

## Country Questionnaire for Indicator 6.5.1

### Degree of integrated water resources management implementation (0 – 100)

#### Introduction

UN Environment is supporting countries in monitoring and reporting on Sustainable Development Goal (SDG) 6, including target 6.5: “By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate”<sup>1</sup>. The target supports the equitable and efficient use of water resources, which is essential for social and economic development, as well as environmental sustainability.

Indicator 6.5.1 is: Degree of integrated water resources management implementation (0 – 100). Please refer to the “[Step-by-step Monitoring Methodology for Indicator 6.5.1](#)” for a full description of indicator 6.5.1, which provides additional guidance on completing the questionnaire, data collection, management and use.

The indicator score calculated using the responses to this questionnaire represents the current degree of IWRM implementation, on a scale from 0 to 100. The process of completing the questionnaire, including national multi-stakeholder workshops, supports countries in identifying barriers or delays to further progress, thereby providing a starting point for considering possible correcting actions towards achieving the IWRM target. The actions to achieve target 6.5 directly underpin the various other water-related targets within SDG-6.

The IWRM Focal Point is responsible for submitting the final completed questionnaire to UN Environment for formal submission. This can be done by using one of the following options (content is identical):

**Option 1:** Complete and submit the online version of the questionnaire in SurveyMonkey from the link available here:

<https://www.surveymonkey.com/r/LGLWVNH>

**Option 2:** Complete and submit the Microsoft Word version of the questionnaire to the HelpDesk either electronically or via post or fax:

HelpDesk at UN Environment

Email: [lwrn.Sdg6survey@unep.org](mailto:lwrn.Sdg6survey@unep.org)

Upon request, the helpdesk may provide support to the national IWRM focal points on matters such as interpretation of questions and thresholds, the appropriate level of stakeholder engagement in countries, and support to uploading/submitted the final indicator scores.

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<sup>1</sup> This is being done as part of the GEMI initiative, coordinated by UN-Water, for monitoring and reporting of SDG targets 6.3 - 6.6, 6a and 6b. Support is provided in close collaboration with a number of UN-Water members and partners.

## About the Questionnaire

The questionnaire contains four sections, each covering a key component of IWRM:

- 1. Enabling Environment:** Creating the conditions that help to support the implementation of IWRM, which includes the most typical policy, legal and strategic planning tools for IWRM.
- 2. Institutions and Participation:** The range and roles of political, social, economic and administrative institutions and other stakeholder groups that help to support the implementation of IWRM.
- 3. Management Instruments:** The tools and activities that enable decision-makers and users to make rational and informed choices between alternative actions.
- 4. Financing:** Budgeting and financing made available and used for water resources development and management from various sources.

Each section has two sub-sections covering the “National” and “Other” levels. Various levels are covered to address the target 6.5 wording “... at all levels.” “Other” levels include sub-national, basin, local and transboundary (see glossary). Questions relate to these levels depending on their relevance to the particular aspect of IWRM.

For each question, a score between 0 and 100 should be selected, in increments of 10, unless the country judges the question to be ‘not applicable (n/a)’. The score selection is guided by descriptive text for six thresholds, which are specific to each question. If a country judges the degree of implementation to be between two thresholds, the increment of 10 between the two thresholds may be selected. The potential scores that may be given for each question are: 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100.

The thresholds for each question are defined sequentially. This means that the criteria for all lower levels of implementation must be met in order for a country to respond that it has reached a specific level of implementation for each question. Furthermore, if an aspect of IWRM is specified in a lower threshold, it is implicit that this aspect must also be addressed in the higher thresholds for that question.

**The thresholds are indicative and are meant to guide countries in choosing the most appropriate responses, i.e. selected responses should be a reasonable match, but do not have to be a perfect match, as each country is unique.**

Respondents are strongly encouraged to add their justification for the score given in the space provided after each question, referencing evidence wherever possible (e.g. quoting reports, laws, plans etc.). This will significantly increase the robustness and objectivity of the questionnaire. It will help different stakeholder groups within the country to reach agreement on responses to each question; help countries analyse what is required to reach the next threshold; help countries to track progress over time; and allow for standardisation of degrees of implementation between countries. Countries are also welcome to provide additional relevant information or links to further documentation in the spaces provided after each question. Note that if ‘Very high’ or ‘n/a’ (not applicable) is selected as a response to any of the questions, the respondents are required to provide a brief justification for this.

Indicator 6.5.1 is calculated as follows:

1. Calculate the average score of each of the four sections by averaging all questions scores in each section.
2. Calculate the average of the four section scores to give the overall score for indicator 6.5.1.

If 'not applicable' is selected for any question, this will not be included in the indicator calculations, and therefore will not reduce the average score. All questions should be given a score, unless 'n/a' is selected. It is not possible to omit questions.

## Glossary

- **Authorities / organizations /institutions / departments:** administrative units.
- **Basins:** Includes rivers, lakes and aquifers, unless otherwise stipulated. For surface water, the term is interchangeable with ‘catchments’ and ‘watersheds’.
- **Federal countries:** Refers to countries made up of federated states, provinces, territories or similar terms.
- **IWRM:** Integrated Water Resources Management (IWRM) is a process that promotes the coordinated development and management of water, land and related resources in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. IWRM is not an end in itself but a means of achieving three key strategic objectives:
  - efficiency to use water resources in the best way possible;
  - equity in the allocation of water across social and economic groups;
  - environmental sustainability, to protect the water resource base, as well as associated ecosystems.
- **‘Most significant’ interstate basins:** For federal countries only. Basins that cross state/provincial borders and are of reasonably high significance to those states and/or the country.
- **National (level):** Refers to the highest level of administration in a country.
- **Sub-national / state (level):** refers to levels of administration other than national. For federated countries, these are likely to be provinces or states. Non-federated countries may still have sub-national jurisdictions with some responsibility for water resources management, e.g. regions, counties, departments.
- **Programs:** Nation-wide plans of action with long-term objectives, for example to strengthen monitoring, knowledge sharing and capacity development, with details on what work is to be done, by whom, when, and what means or resources will be used.
- **Stakeholders:** In this questionnaire, stakeholders are the main groups important for water resources management, development and use. Examples of stakeholders in each group are given in footnotes as they appear in the survey.
- **Water Resources Management** is the activity of planning, developing, distributing and managing the optimum use of water resources. Ideally, water resource management planning has regard to all the competing demands for water and seeks to allocate water on an equitable basis to satisfy all uses and demands. An integrated approach (see IWRM) is needed to ensure water resources management is not isolated within sector silos resulting to inefficiencies, conflicts and unsustainable resource use. Generally in this questionnaire, WRM activities (e.g. policies, laws, capacity development), must be based on IWRM approaches to score 40 and above.

**Transboundary questions:**

The transboundary questions for indicator 6.5.1 focus on the degree of implementation of IWRM at the transboundary level, as relevant to implementation of IWRM ‘at all levels’, as specified in target 6.5. Countries sharing basins of transboundary waters (rivers, lakes or aquifers) should answer the questions on transboundary issues. This information is complemented by indicator 6.5.2 ‘Proportion of transboundary basin area with an operational arrangement for water cooperation’.

To enable tracking of progress over time and for transparency, in the table below please list the transboundary (or ‘international’) basins or aquifers that are included in this survey. Only the most important transboundary basins or aquifers that are regarded as significant, in terms of economic, social or environmental value to the country (or neighbouring countries), need to be included in this survey. It is up to countries to decide which ones these are. When answering transboundary questions, the majority of the basins below must meet the criteria described in each threshold to achieve the score for that threshold.

	<b>Important basin / aquifer</b>
1.	Ganges
2.	Brahmaputra
3.	Meghna
4.	Coastal area
5.	Haor areas
6.	Hill tracts

## 1. Enabling Environment

This section covers the enabling environment, which is about creating the conditions that help to support the implementation of IWRM. It includes the most typical policy, legal and planning tools for IWRM<sup>2</sup>. Please refer to the glossary for any terms that may require further explanation. Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds.

Enter your score, **in increments of 10**, from 0-100, or n/a (not applicable), in the yellow cell immediately below each question. You are strongly encouraged to provide the justification and references to evidence for the score in the grey cell to the right of the score. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information required are provided. You may also provide further information you think is relevant, or links to further documentation. If 'Very high (100)' or 'n/a' is selected, a justification should be provided.

1. Enabling Environment							
		Degree of implementation (0 – 100)					
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
<b>1.1 What is the status of policies, laws and plans to support Integrated Water Resources Management (IWRM) at the national level?</b>							
a	National water resources <b>policy</b> , or similar	Development <b>not started</b> or not progressing.	Exists, but <b>not based on IWRM</b> .	<b>Based on IWRM, approved</b> by government and <b>starting to be used</b> by authorities to guide work.	<b>Being used by the majority</b> of relevant authorities to guide work.	<b>Policy objectives consistently achieved.</b>	Objectives consistently achieved, and <b>periodically reviewed and revised.</b>
	Score or n/a:	[70]	<b>Justification/evidence</b>	National Water Policy (NWPo), 1999; Coastal Zone Policy (CZPo) 2005; Environment Policy, 1992; National Agriculture Policy, 2013; Minor Irrigation Policy, 2017; National Forest Policy, 2016, Fisheries Policy, 1998; National Jalmahal Policy, 2009 As per NWPo, Bangladesh Water Development Board (BWDB) will implement all major surface water development projects and other FCDI projects with command area above 1000 hectares. The Local Government will implement FCDI projects having a command area of 1000 hectares or less after identification and appraisal through an interagency Project Appraisal Committee. Accordingly, BWDB under Ministry of Water Resources and Local Government Division implement projects in conformity of NWPo. At the project formulation stage, the implementing agencies review the environmental and other relevant policies to integrate the policy directives for better integration, coordination and sustainability of the environment.			
b	National <b>water resources law(s)</b>	Development <b>not started</b> or not progressing.	Exists, but <b>not based on IWRM</b> .	<b>Based on IWRM, approved by government</b> and <b>starting to be applied</b> by authorities.	<b>Being applied by the majority</b> of relevant authorities.	<b>All laws are being applied</b> across the country.	<b>All laws are enforced</b> across the country, and <b>all people and organizations are held accountable.</b>

<sup>2</sup> For examples of good practices of policies, laws and plans, please see: GWP (Editor) (2004): Catalyzing Change: A handbook for developing IWRM and water efficiency strategies. Stockholm: Global Water Partnership (GWP).

	Score or n/a:	[60]	Justification/evidence	Embankment and Drainage Act, 1952; Groundwater Management Ordinance, 1985; River Research Institute Act, 1990, Water Resources Planning Act, 1992; Bangladesh Water and Flood Management Strategy, 1995; Bangladesh Water Development Act, 2000; Bangladesh Water Act, 2013; Guidelines for Participatory Water Management, 2000; Participatory Water Management Rules, 2014; Draft Bangladesh Water Rules, 2017 (draft); Coastal Development Strategy, 2006; National Water Management Plan -Development Strategy, 2001; Bangladesh River Conservation Commission Act, 2013; Bangladesh Environment Conservation Act, 1995 (amended 2010), Environment Conservation Rules, 1997; Fisheries Conservation Act, 1950; Bangladesh Haor and Wetland Development Board Act, 2013; Forest Act, 1927 All the projects are submitted to the Department of Environment for Environmental clearance depending on the necessity as per Act. The concerned department applies the laws for protecting the fisheries, forest and other natural resources.				
			Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c	National <b>integrated water resources management (IWRM) plans</b> , or similar	Development <b>not started</b> or not progressing.	<b>Being prepared</b> , but not approved by government.	<b>Approved</b> by government and <b>starting to be implemented</b> by authorities.	<b>Being implemented by the majority</b> of relevant authorities.	Plan <b>objectives consistently achieved</b> .	Objectives consistently achieved, and <b>periodically reviewed and revised</b> .	
	Score or n/a:	[60]	Justification/evidence	National Water Plan, 1986 and 1989; National Water Management Plan, 2004 2001 ; Haor Master Plan, 2013; Agricultural Master Plan for Southern Region, 2013; Delta Plan-2100 (Draft), Bangladesh Climate Change Strategy and Action Plan (BCCSAP), 2009; National Adaptation Plan of Action, 2005; Five Year Plan; Perspective Plan (2010-21) During formulation and approval of any project, the link with the said plan is judged critically and therefore approved. For example, WARPO is acting as the clearing house for the project related to the water resources development and management and asses the relevancy of the project with this policy and plan.				
<b>1.2 What is the status of policies, laws and plans to support IWRM at other levels?</b>								
a	<b>Sub-national<sup>3</sup> water resources policies</b> or similar	Development <b>not started or delayed in most sub-national jurisdictions</b> .	Exist in <b>most jurisdictions</b> , but <b>not necessarily based on IWRM</b> .	<b>Based on IWRM, approved by the majority</b> of authorities and starting to be used to guide work.	<b>Being used by the majority of relevant</b> authorities to guide work.	Policy objectives <b>consistently achieved by a majority of authorities</b> .	Objectives <b>consistently achieved by all</b> authorities, and <b>periodically reviewed and revised</b> .	
	Score or n/a:	[n/a]	Justification/evidence	[Enter text here. E.g. reference to policies, reports, evidence of implementation of policies]				
b	<b>Basin/aquifer management plans<sup>4</sup></b> or similar, based on IWRM	Development <b>not started or delayed in most basins/aquifers</b> of national importance.	<b>Being prepared for most</b> basins/aquifers of national importance.	<b>Approved in the majority</b> of basins/aquifers and starting to be used by authorities.	<b>Being implemented in the majority of</b> basins/aquifers.	Plan <b>objectives consistently achieved in majority</b> of basins/aquifers.	Objectives consistently achieved in <b>all basins/aquifers</b> , and <b>periodically reviewed and revised</b> .	

<sup>3</sup> Sub-national includes jurisdictions not at national level, such as: states, provinces, counties, regions, or departments.

<sup>4</sup> At the basin/aquifer level, please include only the most important river basins, lake basins and aquifers for water supply or other reasons. This question only refers to these basins/aquifers. These basins/aquifers are likely to cross administrative borders, including state/provincial borders for federal countries. The basins may also cross national borders, but this question refers to management of the portions of basins within each country. Question 1.2c refers specifically to transboundary arrangements for basins/aquifers shared by countries.

Score or n/a:	[40]	Justification/evidence	Haor Master Plan, 2013; National Water Management Plan (NWMP), 2001; Regional Plan on NWMP 2001, Groundwater Management Ordinance, 1985, Delta Plan-2100 (Draft) The national water policy states to take considerable effort and time for Bangladesh to work out joint plans for different river basins with other co-riparian countries. As a long-term measure, therefore, it is the policy of the government to undertake essential steps for realizing basin-wide planning for development of the resources of the rivers entering its borders. The NWMP outlines and priorities the development of the Ganges, Brahmaputra and Meghna Basin respectively. The Haor Master Plan includes the development plan for the Northeast region (Haor basin) of Bangladesh, The Delta Plan-2100 divides the whole country into six hotspots and outlines the integrated development of these hotspots.
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		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c	<b>Arrangements for transboundary water management in most important basins / aquifers<sup>5</sup></b>	Development not started or not progressing.	<b>Being prepared or negotiated.</b>	<b>Arrangements are adopted.</b>	Arrangements' provisions are <b>partly implemented.</b>	<b>Most of the arrangements' provisions are implemented.</b>	The arrangements' provisions are <b>fully implemented.</b>
Score or n/a:	[20]	Justification/evidence	Land Boundary Agreement Act, 1974; Ganges Water Sharing Treaty, 1996; Arrangement between Bangladesh and India for sharing the flood related data of transboundary rivers, MoU between Bangladesh and China for Hydrological Data Sharing 2008 (renewed on 2014), Joint Working Group of Bangladesh, Bhutan, India and Nepal The Ganges Water Sharing Treaty ensures the dry season flow in the Ganges River. India is sharing the flood data of different stations of the transboundary rivers during flood season. The hydrological data of the upstream of the Brahmaputra River is provided by China. <b>There are 57 transboundary rivers in Bangladesh of which 54 from India and 3 from Myanmar enter into Bangladesh. But only 1 (one) agreement for sharing the water of the Ganges River was signed between Bangladesh and India. There are no progresses for sharing water in other 53 rivers with India and all the rivers entering from Myanmar. In addition, very limited hydro-meteorological data/information are shared among countries in order to manage the water related disasters such as flood, riverbank erosion, drought, etc. and other water management issues such as irrigation, environmental flow, water allocation, pollution etc. There is no multilateral framework / agreement to establish basin-wise river commission such as Mekong River Commission (MRC).</b>				
d	<b>FEDERAL COUNTRIES ONLY: Provincial/state water resources laws.</b>	<b>Development not started or delayed in most states.</b>	Exist in most jurisdictions, but not necessarily based on IWRM.	<b>Based on IWRM, approved in most states and starting to be applied by authorities in the minority of states.</b>	<b>Some laws being applied in the majority of states.</b>	<b>All laws being applied in the majority of states.</b>	<b>All laws being applied in all states, and all people and organizations are held accountable.</b>
Score or n/a:	[n/a]	Justification/evidence	[Enter text here. E.g. reference to laws, mechanisms for enforcement, examples of enforcement]				
<b>Average 'Enabling Environment' score</b>			[50]	In case of 'n/a' for any questions, they should be omitted from the average calculation.			

<sup>5</sup> An arrangement can be a bilateral or multilateral treaty, convention, agreement or other arrangement (e.g. memorandum of understanding) between riparian countries on the management of a transboundary basin/aquifer. Refers to international basins/aquifers only. Arrangements may be interstate, intergovernmental, inter-ministerial, interagency or between regional authorities.



## 2. Institutions and Participation

This section is about the range and roles of political, social, economic and administrative institutions that help to support the implementation of IWRM. It includes some of the most typical institutions at different levels of society for IWRM. It includes institutional capacity and effectiveness, cross-sector coordination, stakeholder participation and gender equality. The 2030 Agenda stresses the importance of partnerships that will require public participation and creating synergies with the business sector. Note that public participation is also addressed in the ‘means of implementation’ Target 6.b: “Support and strengthen the participation of local communities in improving water and sanitation management”, which is monitored by indicator 6.b.1: “Proportion of local administrative units with established and operational policies and procedures for participation of local communities in water and sanitation management”.

### Terminology used in the questions:

- **Government authorities:** could be a ministry or ministries, or other organizations/institutions/agencies/bodies with a mandate and funding from government.
- **Capacity for leading implementation:** in this context is that the responsible authorities should be adapted to the complexity of water challenges to be met and have the required knowledge, technical facilities and skills, including planning, rule-making, project management, finance, budgeting, data collection and monitoring, risk management and evaluation. It should include the ability to manage potential conflicts of interest between different sectors and/or stakeholder groups, particularly at the basin/aquifer level.
- **Sectors** relates to coordination between the government authorities responsible for water management and those responsible for other sectors (such as agriculture, energy, climate, environment etc.) that are dependent on water, or impact on water. Coordination between groundwater and surface water development/management should also be optimised. The relevant sectors should be considered according to their importance for the country.
- **Stakeholder** includes all interested parties who are, or may be, affected by any water resources issue or intervention. It includes organizations, institutions, academia, civil society and individuals. While definitions of stakeholders typically include the private (or business) sector, this particular stakeholder group is dealt with separately in this questionnaire (see below).
- **Business** includes private for-profit groups. It does not include government or civil society.

Please refer to the glossary for any terms that may require further explanation. Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds.

Enter your score, **in increments of 10**, from 0-100, or n/a (not applicable), in the yellow cell immediately below each question. You are strongly encouraged to provide the justification and references to evidence for the score in the grey cell to the right of the score. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information required are provided. You may also provide further information you think is relevant, or links to further documentation. If ‘Very high (100)’ or ‘n/a’ is selected, a justification should be provided.

2. Institutions and Participation							
		Degree of implementation (0 – 100)					
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
2.1 What is the status of institutions for IWRM implementation at the national level?							
a	National <b>government authorities</b> <sup>6</sup> <b>capacity</b> <sup>7</sup> for leading implementation of national IWRM plans or similar	<b>No dedicated government authorities</b> for water resources management.	Authorities exist, with <b>clear mandate to lead water resources management.</b>	Authorities have clear mandate to lead IWRM implementation, and the <b>capacity to effectively lead IWRM plan formulation.</b>	Authorities have the <b>capacity to effectively lead IWRM plan implementation.</b>	Authorities have the capacity to effectively lead <b>periodic monitoring and evaluation of the IWRM plan.</b>	Authorities have the capacity to effectively lead <b>periodic IWRM plan revision.</b>

<sup>6</sup>‘Government authorities’ could be a ministry or ministries, or other organizations/institutions/agencies/bodies with a mandate and funding from government.

<sup>7</sup>‘Capacity for leading implementation’ in this context is that the responsible authorities should be adapted to the complexity of water challenges to be met and have the required knowledge and technical skills, including planning, rule-making, project management, finance, budgeting, data collection and monitoring, risk management and evaluation. Beyond having the capacity to lead implementation of the activities listed in the thresholds, authorities must also actually be leading the implementation of these activities.

Score or n/a:	[60]	Justification/evidence	<p><b>MoWR:</b> The Ministry of Water Resources is the apex body of the Government of the People's Republic of Bangladesh for development and management of the whole water resources of the country. It is the principal executive body responsible for all aspects of water management including expansion of irrigated areas, water conservation, surface and groundwater use, and river management. The renaming and subsequent activities of the MoWR reflect the recognition of integrated nature of water resources management, a shift from sectoral approach.</p> <p><b>BWDB:</b> Construction of dams, barrages, reservoirs, embankments, regulators or other structures for development of rivers, flood control, drainage, surface irrigation and drought prevention; Dredging, re-excavation and de-siltation of water channels and removal of obstacles from the mouths of river for improvement of water flows or diversion of water for assisting fisheries, navigation, forestry, wildlife preservation and up gradation of environment; Works for preservation, land accretion, land reclamation and estuary control; River training and river bank protection for the protection of towns, bazaar, hats and places of historical and public importance from the hazards of land erosion; Construction and maintenance of coastal embankment; Prevention of salinity intrusion and desertification, Flood and drought forecasting and warning; Hydrological survey and investigation; Development of forestry and fisheries on land available around BWDB's infrastructures, in conjunction with relevant government agencies, for the preservation and improvement of the environment as well as for poverty alleviation; Basic and applied research on water management; and Development of water user's association and other water users/ stakeholders organizations, their training and participation in project planning, implementation, operation and maintenance and project cost recovery for long-term sustainability of benefits to the beneficiaries of completed project.</p> <p><b>WARPO:</b> The Mission of WARPO is to achieve sustainable water resources development in Bangladesh by pursuing Integrated Water Resources Management (IWRM). The vision is to become an apex organization in macro-level planning; a center of excellence for the management and integrated development of water resources, to act as the central coordinating body for all relevant activities in the water sector, the custodian of National and Regional Water Resources Databases and Information systems and to act as secretariat to the National Water Resources Council (NWRC) and Executive Committee of the National Water Resources Council (ECNWRC). Formulation of national policy, water sector macro plan relevant to the management of the water resources in an integrated way, Serving as the clearing house for the water sector projects, prepare and update National Water Law revising and consolidating the laws governing ownership, development, appropriation, utilization, conservation, and protection of water resources and resolve interagency conflicts related to water development and management and report to ECNWRC is the key mandated tasks.</p> <p><b>IWM and CEGIS:</b> Provides support services for the planning phase of the project</p> <p><b>LGED:</b> involved in small-scale water resources development for several decades.</p> <p><b>DBHDA:</b> coordinate the development activities in the Haor areas in an integrated manner.</p> <p><b>BMDA:</b> develop a groundwater based irrigation system using mainly deep tube wells (DTWs) for agricultural development in the north and north-western part of Bangladesh</p> <p><b>JRC:</b> For sharing and management of water of transboundary rivers, Joint Rivers Commission (JRC) was established in 1972</p> <p><b>IWFM:</b> pursues research and capacity development in the field of water and flood management that is vital for economic development and social prosperity of the country.</p>
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b	<b>Coordination between national government authorities representing different sectors<sup>8</sup> on water resources, policy, planning and management</b>	<b>No communication</b> between different government sectors on policy, planning and management.	<b>Communication: Information</b> on water resources, policy, planning and management <b>is made available between different sectors.</b>	<b>Consultation: Information, experiences and opinions are shared between different sectors.</b>	<b>Participation: Opportunities</b> for different sectors <b>to take part in</b> policy, planning and management <b>processes.</b>	<b>Representation: Formal consultation</b> between different government sectors <b>with the objective of agreeing on collective decisions on important issues and activities.</b>	<b>Co-decisions and co-production: Shared power between different sectors</b> on joint policy, planning and management activities.
	Score or n/a:	[50]	Justification/evidence	Guidelines for Participatory Water Management, 2000, Participatory Water Management Rules, 2014; NWMP-2001, National Water Resources Council, MoU between BWDB, WARPO, LGED, DoF, DoFL etc. Bangladesh Water Development Board (BWDB) is implementing several projects in a coordinated manner involving agencies such as LGED, Ministry of Agriculture, Ministry of Environment and Forest, Ministry of Land, Department of Agriculture Extension, Department of Fisheries etc. WARPO also coordinating the Integrated Coastal Zone Management (ICZM) with 34 agencies and Clearing the projects considering the relevancy with guidelines, policy and plans of different agencies for approval.			
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c	<b>Public participation in water resources, policy, planning and management<sup>9</sup> at national level.</b>	<b>No communication</b> between government and stakeholders on policy, planning and management.	<b>Communication: Information</b> on water resources, policy, planning and management <b>is made available to stakeholders.</b>	<b>Consultation: Government authorities occasionally request</b> information, experiences and opinions of stakeholders.	<b>Consultation: Government authorities regularly request</b> information, experiences and opinions of stakeholders.	<b>Participation: Regular opportunities</b> for stakeholders <b>to take part in relevant policy, planning and management processes.</b>	<b>Representation: Formal representation of stakeholders</b> in government processes <b>contributing to decision making on important issues and activities, as appropriate.</b>
	Score or n/a:	[70]	Justification/evidence	The preparation of key documents of the water sector i.e. National Water Policy, National Water Management Plan and Bangladesh Water Act have been developed based on very extensive public consultation. For the preparation and dissemination of draft Bangladesh Water rules mass public consultation is still ongoing. All the institutes working in the water sector encourages stakeholder's participation in all the phases of a project. The participation in local level has three tiers (based on the area of the project), Water Management Group (WMG), Water Management Association (WMA) and Water Management Federation (WMF). The board of the governors of BWDB is multidisciplinary and includes member from the stakeholders as well.			

<sup>8</sup> Relates to coordination between the government authorities responsible for water management and those responsible for other sectors (such as agriculture, energy, climate, environment etc.) that are dependent on water, or impact on water. Coordination between groundwater and surface water development/management should also be optimised. The relevant sectors should be considered according to their importance for the country.

<sup>9</sup> Stakeholder includes all interested parties who are, or may be, affected by any water resources issue or intervention. It includes organizations, institutions, academia, civil society and individuals.

d	<b>Business<sup>10</sup> participation</b> in water resources development, management and use at national level.	<b>No communication</b> between government and business about water resources development, management and use.	<b>Limited communication</b> between government and business about water resources development, management and use.	<b>Regular consultation</b> between government and business about water resources development, management and use.	<b>Limited opportunities for private sector involvement</b> established for water resources development, management and use activities.	<b>Regular opportunities for private sector involvement</b> established for water resources development, management and use activities.	<b>Effective private sector involvement established</b> for water resources development, management and use activities.
	Score or n/a:	[40]	Justification/evidence	Few NGOs are involved in the management of the water resources, community mobilization and awareness development. The institutions working in water sector is searching for the Public Private Partnership (PPP) actively. BWDB signed several MoUs with different Chinese companies to explore the opportunities of PPP. Recently some major private sector entrepreneurs like BGMEA, BKMEA, COCA COLA etc are included in consultation under the umbrella of MoWR through Water Resources Group 2030.			
e	<b>Gender-specific objectives</b> for water resources management at national level. <sup>11</sup>	<b>Gender not explicitly addressed</b> throughout national laws, policy or plans.	<b>Gender partially addressed</b> throughout national laws, policies or plans.	<b>Gender addressed</b> in national plans but with <b>limited budget and implementation.</b>	Gender addressed in national plans, <b>partially funded and objectives partly achieved.</b>	Activities <b>adequately funded and objectives mostly achieved.</b>	Objectives <b>fully achieved and adequately address gender issues.</b>
	Score or n/a:	[70]	Justification/evidence	The national water policy 1999 and coastal Zone Policy 2005 carefully considered the issues of gender in water sector with significant importance. The NWPo states that, “to develop a state of knowledge and capability that will enable the country to design future water resources management plans by itself with economic efficiency, gender equity, social justice and environmental awareness to facilitate achievement to the water management objectives through broad public participation”. The Guidelines for Participatory Water Management and Participatory Water Management Rules outline the involvement of gender in the planning, design, implementation, operation and maintenance phase of water management project. At the national level, the policies and plans related to water management encourage gender participation and empowerment of gender.			

<sup>10</sup> Business includes private for-profit groups. It does not include government or civil society.

<sup>11</sup> Gender-specific objectives at national level can include: 1) Presence of designated ministerial responsibility for gender in relation to water policies. Presence of designated ministerial responsibility for water in the gender-equality ministry or related designated agency for gender; 2) Gender Parity of male and female participants in meetings of national decision-making authorities (counting the number of women and men participating in meetings); and 3) The presence of gender-specific objectives and commitments (or gender strategies) in national strategies, national plans and national laws regarding national water policy.

Source: adapted from WWAP 2015 “Questionnaire for collecting sex-disaggregated water data” <http://unesdoc.unesco.org/images/0023/002345/234514E.pdf>

		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
f	<b>Developing IWRM capacity<sup>12</sup> at the national level</b>	<b>No capacity development specific to water resources management.</b>	<b>Occasional</b> capacity development, generally limited to <b>short-term / ad-hoc activities.</b>	<b>Some long-term</b> capacity development initiatives are being implemented, but geographic and stakeholder <b>coverage is limited.</b>	<b>Long-term</b> capacity development initiatives are being implemented, and geographic and stakeholder <b>coverage is adequate.</b>	<b>Long-term</b> capacity development initiatives are being implemented, with <b>effective outcomes</b> , and geographic and stakeholder <b>coverage is very good.</b>	<b>Long-term</b> capacity development initiatives are being implemented with <b>highly effective outcomes</b> , and geographic and stakeholder <b>coverage is excellent.</b>
	Score or n/a:	[60]	Justification/evidence	For capacity development both short and long term plan are adopted. There are training program, short courses, post-graduation, on-job training for the capacity development including gender issues are ongoing. Continuous capacity building initiatives is prerequisite for ensuring sustainability.			
<b>2.2 What is the status of institutions for IWRM implementation at other levels?</b>							
a	<b>Basin/aquifer level<sup>13</sup> organizations<sup>14</sup> for leading implementation of IWRM plans or similar.</b>	<b>No dedicated basin authorities for water resources management.</b>	Authorities exist, with <b>clear mandate to lead water resources management.</b>	Authorities have clear mandate to lead IWRM implementation, and the <b>capacity to effectively lead IWRM plan formulation.</b>	Authorities have the <b>capacity to effectively lead IWRM plan implementation.</b>	Authorities have the <b>capacity to effectively lead periodic monitoring and evaluation</b> of the IWRM plan.	Authorities have the <b>capacity to effectively lead periodic IWRM plan revision.</b>
	Score or n/a:	[20]	Justification/evidence	Bangladesh is a flat country with about 405 rivers. All most all the rivers are either tributaries or distributaries of the mighty Ganges, Brahmaputra and Meghna rivers. The individual river basins of the mighty rivers possess unique characteristics. There exists number of basin in Bangladesh such as north eastern haor basin, southern coastal basin, south eastern hilly basin, north and north western drought prone areas, floodplain areas, estuary etc. Organizations such as LGED, BWDB, Bangladesh Agriculture Development Corporation (BADC), Department of Agriculture Extension (DAE), Department of Fisheries (DoF), Department of Environment and Forest (DoEF), Roads and Highways (RHD) etc. are working individually of their own mandate. However, no dedicated organizations to development of each basin. There are regional training			

<sup>12</sup> IWRM capacity development: refers to the enhancement of skills, instruments, resources and incentives for people and institutions at all levels, to improve IWRM implementation. Capacity needs assessments are essential for effective and cost-effective capacity development. Capacity development programs should consider gender balance and disadvantaged/minority groups in terms of participation and awareness. Capacity development is relevant for many groups, including: local and central government, water professionals in all areas - both public and private water organisations, civil society, and in regulatory organisations. In this instance, capacity development may also include primary, secondary and tertiary education, and academic research concerning IWRM.

<sup>13</sup> At the basin/aquifer level, please include only the most important river basins, lake basins and aquifers for water supply or for other reasons. This question only refers to these basins/aquifers. These basins/aquifers likely cross-administrative borders, including state/provincial borders for federal countries. The basins may also cross national borders, but this question refers to management of the portions of basins within each country. Question 2.2e refers specifically to transboundary management of basins/aquifers shared by countries.

<sup>14</sup> Could be organization, committee, inter-ministerial mechanism or other means of collaboration for managing water resources at the basin level.

		institute for the capacity development under Bangladesh Water Development Board (BWDB). In addition, organizations such as Department of Bangladesh Haor and Wetland Development (DBHWD), Barind Multipurpose Development Authority (BMDA) are established.					
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
b	<b>Public participation</b> <sup>15</sup> in water resources, policy, planning and management at the <b>local level</b> <sup>16</sup>	<b>No communication</b> between local government and stakeholders on policy, planning and management.	<b>Communication: Local level information</b> on water resources, policy, planning and management <b>is made available to stakeholders.</b>	<b>Consultation:</b> Government authorities <b>occasionally request</b> local level information, experiences and opinions of stakeholders.	<b>Consultation:</b> Government authorities <b>regularly request</b> local level information, experiences and opinions of stakeholders.	<b>Participation:</b> Regular opportunities for stakeholders <b>to take part in relevant local level policy, planning and management processes.</b>	<b>Representation:</b> Formal representation of stakeholders on local authority processes contributing to decision-making on important local issues and activities, as appropriate.
	Score or n/a: <b>[60]</b>	Justification/evidence	Guidelines for Participatory Water Resources Management (GPWM) have been developed to ensure public participation. Following the GPWM BWDB has formed about 2000 water management organizations (WMOs) in the local level. The WMOs actively participating in all phases of a project. In addition, LGED is following the similar approach. BWDB has implemented several projects in this regard as well.				
c	<b>Gender-specific objectives at sub-national levels</b> <sup>17</sup>	<b>Gender not explicitly addressed</b> throughout sub-national laws, policy or plans.	<b>Gender partially addressed</b> in sub-national laws, policies or plans.	<b>Gender addressed</b> in sub-national plans but with <b>limited budget</b> and <b>implementation.</b>	Gender addressed in sub-national plans, <b>partially funded</b> and <b>objectives partly achieved.</b>	Activities <b>adequately funded</b> and <b>objectives mostly achieved.</b>	Objectives <b>fully achieved</b> and <b>adequately address sub-national gender issues.</b>
	Score or n/a: <b>[n/a]</b>	Justification/evidence	<b>The government system of Bangladesh is unitary and there are no provincial governments. In addition, there are no local water authorities in Bangladesh. As such gender specific objectives at sub-national level is not applicable to Bangladesh.</b>				

<sup>15</sup> Stakeholder includes all interested parties who are, or may be, affected by any water resources issue or intervention. It includes organizations, institutions, academia, civil society and individuals.

<sup>16</sup> Examples of 'local level' include municipal level (e.g. cities, towns and villages), community level, basin/tributary/aquifer/delta level, and water user associations.

<sup>17</sup> Gender-specific objectives at sub-national level can include: 1) Proportion of seats held by male and female in local water authorities' executive boards; 2) Gender Parity of M/F participation in meetings of sub-national decision-making authorities (counting the number of women and men participating in meetings); 3) The presence of gender strategy in local plans and local implementation policies. Source: adapted from WWAP 2015 "Questionnaire for collecting sex-disaggregated water data"

<http://unesdoc.unesco.org/images/0023/002345/234514E.pdf>

d	<b>Gender-specific objectives and plans at transboundary level<sup>18</sup></b>	<b>Gender not explicitly addressed</b> in transboundary policies or plans.	<b>Gender partially addressed</b> in transboundary policies or plans.	<b>Gender addressed</b> in transboundary plans but with <b>limited budget and implementation.</b>	Gender addressed in transboundary plans, <b>partially funded and objectives partly achieved.</b>	Activities <b>adequately funded and objectives mostly achieved.</b>	Objectives <b>fully achieved</b> and <b>adequately address transboundary gender issues.</b>
	Score or n/a: <b>[n/a]</b>	Justification/evidence	There are no basin level river commissions in Bangladesh. There are no multilateral frameworks /agreements for transboundary water management in the GBM Basins. As such Gender-specific objectives and plans at transboundary level may not applicable to Bangladesh.				
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
e	<b>Organizational framework for transboundary water management</b> for most important basins / aquifers <sup>19</sup>	No organizational framework(s).	Organizational framework(s) <b>being developed.</b>	Organizational framework(s) <b>established.</b>	Organizational framework(s)' <b>mandate is partly fulfilled.</b>	Organizational framework(s)' <b>mandate is fulfilled for the most part.</b>	Organizational framework(s)' <b>mandate is fully fulfilled.</b>
	Score or n/a: <b>[10]</b>	Justification/evidence	Joint Rivers Commission (JRC) was established in 1972. The organization successfully conducted the Ganges Water Sharing Treaty and working for the preparation of Framework Agreements for the water sharing of other transboundary rivers. Joint Working Group of Bangladesh, Bhutan, India and Nepal is also formed for dealing with transboundary water management and hydropower of the Ganges-Brahmaputra-Meghna Basin.				
f	<b>FEDERAL COUNTRIES ONLY: Provincial / State authorities</b> responsible for water resources management	<b>No dedicated provincial/state authorities for water resources management.</b>	Authorities exist, with <b>clear mandate to lead water resources management.</b>	Authorities have clear mandate to lead IWRM implementation, and the <b>capacity</b> to effectively lead IWRM <b>plan formulation.</b>	Authorities have the <b>capacity</b> to effectively lead IWRM <b>plan implementation.</b>	Authorities have the capacity to effectively lead <b>periodic monitoring and evaluation</b> of the IWRM plan.	Authorities have the capacity to effectively lead <b>periodic IWRM plan revision.</b>
	Score or n/a: <b>[n/a]</b>	Justification/evidence	[Enter text here. E.g. reference to authorities and evidence of capacity for leading implementation of IWRM]				
<b>Average 'Institutions and Participation' score</b>			<b>[49]</b>	In case of 'n/a' for any questions, they should be omitted from the average calculation.			

<sup>18</sup> Gender-specific objectives at the transboundary level: 1) Presence of a specific gender strategy in transboundary agreements, in other transboundary arrangements, in their implementation plans and in all transboundary water impact assessments; 2) Gender Parity of male and female participants in meetings of transboundary decision-making authorities (counting the number of women and men participating in meetings. Source: adapted from WWAP 2015 "Questionnaire for collecting sex-disaggregated water data" <http://unesdoc.unesco.org/images/0023/002345/234514E.pdf>

<sup>19</sup> An organizational framework can include the existence of a joint body, joint mechanism or commission for transboundary cooperation. Refers to international basins/aquifers only.

### 3. Management Instruments

This section includes the tools that enable decision-makers and users to make rational and informed choices between alternative actions. It includes management programs, monitoring water resources and the pressures on them, knowledge sharing and capacity development.

#### Terminology used in the questions:

- **Limited, Adequate, Very good, Excellent:** Are terms used describe the status, coverage and effectiveness of the management instruments assessed in this section. Respondents should apply their own judgement based on the ‘best-practice’ descriptions of management instruments in the glossary, the section introduction, and through footnotes. For example, ‘adequate’ may imply that the basic minimum criteria for that particular management instrument are met. Respondents are encouraged to provide qualifying information to the question score in the ‘Justification’ cell immediately below each question.
- **Management instruments:** Can also be referred to as management tools and techniques, which include regulations, financial incentives, monitoring, plans/programs (e.g. for development, use and protection of water resources), as well as those specified in footnotes on questions and thresholds below.
- **Monitoring:** collecting, updating, and sharing timely, consistent and comparable water-related data and information, relevant for science and policy. Effective monitoring requires ongoing commitment and financing from government. Resources required include appropriate technical capacity such as laboratories, portable devices, online water use control and data acquisition systems. May include a combination of physical data collection, remote sensing, and modelling for filling data gaps.
- **Short-term / Long-term:** In the context of management instruments, short-term includes ad-hoc activities and projects, generally not implemented as part of an overarching program with long-term goals. Long-term refers to activities that are undertaken as part of an ongoing program that has more long-term goals/aims and implementation strategy.

Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds.

Enter your score, **in increments of 10**, from 0-100, or n/a (not applicable), in the yellow cell immediately below each question. You are strongly encouraged to provide the justification and references to evidence for the score in the grey cell to the right of the score. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information required are provided. You may also provide further information you think is relevant, or links to further documentation. If ‘Very high (100)’ or ‘n/a’ is selected, a justification should be provided.

3. Management Instruments							
		Degree of implementation (0 – 100)					
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
3.1 What is the status of management instruments to support IWRM implementation at the national level?							
a	<b>National monitoring of water availability</b> <sup>20</sup> (includes surface and/or groundwater, as relevant to the country).	<b>No national monitoring systems in place.</b>	Monitoring systems established for a limited number of <b>short-term / ad-hoc projects</b> or similar.	<b>Long-term</b> national monitoring is carried out but with <b>limited coverage and limited use</b> by stakeholders.	<b>Long-term</b> national monitoring is carried out with <b>adequate coverage but limited use</b> by stakeholders.	<b>Long-term</b> national monitoring is carried out with <b>very good coverage and adequate use</b> by stakeholders.	<b>Long-term</b> national monitoring is carried out with <b>excellent coverage and excellent use</b> by stakeholders.
Score or n/a:	<b>[80]</b>	Justification/evidence	Water (both ground and surface) Resources availability assessment is being performed by Water Resources Planning Organization (WARPO). As per Bangladesh Water Act 2013, depending on availability of water resources. water scarce areas will be identified. Local Government Engineering Department (LGED) also performed similar assessment on project basis. In addition, BWDB is monitoring the surface water, groundwater all over Bangladesh.				
b	<b>Sustainable and efficient water use management</b> <sup>21</sup> from the national level, (includes surface and/or groundwater, as relevant to the country).	<b>No management instruments being implemented.</b>	Use of management instruments is <b>limited</b> and only through <b>short-term / ad-hoc projects</b> or similar.	<b>Some</b> management instruments implemented on a more <b>long-term</b> basis, but with <b>limited coverage</b> across different water users and the country.	Management instruments are implemented on a long-term basis, with <b>adequate coverage</b> across different water users and the country.	Management instruments are implemented on a long-term basis, with <b>very good coverage</b> across different water users and the country, and are <b>effective</b> .	Management instruments are implemented on a long-term basis, with <b>excellent coverage</b> across different water users and the country, and are <b>highly effective</b> .
Score or n/a:	<b>[50]</b>	Justification/evidence	National Water Policy, National Irrigation Policy, Bangladesh Water Water Act encourages enhancement surface water utilization for irrigation and other water uses. In addition, for increasing water retaining capacity the rivers and wetlands are brought under dredging activities.				

<sup>20</sup> See definition of monitoring in Terminology.

<sup>21</sup> Management instruments include demand management measures (e.g. technical measures, financial incentives, education and awareness raising to reduce water use and/or improve water-use efficiency, conservation, recycling and re-use), monitoring water use (including the ability to disaggregate by sector), mechanisms for allocating water between sectors (including environmental considerations).

		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
c	<b>Pollution control</b> <sup>22</sup> from the national level	<b>No management instruments being implemented.</b>	Use of management instruments is <b>limited</b> and only through <b>short-term / ad-hoc projects</b> or similar.	<b>Some</b> management instruments implemented on a more <b>long-term</b> basis, but with <b>limited coverage</b> across sectors and the country.	Management instruments are implemented on a long-term basis, with <b>adequate coverage</b> across sectors and the country.	Management instruments are implemented on a long-term basis, with <b>very good coverage</b> across sectors and the country, and are <b>effective</b> .	Management instruments are implemented on a long-term basis, with <b>excellent coverage</b> across sectors and the country, and are <b>highly effective</b> .
	Score or n/a:	[40]	Justification/evidence	Water quality is a big concern in NWPo and NWMP. Specific program on pollution control i.e EA 001 National Pollution Control Plan, EA 002 National Clean-up of existing Industrial Pollution and EA 003 National Water Quality Monitoring have been identified in NWMP. Department of Environment, Public Health Engineering department, City Corporation, BWDB and other relevant organizations have undertaken different programs for water pollution control. WARPO archived the water quality data in National Water Resources Database (NWRD)			
d	<b>Management of water-related ecosystems</b> <sup>23</sup> from the national level	<b>No management instruments being implemented.</b>	Use of management instruments is <b>limited</b> and only through <b>short-term / ad-hoc projects</b> or similar.	<b>Some</b> management instruments implemented on a more <b>long-term</b> basis, but with <b>limited coverage</b> across different ecosystem types and the country.	Management instruments are implemented on a long-term basis, with <b>adequate coverage</b> across different ecosystem types and the country. Environmental Water Requirements (EWR) analysed in some cases.	Management instruments are implemented on a long-term basis, with <b>very good coverage</b> across different ecosystem types and the country, and are <b>effective</b> . EWR analysed for most of country.	Management instruments are implemented on a long-term basis, with <b>excellent coverage</b> across different ecosystem types and the country, and are <b>highly effective</b> . EWR analysed for whole country.
	Score or n/a:	[60]	Justification/evidence	Issues for managing water related ecosystem adequately addressed in NWPo and NWMP. NWMP Cluster Environment and Aquatic Resources identified programs like EA 007 Improved Water Management in the Haor Basin, EA 008 Environmentally Critical Areas and Integrated Wetland Management, EA 009 Improved Water Management and Salinity Control in the Sundarbans etc programs identified for implementation by relevant agencies. Department of Environment is enacting Bangladesh Environment Conservation Act, Ecologically Critical Area Management Rules for the management of water related ecosystem. BWDB in conformity with the National Water Policy, Water Act is managing the water related ecosystem as well. The submergible embankment in the Northeast part of the country is a very good example in this regard.			

<sup>22</sup> Includes regulations, water quality guidelines, economic tools (e.g. taxes and fees), water quality trading programs, water quality monitoring, education, consideration of point and non-point (e.g. agricultural) pollution sources, construction and operation of wastewater treatment plants, watershed management.

<sup>23</sup> Water-related ecosystems include rivers, lakes and aquifers, as well as wetlands, forests and mountains. Management of these systems includes tools such as management plans, the assessment of Environmental Water Requirements (EWR), and protection of areas and species. Monitoring includes measuring the extent and quality of the ecosystems over time.

		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
e	<b>Management instruments to reduce impacts of water-related disasters<sup>24</sup> from the national level</b>	<b>No management instruments being implemented.</b>	Use of management instruments is <b>limited</b> and only through <b>short-term / ad-hoc projects</b> or similar.	<b>Some</b> management instruments implemented on a more <b>long-term</b> basis, but with <b>limited coverage</b> of at-risk areas.	Management instruments are implemented on a long-term basis, with <b>adequate coverage</b> of at-risk areas.	Management instruments are implemented on a long-term basis, with <b>very good coverage</b> of at-risk areas, and are <b>effective</b> .	Management instruments are implemented on a long-term basis, with <b>excellent coverage</b> of at-risk areas, and are <b>highly effective</b> .
	Score or n/a:	[80]	Justification/evidence	The embankment system developed by BWDB is safeguarding about 70 % of the country from flood ravages. These embankment systems cover different ecological zones as well. The coastal embankment of BWDB is a good example which protects about 30% of the country from the cyclone and cyclonic surges, tidal flooding. The flood forecasting and warning centre of BWDB is proving flood warning in Bangladesh. LGED, DDM, and other relevant organizations are also proving support by building cyclone and flood shelters, conducting operation and rescuing victims. In this regard, a national level committee is working actively.			
<b>3.2 What is the status of management instruments to support IWRM implementation at other levels?</b>							
a	<b>Basin management instruments.<sup>25</sup></b>	<b>No basin level management instruments being implemented.</b>	Use of basin level management instruments is <b>limited</b> and only through <b>short-term / ad-hoc projects</b> .	<b>Some</b> basin level management instruments implemented on a more <b>long-term</b> basis, but with <b>limited geographic and stakeholder coverage</b> .	Basin level management instruments implemented on a more <b>long-term</b> basis, with <b>adequate geographic and stakeholder coverage</b> .	Basin level management instruments implemented on a more <b>long-term</b> basis, with <b>effective outcomes</b> and <b>very good geographic and stakeholder coverage</b> .	Basin level management instruments implemented on a more <b>long-term</b> basis, with <b>highly effective outcomes</b> and <b>excellent geographic and stakeholder coverage</b> .
	Score or n/a:	[n/a]	Justification/evidence	[Enter text here. E.g. reference to types of management instruments, evidence of implementation and effectiveness, geographic differences, level of implementation across different stakeholder groups.]			

<sup>24</sup> **Management instruments** can cover: understanding disaster risk; strengthening disaster risk governance; investing in disaster risk reduction; and enhancing disaster preparedness. **Impacts** include social impacts (such as deaths, missing persons, and number of people affected) and economic impacts (such as economic losses in relation to GDP). **Water-related disasters** include disasters that can be classified under the following: Hydrological (flood, landslide, wave action); Meteorological (convective storm, extratropical storm, extreme temperature, fog, tropical cyclone); and Climatological (drought, glacial lake outburst, wildfire).

<sup>25</sup> Basin and aquifer management: involves managing water at the appropriate hydrological scale, using the surface water basin or aquifer as the unit of management. This may involve basin and aquifer development, use and protection plans. It should also promote multi-level cooperation, and address potential conflict, among users, stakeholders and levels of government for the management of water resources. To achieve 'Very high (100)' basin and aquifer management scores, surface and groundwater management must be integrated.

		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
b	<b>Aquifer management instruments.</b> <sup>26</sup>	<b>No aquifer level management instruments being implemented.</b>	Use of aquifer level management instruments is <b>limited</b> and only through <b>short-term / ad-hoc projects</b> .	<b>Some</b> aquifer level management instruments implemented on a more <b>long-term</b> basis, but with <b>limited geographic and stakeholder coverage</b> .	Aquifer level management instruments implemented on a more <b>long-term</b> basis, with <b>adequate geographic and stakeholder coverage</b> .	Aquifer level management instruments implemented on a more <b>long-term</b> basis, with <b>effective outcomes and very good geographic and stakeholder coverage</b> .	Aquifer level management instruments implemented on a more <b>long-term</b> basis, with <b>highly effective outcomes and excellent geographic and stakeholder coverage</b> .
	Score or n/a:	[20]	Justification/evidence	Groundwater table data is collected by BWDB, BADC, DPHE etc. which are used for planning of the water management projects. As per Bangladesh Water Act 2013, section 19, Fixing the lowest safe yield level of aquifer and restriction on abstracting ground water will be in place after the implementation of the act.			
c	<b>Data and information sharing within countries</b> at all levels <sup>27</sup>	<b>No data and information sharing.</b>	<b>Limited</b> data and information sharing <b>on an ad-hoc basis</b> .	Data and information sharing <b>arrangements exist</b> on a more <b>long-term basis between major data providers and users</b> .	Data and information sharing <b>arrangements implemented</b> on a more <b>long-term basis</b> , with <b>adequate coverage</b> across sectors and the country.	Data and information sharing <b>arrangements implemented</b> on a more <b>long-term basis</b> , with <b>very good coverage</b> across sectors and the country.	<b>All relevant data and information are online and freely accessible to all.</b>
	Score or n/a:	[80]	Justification/evidence	Different hydrological, meteorological, sediment, projects, policy, plan are shared among the relevant agencies. The National Water Resources Database of WARPO archives the data and shares among stakeholders.			
d	<b>Transboundary data and information sharing between countries</b>	<b>No data and information sharing.</b>	<b>Limited</b> data and information sharing <b>on an ad-hoc or informal basis</b> .	Data and information sharing <b>arrangements exist, but sharing is limited</b> .	Data and information sharing <b>arrangements implemented adequately</b> .	Data and information sharing <b>arrangements implemented effectively</b> . <sup>28</sup>	All relevant data and information are <b>online and accessible between countries</b> .
	Score or n/a:	[40]	Justification/evidence	Data and information sharing arrangements between China, India and Nepal exist but sharing is limited of hydro-morphological and meteorological data.			
<b>Average 'Management Instruments' score</b>			[56]	In case of 'n/a' for any questions, they should be omitted from the average calculation.			

<sup>26</sup> See previous footnote on basin management instruments, which also applies to aquifers.

<sup>27</sup> Includes more formal data and information sharing arrangements between users, as well as accessibility for the general public, where appropriate.

<sup>28</sup> E.g. institutional and technical mechanisms in place that allow for exchanging data as agreed upon in agreements between riparians (e.g. regional database or information exchange platform with a river basin organization including technical requirements for data submission, institutionalized mechanisms for QA and for analysing the data, etc.).

## 4. Financing

This section concerns the adequacy of the finance available for water resources development and management from various sources.

Finance for investment and recurrent costs can come from many sources, the most common being central government budget allocations to relevant ministries and other authorities. Finance from Overseas Development Assistance (ODA) specifically for water resources should be considered part of the government budget. Note that the level of coordination between ODA and national budgets is tracked by the 'means of implementation' indicator 6.a.1: "Amount of water- and sanitation-related official development assistance that is part of a government-coordinated spending plan", as part of reporting on Target 6.a: "By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies".

"Other sources" include fees and tariffs levied on water users, polluter fees or grants from philanthropic or similar organisations. In kind support should not be included as it is not easily measurable but can be mentioned in the 'Justification/evidence' section.

Investments should cover all aspects of water resources development and management but exclude any related to drinking water supply and sanitation services as they are covered in other monitoring processes.

Please take note of all footnotes as they contain important information and clarification of terms used in the questions and thresholds.

Enter your score, **in increments of 10**, from 0-100, or n/a (not applicable), in the yellow cell immediately below each question. You are strongly encouraged to provide the justification and references to evidence for the score in the grey cell to the right of the score. This will help achieve agreement among different stakeholders in the country, as well as help monitor progress over time. Suggestions for the type of information required are provided. You may also provide further information you think is relevant, or links to further documentation. If 'Very high (100)' or 'n/a' is selected, a justification should be provided.

4. Financing							
		Degree of implementation (0 – 100)					
		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
4.1 What is the status of financing for water resources development and management at the national level?							
a	<b>National budget<sup>29</sup> for investment including water resources infrastructure<sup>30</sup>.</b>	<b>No budget</b> allocated in national investment plans.	<b>Budget allocated</b> but only partly covers planned investments.	<b>Sufficient budget allocated</b> for planned investments but insufficient funds disbursed or made <b>available</b> .	<b>Sufficient budget allocated and funds disbursed</b> for all planned programmes or projects.	<b>Funding available and all planned projects under implementation.</b>	Planned programs <b>completed</b> , post-evaluation carried out and new funding cycle for programs underway.
	Score or n/a:	<b>[80]</b>	Justification/evidence	The annual development budget is adequate but the operation and maintenance budget is not enough to meet the demand.			
b	<b>National budget for the recurrent costs of the IWRM elements<sup>31</sup></b>	<b>No budget</b> allocations made for recurrent costs of the IWRM elements.	<b>Allocations</b> made for <b>only a few</b> of the elements and implementation at an early stage.	Allocations made for <b>at least half</b> of the elements but insufficient for others.	Allocations for <b>most of the elements</b> and some implementation under way.	Allocations include <b>all elements</b> and implementation regularly carried out.	Planned budget allocations for all elements of the IWRM approach <b>fully utilised</b> .
	Score or n/a:	<b>[60]</b>	Justification/evidence	The annual development budget includes all the component of IWRM but after finishing the project, the cost for recurrent components are not well monitored.			

<sup>29</sup> Allocations of funding for water resources may be included in several budget categories or in different investment documents. Respondents are thus encouraged to examine different sources for this information. When assessing the allocations respondents should take account of funds from government budgets and any co-funding (loans or grants) from other sources such as banks or donors.

<sup>30</sup> Infrastructure includes ‘hard’ structures such as dams, canals, pumping stations, flood control, treatment works etc as well as soft infrastructure and environmental measures such as catchment management, sustainable drainage systems etc. For this survey do not include infrastructure for drinking water supply or sanitation services.

<sup>31</sup> ‘IWRM elements’ refers to all the activities described in sections 1, 2 and 3 of this survey that require funding, e.g. policy, law making and planning, institutional strengthening, coordination, stakeholder participation, capacity building, and management instruments such as research and studies, gender and environmental assessments, data collection, monitoring etc.

		Very low (0)	Low (20)	Medium-low (40)	Medium-high (60)	High (80)	Very high (100)
<b>4.2 What is the status of financing for water resources development and management at other levels?</b>							
a	<b>Sub-national or basin budgets</b> for investment including water resources <b>infrastructure</b> .	<b>No</b> budget allocated in sub-national or basin investment plans.	<b>Budget allocated</b> but only partly covers planned investments.	<b>Sufficient budget allocated</b> for planned investments but insufficient funds disbursed or made <b>available</b> .	Sufficient budget allocated and funds disbursed for all planned programmes or projects.	Funding available and all <b>planned projects under implementation</b> .	<b>Budget fully utilised</b> , programmes completed as planned and post evaluation carried out.
	Score or n/a:	[n/a]	Justification/evidence	[Enter text here. E.g. reference to adequacy of budget, significant budget gaps.]			
b	<b>Revenues</b> raised from dedicated levies on water users at basin, aquifer or sub-national levels. <sup>32</sup>	<b>No revenues</b> raised at the <b>sub-national</b> level.	<b>Processes in place</b> to raise local revenue but <b>not yet implemented</b> .	Limited revenues raised from <b>charges, but are not</b> used for IWRM activities.	Limited revenues raised from <b>charges</b> cover some IWRM activities.	Revenues raised from <b>charges</b> cover most IWRM activities.	Local authorities raise funds <b>from multiple sources and fully cover costs</b> of IWRM activities.
	Score or n/a:	[20]	Justification/evidence	BWDB collects irrigation service charges. But the revenue earning is very nominal. The local level water management organizations (WMOs) occasionally participated in the operation and management of the project.			
c	<b>Financing for transboundary</b> <sup>33</sup> <b>cooperation</b> <sup>34</sup>	No specific funding allocated from the MS budgets nor from other regular sources.	MS agreement on country share of contributions in place and in-kind support for the cooperation organisation / arrangement.	Funding less than 50% of that expected as contributions and by regulation.	Funding less than 75% of that expected as contributions and by regulation.	Funding more than 75% of that expected as contributions and by regulation.	Full funding of that expected as contributions and by regulation.
	Score or n/a:	[20]	Justification/evidence	Joint Rivers Commission receives budget for monitoring the Ganges water sharing treaty. The cost of meeting for negotiation of water sharing for other rivers is also borne by the Government of Bangladesh.			
<b>Average 'Financing' score</b>			[45]	In case of 'n/a' for any questions, they should be omitted from the average calculation.			

<sup>32</sup> For example, abstraction & bulk water charges, environmental fees such as pollution charges, Payment for Ecosystem Services (PES) schemes, and the sale of secondary products and services, significant contributors.

<sup>33</sup> Transboundary includes surface and groundwater basins that cross one or more national borders.

<sup>34</sup> In this question "Member States (MS)" refers to riparian countries that are parties to the arrangement. "Contributions" refers to the annual share of funds agreed from MS national budgets to support the agreed TB cooperation arrangement. Regular funds obtained from for example, water user fees (e.g. hydropower charges) and polluter-pays fees on the basis of existing regulation are also taken into account as sustainable funding. As variable and unsustainable, donor support is not considered. .

## 5. Indicator 6.5.1 score

Please complete the following table based on scores calculated for the previous four sections.

The indicator 6.5.1 score is the average of each of the section scores.

Section	Average Score
Section 1 Enabling Environment	50
Section 2 Institutions and Participation	49
Section 3 Management Instruments	56
Section 4 Financing	45
<b>Indicator 6.5.1 score = Degree of IWRM implementation (0-100)</b>	<b>50</b>

(Please remember: Questions where the score is 0 (zero) must be included. However, questions that are not applicable must not be included.)

### Interpretation of the score

The score indicates the 'degree of implementation of Integrated Water Resources Management', on a scale of 0 to 100, with 0 signifying no implementation, and 100 signifying complete implementation. However, the true value of the questionnaire to countries lies within the scores and justification provided for the individual questions, as this helps to identify which actions need to be taken to move towards a greater degree of implementation of IWRM.