreaming relating to two or three of the above aspects.

Example of other donors' activities 1: Asian Development Bank (ADB), Activities to Improve women's leadership

Activities with a gender perspective: ADB's water supply projects in Bangladesh, Cambodia, Georgia, Laos, Nepal, Pakistan, Sri Lanka, and other countries incorporate an allocation system (quota) and specific targets are set aiming to support women's leadership. For example, the Lao PDR project calls for at least 30% of the Village Development Committee (VDC) members to be women. In addition, it offers scholarships and mentoring programs in high schools for female students who are expected to become engineers, technicians, and environmental engineers in the water supply sector in the future. It also has established a gender-mentoring network of female professionals who are expected to become managers in the future in both public and private sectors to improve women's leadership in decision making in the water resources sector. (Reference: ADB (2014), Women, Water and Leadership, in ADB Policy Brief, No.24, <https://www.adb.org/sites/default/files/publication/150953/women-water-and-leadership.pdf>)

Example of other donors' activities 2: Asian Development Bank Fiji "Urban Water Supply and Wastewater Management Investment Program", 2016

Project summary: The project (loan) aims to improve access to urban water supply and wastewater treatment services to secure sustainable development and improved public health in Suva, the capital of Fiji. The three outcomes are (1) improved water supply capacity and access to safe water (water supply), (2) improved wastewater treatment and management capacity, and (3) strengthen the operation and sustainable service delivery capacity of the Fiji Water Authority.

(Reference URL: <https://www.adb.org/projects/49001-002/main>)

Activities with a gender perspective

- (1) Implementation of water supply projects
 - Establishing employment, terms and conditions of employment, and wages without gender disparities by conducting orientations to construction contractors and develop facilities for healthy and safe working conditions (e.g., separate rest areas and restrooms for women and men).
 - Promoting women's participation in the decision-making process (at least 30% of planning team members must be women)
 - Inclusion of women's voices in project planning through public consultation
 - Addressing the needs of female-headed households (10% of the population served, subsidized water use fees)
 - Establishment of gender-neutral employment, terms and conditions of employment, and wages by conducting orientations to construction contractors, alongside construction of facilities that aim for healthy and safe work (e.g., separate rest areas and toilets for women and men)
- (2) Strengthening the capacity of executing agencies
 - Conducting gender training for management and staff of executing agencies to raise awareness on gender issues related to urban water supply and to acquire the necessary knowledge and skills
 - Development of strategies and guidelines to promote and monitor efforts for gender equality within the organization
 - Securing budgets to promote gender mainstreaming within the project
 - Placement of women in complaint relief mechanisms, including sexual harassment (50%)
 - Assistance by executing agencies in developing human resources policies with a gender perspective (hiring and promotion of women)
 - Participation of women in training to acquire skills related to finance, facilities management, technology, and project management (at least 30%)

(Reference URL: <https://www.adb.org/sites/default/files/project-document/216536/49001-002-gap.pdf>)

Step 3. Setting gender indicators

After considering activities with a gender perspective, indicators (gender indicators) will be set to measure expected results (changes) of such activities. When setting indicators, set quantitative indicators as much as possible to objectively assess the status of the changes. If it is difficult to set quantitative indicators, qualitative indicators can be set to measure the progress of change. Examples of gender indicators are indicated below.

List of gender indicators

Policies and systems
<input type="checkbox"/> Relevant policies and plans that incorporate gender perspectives (type and number) <input type="checkbox"/> Relevant policies and plans that incorporate gender perspectives (contents) <input type="checkbox"/> Gender action plans that have been developed
Organizational structure
[Gender mainstreaming activities]
<input type="checkbox"/> Strategies and plans for gender mainstreaming <input type="checkbox"/> Increased budget for gender mainstreaming
[Gender training for executives and staff]
<input type="checkbox"/> Number of gender training sessions for executives and staff <input type="checkbox"/> Number of training participants (by gender and age) <input type="checkbox"/> Changes in gender awareness after training (comparison of pre- and post-questionnaire results)
[Female executives]
<input type="checkbox"/> Increase in the number and percentage of female executives <input type="checkbox"/> Percentage of quota to increase female executives (planned and actual)
[Female staff and technical staff]
<input type="checkbox"/> Increase in the number and percentage of female staff and engineers <input type="checkbox"/> Percentage of quota for active employment of women (planned and actual) <input type="checkbox"/> Personnel policy for active employment of women
[Work environment]
<input type="checkbox"/> Decrease in the number of female retirees <input type="checkbox"/> Satisfaction level of female employees regarding work environment
[Strengthening the capabilities of female technical staff]
<input type="checkbox"/> Technical training for female technical staff (number of times held, number of participants) <input type="checkbox"/> Participation in various training programs (male/female ratio) <input type="checkbox"/> Identified training needs of female technical staff
[Harassment and SGBV in the workplace]
<input type="checkbox"/> Number of reports of harassment and SGBV in the workplace (by type) <input type="checkbox"/> Number of incidents of harassment and SGBV in the workplace (by type) <input type="checkbox"/> Training on harassment and SGBV (number of times conducted, number of participants, by gender) <input type="checkbox"/> Changes in staff's understanding and awareness regarding harassment and SGBV
Gender division of labor
[Participation of women in technical training]
<input type="checkbox"/> Increase in the number and percentage of female residents who participated in technical training <input type="checkbox"/> Technology acquired by women
[Gender awareness training to communities]
<input type="checkbox"/> Number of training sessions <input type="checkbox"/> Number of training participants (by gender and age) <input type="checkbox"/> Changes in gender awareness after the training (comparison of pre- and post-questionnaire results)
[Employment of women]
<input type="checkbox"/> Number and percentage of women employed by the project
Participation in decision-making
<input type="checkbox"/> Increase in the number and percentage of female members and leaders in water management and sanitation committees <input type="checkbox"/> Percentage of quota for active participation of women (planned and actual)

Related data
<input type="checkbox"/> Type and number of gender-specific data obtained
Needs
<input type="checkbox"/> Gender-specific needs incorporated into facility planning
<input type="checkbox"/> Satisfaction levels by gender

Indicators for infrastructure development

Subsector	Infrastructure type	Sample indicators
Urban water supply	Water intake, water storage facilities, water supply equipment, water purification facilities, water supply and distribution facilities, water distribution pipes, pumping facilities	<input type="checkbox"/> Population served (by gender) <input type="checkbox"/> Percentage of population with access to safe and controlled drinking water services (by gender) <input type="checkbox"/> Per capita volume of water supplied (by gender) <input type="checkbox"/> Reduction in waterborne diseases (by gender and age)
Rural water supply	Wells and hand pumps, pumps, common taps, elevated water tanks, well drilling related equipment	<input type="checkbox"/> Population benefited (by gender) <input type="checkbox"/> Percentage of population with access to safe and controlled drinking water services (by gender) <input type="checkbox"/> Per capita volume of water supplied (by gender) <input type="checkbox"/> Population living in an improved water supply status (by gender) <input type="checkbox"/> Reduction in time spent fetching water (by gender and age) <input type="checkbox"/> Distance covered to fetch water <input type="checkbox"/> Reduction in waterborne diseases (by gender and age) <input type="checkbox"/> Enrollment rate (by gender and age) <input type="checkbox"/> Increase in female employment rate <input type="checkbox"/> Increase in leisure time owing to decrease in women's time spent fetching water <input type="checkbox"/> Number of women who started new income generating activities owing to decreased time spent fetching water, new income earned <input type="checkbox"/> Number of SGBV incidents on water fetching routes and at water fetching sites
Sanitation facilities	Public toilets, places for hand washing, plumbing for hand washing	<input type="checkbox"/> Number of beneficiaries (by gender and age) <input type="checkbox"/> Number of users (by gender and age) <input type="checkbox"/> Percentage of people who use outdoor defecation (by gender and age) <input type="checkbox"/> Reduction in waterborne diseases (by gender and age) <input type="checkbox"/> Women and girls' anxiety about safety and privacy when using the toilet <input type="checkbox"/> Number and percentage of women and girls with appropriate menstrual hygiene management <input type="checkbox"/> Number of SGBV occurrences in communal toilets and during outdoor defecation <input type="checkbox"/> School students' awareness of hygiene (by gender and age) <input type="checkbox"/> Girls' willingness to go to school <input type="checkbox"/> Maternal mortality rate (relationship between childbirth in unsanitary conditions and mortality)

Step 4. Gender responsive project implementation and monitoring

A project should also include actions to respond to situations of the stakeholders of different gender, including their gender issues and needs identified in Step 1. In monitoring, gender-disaggregated data and gender indicators set in Step 3 help understand the implementation status of the activities, including the participation rates of women and men, and assess if the expected results are being achieved. If unexpected gender issues have been identified during the monitoring, effective solutions should be formulated, assessed on the compatibility with the project scope and progress, and added in the project as new activities. Where the situation allows, it is desirable to revise project plans, such as Project Design Matrix (PDM) and Plan of Operation (PO) accordingly.

The table below illustrates points to keep in mind during project implementation and monitoring.

Points to remember for gender-responsive project implementation and monitoring

Category	Points to remember
Implementation structure	<ul style="list-style-type: none"> ● Except where there is a specific reason, check the gender balance of the Counter Part (C/P) and consider measures to improve a gender balance if there is a disproportion. ● Conduct gender training for C/Ps, project staff, and Japanese experts prior to and during project implementation. If lack of gender understanding and awareness is found during the training, consider ways to continuously raise awareness. ● When hiring project staff, let them know clearly the clauses prohibiting sexual exploitation, abuse and harassment (SEAH) to beneficiaries, and have them sign a consent form. ● Japanese experts should fully understand the culture and customs of the target country/region, raise awareness of sexual exploitation, abuse and harassment (SEAH) in the field of international cooperation, and remind each other to be self-aware and to avoid unintentional discriminatory words and actions. ● Establish consultation services and channels available to all concerned parties to address SGBV and harassment. ● Assign international and local gender specialists as required.
Implementation of activities	<ul style="list-style-type: none"> ● When facilitating trainings or other participatory activities, set time and location to facilitate the participation of women who are busy with household chores and care work. In addition, pay attention not to increase the burden of labor and responsibilities on any particular person or group. ● If the literacy rate among women is low, devise ways to convey information and skills through training and technical guidance (e.g., explain using illustrations and photographs instead of texts, conduct group learning), and continuously monitor participation to ensure that those who need the information and skills are attending the training. ● Create an environment that would be easier for women to participate and to speak up, considering factors such as member composition and the way meetings are conducted, so that women are always included in the decision-making process and their voices are reflected. ● Pay attention to the diversity among women, since women also face different circumstances, challenges, needs, and impacts from development projects depending on their age, social class, ethnicity, disability, education level, and family/household type. ● Involve and promote understanding among boys, men, and local residents. ● If gender norms and discrimination are strong at the project site, promoting understanding and cooperation of influential community leaders, religious leaders, and others will be particularly important.
Monitoring	<ul style="list-style-type: none"> ● When participation in project activities and benefits from these activities are disproportionate to specific gender without justifiable reasons, identify the causes and

	<p>factors and consider necessary measures. (e.g., participation in training, lower percentage of women in employment compared to men)</p> <ul style="list-style-type: none">● Check that the time and place of activities are set so that women who are busy with household chores and care work can easily participate in the activities. Also, check whether participation in activities is increasing the burden on specific persons/groups.● If gender differences in understanding or practice of training are observed, identify and address the causes.● In case there are any positive or negative impacts that were not anticipated at the planning stage, consider ways to expand positive impacts and minimize negative impacts.
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Step 5. Gender mainstreaming evaluation

In the evaluation phase, project achievements, implementation process, outcomes, and impacts should be assessed with a gender perspective, while evaluating the project in accordance with a prescribed project evaluation framework (ex-post evaluation) and evaluation methodology (DAC six evaluation criteria). When identifying the outcomes and impacts, attention needs to be paid to signs of emerging outcomes and impacts as well as already achieved outcomes and impacts. If there is difference in benefits received by women and men, details of the difference and its causes should be analyzed.

It should be noted that during the evaluation, whether be it quantitative or qualitative, gender-disaggregated data and information should be collected, whenever possible, and analyzed. When conducting interviews, attention should be given to gender balance and attributes of the survey participants. Group formation (either single-gender or mixed-gender) will be decided depending on the content of the interview. Gender composition of an evaluation team should also be decided after thorough consideration.

The following shows gender-responsive evaluation questions listed in accordance with the DAC six evaluation criteria.

Check points for gender-responsive evaluation

OECD DAC 6 evaluation criteria	Check points
Relevance	<p>Development policies and needs of the target country</p> <ul style="list-style-type: none"> - Are the gender-responsive activities of the project consistent with priorities of gender equality policies and energy policies? <p>Inclusion of people with special needs</p> <ul style="list-style-type: none"> - Do specific gender or groups occupy the majority of beneficiaries? - Prior to beneficiary selection, was information collected from women and women's groups? - Did the project promote the participation of female-headed households, women with disabilities, and elderly women? <p>Appropriateness of the plan and approach</p> <ul style="list-style-type: none"> - Have methods been taken that do not exclude certain gender groups? - Did the project take an approach to benefit diverse people? - Have methods been taken that ensure no increase in the workload of a particular gender group? - Did the project made any revision based on the monitoring results?
Coherence	<p>Coherence between global goals and initiatives such as SDGs and global norms and standards</p> <ul style="list-style-type: none"> - Did the gender-responsive project activities align with global initiatives (e.g., SE4All, etc.)? - Did the aforementioned activities contribute to achievement of global goals such as SDGs
Efficiency	<ul style="list-style-type: none"> - Have the knowledge and experience of women, girls, and women's groups been utilized? - Are the training participants in Japan and the third countries gender-balanced?
Effectiveness	<ul style="list-style-type: none"> - Did the gender-responsive activities achieve the expected results? - Did the aforementioned activities contribute to achievement of the project objectives and outcomes? - Satisfaction of users (of constructed facilities), by gender
Impact	<ul style="list-style-type: none"> - Did the gender-responsive activities facilitate positive impacts? (Example: promoting women's leadership in communities, reducing domestic violence and SGBV against women and girls) - If there are any negative impacts, are there any differences in impacts depending on

	<p>people's attributes such as gender and age? (e.g. Increased work burden for women and girls, increased domestic violence and SGBV against women and girls)</p> <ul style="list-style-type: none"> - Have there been any changes in the general perception or actual situation of women's economic, social and political participation?
Sustainability	<ul style="list-style-type: none"> - Will women and girls be able to continue their activities without difficulty? - Will women and girls be able to participate in energy-related activities continuously and contribute to the sustainability of project effectiveness? - Will the role and contribution of women and girls in the community and households be recognized and will there be continued cooperation between women and men in water and sanitation-related activities? - Will relevant agencies keep implementing gender mainstreaming? - Will relevant agencies keep facilitating women's participation in decision-making? - Will the voices of women and girls continue to be reflected in policies, measures, and institutions of the water resources sector? - Will activities with gender perspective be reflected in the water resources sector policies and plans? - Will activities with gender perspective be reflected in the water resources sector budget?

Regarding effectiveness (outcomes), impact, and sustainability, identify how gender-responsive activities have contributed to the promotion of gender equality and women's empowerment, taking into account the three aspects of agency, relations, and structure and systems (see Step 2). Specifically, "agency" refers to what women have become able to do as a result of the implementation of the activities (including not only their own abilities but also changes in the external environment surrounding the women). "Relations" refers to how the activities have helped transform the gender relations among stakeholders and in societies. As for "structure and systems," the scope of evaluation includes how the activities have been integrated into policies and systems, as well as operational policies and plans of the implementing agencies, and how gender equality has been promoted in the organization. If a negative impact is identified, lessons learned should be extracted as much as possible for reflecting in future projects.

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Endnotes

¹ ADB (2006) Gender Checklist: Water Supply and Sanitation

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² UN Women (2021) <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs/sdg-6-clean-water-sanitation>

³ In addition, women spend three times as much time as men in this type of unpaid childcare, caregiving, and domestic work, and rural women, women in poverty, and women with young children are said to spend even more time in domestic work. UN Women (2019) Progress of the World's Women 2019-2020: Families in a Changing World. P.170.

⁴ WaterAid (2021) <https://www.wateraid.org/uk/the-crisis/tackling-inequality/girls-and-women>

⁵ JICA (2016) Guidelines for Gender Mainstreaming. p3.

⁶ WHO/UNICEF JWP (2021), "Water, sanitation, and hygiene in health care facilities: Practical steps to achieve universal access for quality care". <https://www.unwater.org/publications/water-sanitation-and-hygiene-in-health-care-facilities-practical-steps-to-achieve-universal-access-for-quality-care/>

⁷ UN-Water (2021) <https://www.unwater.org/water-facts/gender/>

⁸ Global Water Partnership South Asia, (-), About IWRM

<https://www.gwp.org/en/gwp-SAS/ABOUT-GWP-SAS/WHY/About-IWRM/>

⁹ JICA (2016) Guidelines for Gender Mainstreaming. P5.

¹⁰ Global Water Partnership (2018) About IWRA

<https://www.gwp.org/en/gwp-SAS/ABOUT-GWP-SAS/WHY/About-IWRM/>

¹¹ [http://www.un-documents.net/h2o-](http://www.un-documents.net/h2o-dub.htm#:~:text=The%20Dublin%20Statement%20on%20Water%20and%20Sustainable%20Development,to%20sustainable%20development%20and%20protection%20of%20the%20environment)

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¹² A quota system is one of the methods taken with the aim of achieving substantial equal opportunity by quotas, such as providing special opportunities within a certain range to those who are disadvantaged due to social or structural discrimination. For example, gender quotas in the political field are a system of allocating the ratio of women or men to women on the basis of gender, with the aim of correcting gender disparities in the legislature. (Reference: Website of the Cabinet Office of Japan

https://www.gender.go.jp/research/kenkyu/pdf/gaikou_research/2020/05.pdf)