Reporting on global SDG indicator 6.5.2

TEMPLATE of the second cycle for reporting

Content of the template

The template is divided into four parts:

- Section I - Calculation of SDG indicator 6.5.2
- Section II - Information on each transboundary basin or group of basins
- Section III - General information on transboundary water management at the national level
- Section IV - Final questions

Country name: [**The Federal Democratic Republic of Ethiopia**]

I. Calculation of Sustainable Development Goal indicator 6.5.2

Methodology

1. Using the information gathered in section II, the information gathered in this section allows for the calculation of Sustainable Development Goal global indicator 6.5.2, which is defined as the proportion of transboundary basin area with an operational arrangement for water cooperation.

2. The step-by-step monitoring methodology for indicator 6.5.2, developed by UNECE and UNESCO in the framework of UN-Water, should be referred to for details on the necessary data, the definitions and the calculation.[a]

3. The value of the indicator at the national level is derived by adding up the surface area in a country of those transboundary basins (river and lake basins and aquifers) that are covered by an operational arrangement and dividing the area obtained by the aggregate total area in a country of all transboundary basins (both river and lake basins, and aquifers).

4. Transboundary basins are basins of transboundary waters, that is, of any surface waters (notably rivers, lakes) or groundwaters which mark, cross or are located on boundaries between by two or more States. For the purpose of the calculation of this indicator, for a transboundary river or lake, the basin area is determined by the extent of its catchment. For groundwater, the area to be considered is the extent of the aquifer.

5. An "arrangement for water cooperation" is a bilateral or multilateral treaty, convention, agreement or other formal arrangement among riparian countries that provides a framework for cooperation on transboundary water management.

6. For an arrangement to be considered "operational" all the following criteria need to be in place in practice:

(a) There is a joint body, joint mechanism or commission (e.g., a river basin organization) for transboundary cooperation (criterion 1);

(b) There are regular (at least once per year) formal communications between riparian countries in form of meetings (either at the political or technical level) (criterion 2);

(c) Joint objectives, a common strategy, a joint or coordinated management plan, or an action plan have been agreed upon by the riparian countries (criterion 3);

(d) There is a regular (at least once per year) exchange of data and information (criterion 4).

Calculation of indicator 6.5.2

7. Please list in the tables below the transboundary basins (rivers and lakes and aquifers) in your country's territory and provide the following information for each of them:

(a) The country/ies with which the basin is shared;

(b) The surface area of the basin (the catchment of rivers or lakes and the aquifer in the case of groundwater) within the territory of your country (in square kilometres (km^2));

(c) Whether a map and/or a geographical information system (GIS) shapefile of the basin has been provided;

(d) Whether there is an arrangement in force for the basin;

(e) The verification of each of the four criteria to assess operationality;

[a] Available from the UN-Water website: https://www.sdg6monitoring.org/indicators/target-65/indicators652/ (updated version "2020").

(f) The surface area of the basin within the territory of your country which is covered by a cooperation arrangement that is operational according to the above criteria.

8. In case an operational arrangement is in place only for a sub-basin or a portion of a basin, please list this sub-basin just after the transboundary basin it is part of. In case there is an operational arrangement for the whole basin, do not list sub-basins in the table below.

Table 1

Transboundary river or lake basin (please add rows as needed)

Name of transboundary river or lake basin/sub-basin	*It is a basin or a sub-basin?* [b]	*Countries shared with*	*Surface area of the basin/ sub-basin (in km²) within the territory of the country*	*Map and/or GIS shapefile provided (yes/no)*	*Covered by an arrangement (entirely, partly, no) (Ref. to questions in sect. II)*	*Criterion 1 applied (yes/no) (Ref. to questions in sect. II)*	*Criterion 2 applied (yes/no) (Ref. to questions in sect. II)*	*Criterion 3 applied (yes/no) (Ref. to questions in sect. II)*	*Criterion 4 applied (yes/no) (Ref. to questions in sect. II)*	*Surface area of the basin/ sub-basin (in km²) covered by an operational arrangement within the territory of the country*
Nile Baro-Akobo Abay Tekeze Mereb	A basin	Burundi, DRC, Egypt, Eritrea, Kenya, Rwanda, S. Sudan, Sudan, Tnzania and Uganda	368,820		Entirely	Yes	Yes	Yes	Yes	368,820
Genale-Dawa	A sub-basin	Kenya and Somalia	172,889		No	No	No	No	No	0
Wabi-shebele	A basin	Somalia	202,220		No	No	No	No	No	0
Lake Turkana (OMo-Gibe)	A lake	Kenya	1000*		No	No	No	No	No	0
(A) Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational arrangements within the territory of the country (in km²) (do not double count sub-basins)										368,820
(B) Total surface area of transboundary basins of rivers and lakes within the territory of the country (in km²) (do not double count sub-basins)			744,929							

[b] List sub-basins after the basin they belong to.

Table 2

Transboundary aquifers (please add rows as needed)

Note: Transbundary aquifers are not delineated, there are some aquifers shared with neighbouring Kenya, Djigbutoi, South Sudan and Sudan though. There is little information on them as they were not studied.

Name of the transboundary aquifer	*Countries shared with*	*Surface area of the aquifer[c] (in km^2) within the territory of the country*	*Map and/ or GIS shapefile provided (yes/no)*	*Covered by an aquifer specific arrangement (entirely, partly, no)* *(Ref. to questions in sect. II)*	*Covered within an arrangement not specific to the aquifer[d] (entirely, partly, no)* *(Ref. to questions in sect. II)*	*Criterion 1 applied (yes/no)* *(Ref. to questions in sect. II)*	*Criterion 2 applied (yes/no)* *(Ref. to questions in sect. II)*	*Criterion 3 applied (yes/no)* *(Ref. to questions in sect. II)*	*Criterion 4 applied (yes/no)* *(Ref. to questions in sect. II)*	*Surface area of the aquifer (in km^2) covered by an operational arrangement within the territory of the country*
xx		xx								
(C) Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km^2)										
(D) Total surface area of transboundary aquifers (in km^2)										

[c] For a transboundary aquifer, the extent is derived from the aquifer system delineation which is commonly done relying on information of the subsurface (notably the extent of geological formations). As a general rule, the delineation of aquifer systems is based on the delineation of the extent of the hydraulically connected water-bearing geological formations. Aquifer systems are three-dimensional objects and the aquifer area taken into account is the projection on the land surface of the system. Ideally, when different aquifer systems not hydraulically connected are vertically superposed, the different relevant projected areas are to be considered separately, unless the different aquifer systems are managed conjunctively.

[d] In the text of the agreement or arrangement or in the practice.

Indicator value for the country

Surface waters:

Percentage of surface area of transboundary basins of rivers and lakes covered by an operational arrangement:

A/B x 100 = (368820/744929) X100 = 49.5 %

Aquifers:

Percentage of surface area of transboundary aquifers covered by an operational arrangement:

C/D x 100 =

Sustainable Development Goal indicator 6.5.2:

Percentage of surface area of transboundary basins covered by an operational arrangement:

((A + C)/(B + D)) x 100 =

Spatial information

If a map (or maps) of the transboundary surface water catchments and transboundary aquifers (i.e., "transboundary basins") is available, please consider attaching them. Ideally, shapefiles of the basin and aquifer delineations that can be viewed in GIS should be sent.

Additional information

If the respondent has comments that clarify assumptions or interpretations made for the calculation, or the level of certainty of the spatial information, please write them here:

* The area of the Ethiopian side of Lake Turkana varies with the seasons of the year. It is estmimaed to be 1000 sq.km.

Does your country have transboundary agreements or arrangements for the protection and/or management of transboundary waters (i.e., rivers, lakes or groundwater), whether bilateral or multilateral?

Yes ☒/No ☐

If yes, list the bilateral and multilateral agreements or arrangements (listing for each of the countries concerned):

[The Agreed Minutes of the Nile Council of Miisters in charge of Water affairs of the Nile Basin countries for the establishment of the Nile Basin Initiaiitve, 22 February 1999, Dar e salaam, Tnzania.]

II. Questions for each transboundary basin, sub-basin, part of a basin, or group of basins (river, lake or aquifer)

Please complete this second section for each transboundary basin **(**river or lake basin, or aquifer**)**, sub-basin, part of a basin or a group of basins covered by the same agreement or arrangement where conditions are similar.[1] In some instances, you may provide information on both a basin and one or more of its sub-basins or parts thereof, for example, where you have agreements[2] or arrangements on both the basin and its sub-basin. You may coordinate your responses with other States with which your country shares transboundary waters, or even prepare a joint report. General information on transboundary water management at the national level should be provided in section III and not repeated here.

Please reproduce this whole section with its questions for each transboundary basin, sub-basin, part of a basin or group of basins for which you will provide a reply.

Name of the transboundary basin, sub-basin, part of a basin or group of basins: Nile

List of the riparian States: **Burudni, D.R.C, Egypt, Eritea, Ethiopia, Rwanda, South Sudan, Sudan, Tanzania, and Ugand**

In the case of an aquifer, what is the nature of the aquifer and its relation with the river or lake basin:

Unconfined aquifer connected to a river or lake	☐
Unconfined aquifer with no or limited relation with surface water	☐
Confined aquifer connected to surface water	☐
Confined aquifer with no or limited relation with surface water	☐
Other	☐
Please describe: [fill in]	
Unknown	☒

[1] In principle, section II should be submitted for every transboundary basin, river, lake or aquifer, in the country, but States may decide to group basins in which their share is small or leave out basins in which their share is very minor, e.g., below 1 per cent.

[2] In section II, "agreement" covers all kinds of treaties, conventions and agreements ensuring cooperation in the field of transboundary waters. Section II can also be completed for other types of arrangements, such as memorandums of understanding.

Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: [11.7]

1. Is there one or more transboundary (bilateral or multilateral) agreement(s) or arrangement(s) on this basin, sub-basin, part of a basin or group of basins?

   One or more agreements or arrangements exist and are in force ☒

   Agreement or arrangement developed but not in force ☒

   Agreement or arrangement developed, but not in force for all riparians ☐

   Please insert the name of the agreement(s) or arrangement(s) [**The Nile Cooperative Framework greement, CFA, adopted by seven NBI Member States; signed by six raiparian countries and ratifieid by four riaiparians and deposited at AU**]

   Agreement or arrangement is under development ☐

   No agreement or arrangement ☐

   If there is no agreement or arrangement or it is not in force, please explain briefly why not and provide information on any plans to address the situation: [fill in]

If there is no agreement or arrangement and no joint body or mechanism for the transboundary basin, sub-basin, part of a basin or group of basins then jump to question 4; if there is no agreement or arrangement, but a joint body or mechanism then go to question 3.

Questions 2 and 3 to be completed for each bilateral or multilateral agreement or arrangement in force in the transboundary basin, sub-basin, part of a basin or group of basins.

2. (a) Does this agreement or arrangement specify the area subject to cooperation?

   Yes ☒/No ☐

   If yes, does it cover the entire basin or group of basins and all riparian States?

   Yes ☒/No ☐

   Additional explanations? [fill in]

   Or, if the agreement or arrangement relates to a sub-basin, does it cover the entire sub-basin?

   Yes ☐/No ☐

   Additional explanations? [fill in]

   Which States (including your own) are bound by the agreement or arrangement? *(Please list)*: [**Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda**]

   (b) If the agreement or arrangement relates to a river or lake basin or sub-basin, does it also cover aquifers?

   Yes ☐/No ☒

   If yes, please list the aquifers covered by the agreement or arrangement: [fill in]

   (c) What is the sectoral scope of the agreement or arrangement?

All water uses ☒

A single water use or sector ☐

Several water uses or sectors ☐

If one or several water uses or sectors, please list (check as appropriate):

Water uses or sectors

Industry ☐

Agriculture ☐

Transport (e.g., navigation) ☐

Households ☐

Energy: hydropower and other energy types ☐

Fisheries ☐

Tourism ☐

Nature protection ☐

Other (*please list*): [fill in]

(d) What topics or subjects of cooperation are included in the agreement or arrangement?

Procedural and institutional issues

Dispute and conflict prevention and resolution ☐

Institutional cooperation (joint bodies) ☒

Consultation on planned measures ☐

Mutual assistance ☒

Topics of cooperation

Joint vision and management objectives ☒

Joint significant water management issues ☒

Navigation ☒

Human health ☐

Environmental protection (ecosystem) ☒

Water quality ☒

Water quantity or allocation ☒

Cooperation in addressing floods ☒

Cooperation in addressing droughts ☒

Climate change adaptation ☒

Monitoring and exchange

Joint assessments ☒

Data collection and exchange ☒

Joint monitoring ☒

Maintenance of joint pollution inventories	☐
Elaboration of joint water quality objectives	☒
Common early warning and alarm procedures	☒
Exchange of experience between riparian States	☒
Exchange of information on planned measures	☒
Joint planning and management	
Development of joint regulations on specific topics	☒
Development of international or joint river, lake or aquifer basin management or action plans	☒
Management of shared infrastructure	☐
Development of shared infrastructure	☒
Other (*please list*): [fill in]	

(e) What are the main difficulties and challenges that your country faces with the agreement or arrangement and its implementation, if any?

Aligning implementation of agreement or arrangement with national laws, policies and programmes	☐
Aligning implementation of agreement or arrangement with regional laws, policies and programmes	☐
Lack of financial resources	☒
Insufficient human capacity	☐
Insufficient technical capacity	☐
Tense diplomatic relations	☐
Non-participation of certain riparian countries in the agreement	☒
No significant difficulties	☐
Other (*please describe*): [fill in]	

(f) What are the main achievements in implementing the agreement or arrangement and what were the keys to achieving such success? **[1. Having a common vision on the shared resource which is "Achieving sustainable socioeconomic development through the equitable utilization of and benefit from the common Nile water resources; agreeing on common sustainability framework Agreement resulted in developing & adopting suits of policies and strategies; improving knowledge on the shared resource, capacity development of the riparian countires; having regular and common platforms for conitnious dialogue on water resources management and development; improving exchange of data and informations among the riparians.**]

(g) Please attach a copy of the agreement or arrangement or provide the web address of the document (*please attach document or insert web address, if applicable*): [https://www.nilebasin.org]

3. Is your country a member of any joint body or mechanism for this agreement or arrangement?

Yes ☒/No ☐

If no, why not? (please explain): [fill in]

Where there is a joint body or mechanism

(a) If there is a joint body or mechanism, which kind of joint body or mechanism (*please tick one*)?

Plenipotentiaries ☐

Bilateral commission ☐

Basin or similar commission ☐

Expert group meeting or meeting of national focal points ☐

Other (*please describe*): [**A River Basin Organization: Nile Basin Initiative (NBI), with three centers: one a basin wide platform and two for sub-basins with their own governance structures consisting of council of Ministers and Technical advisory Committees.**]

(b) Does the joint body or mechanism cover the entire transboundary basin**,** sub-basin, part of a basin or group of basins?

Yes ☒/No ☐

(c) Which States (including your own) are members of the joint body or mechanism? *(Please list)*: [**Burundi, Democratic Republic of Congo, Egypt, Ethiopia, Kenya, Rwanda, South Sudan, Sudan, Tanzania and Uganda**]

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): [**Eritrea**]

(e) If not all riparian States are members of the joint body or mechanism how does the joint body or mechanism cooperate with them?

No cooperation ☐

They have observer status ☒

Other (*please describe*): [fill in]

(f) Does the joint body or mechanism have any of the following features (*please tick the ones applicable*)?

A secretariat ☒

If the secretariat is a permanent one, is it a secretariat or does each country host its own secretariat? (Please describe): [A permanent Secretariat]

A subsidiary body or bodies ☒

Please list (e.g., working groups on specific topics): [**Two Sub-basins: Eastern Nile and Nile Equatorial Lakes]**

Other features (*please list*): [fill in]

(g) What are the tasks and activities of this joint body or mechanism?[3]

Identification of pollution sources	☐
Data collection and exchange	☒
Joint monitoring	☐
Maintenance of joint pollution inventories	☐
Setting emission limits	☐
Elaboration of joint water quality objectives	☐
Management and prevention of flood or drought risks	☒
Preparedness for extreme events, e.g., common early warning and alarm procedures	☒
Surveillance and early warning of water related disease	☐
Water allocation and/or flow regulation	☐
Policy development	☒
Control of implementation	☐
Exchange of experience between riparian States	☒
Exchange of information on existing and planned uses of water and related installations	☒
Settling of differences and conflicts	☐
Consultations on planned measures	☒
Exchange of information on best available technology	☒
Participation in transboundary EIA	☒
Development of river, lake or aquifer basin management or action plans	☒
Management of shared infrastructure	☐
Addressing hydromorphological alterations	☒
Climate change adaptation	☒
Joint communication strategy	☒
Basin-wide or joint public participation and consultation of, for example, basin management plans	☒
Joint resources to support transboundary cooperation	☒
Capacity-building	☒

Any other tasks (*please list*): [**Identification, preparation and implementation of cooperative water resources development projects**]

[3] This may include tasks according to the agreement or tasks added by the joint body, or its subsidiaries. Both tasks which joint bodies coordinate and tasks which they implement should be included.

(h) What are the main difficulties and challenges that your country faces with the operation of the joint body or mechanism, if any?

Governance issues ☐

Please describe, if any: [fill in]

Unexpected planning delays ☐

Please describe, if any: [fill in]

Lack of resources ☒

Please describe, if true: [**A number of cooperative water resources development projects worth billions of dollars were idnetifed and prepared jointly, but couldn't be implemented because of lack of resources.**]

Lack of mechanism for implementing measures ☐

Please describe, if true: [fill in]

Lack of effective measures ☐

Please describe, if true: [fill in]

Unexpected extreme events ☐

Please describe, if any: [fill in]

Lack of information and reliable forecasts ☐

Please describe, if any: [fill in]

Others (*please list and describe, as appropriate*): **[Lack of cooperationfrom and aggressive campaign with bilateral and multirateral financing agencies by one member state against financing the projects**]

(i) Does the joint body or mechanism, or its subsidiary bodies meet regularly?

Yes ☒/No☐

If yes, how frequently does it meet?

More than once per year ☒

Once per year ☐

Less than once per year ☐

(j) What are the main achievements with regards to the joint body or mechanism?

[(i) Creation of a cooperative platform of riparian states to discus the management of their shared water resources; (ii) Identification, preparation and implementation of some win-win projects e.g. hydropower stations, regional power interconnection and watershed projects; (iii) Development and adoption of polcies, strategies and programmes; (iv) Capacity building – human and institutional; Conducting studies / Assessemnts to improve the knowledge gap on the common resources.]

(k) Did the joint body or mechanism ever invite a non-riparian coastal State to cooperate?

Yes ☐/No ☒

If yes, please give details. If no, why not, e.g. are the relevant coastal States also riparian States and therefore already members of the joint body or mechanism? [**The relevant coastal State is also a riparian State and therefore already a member of the joint body or mechanism, it temporarily froze its participation though**]

4. Have joint objectives, a common strategy, a joint or coordinated management plan or action plan been agreed for the basin, sub-basin, part of a basin or group of basins?

Yes ☒/No☐

If yes, please provide further details: [**NBI 10 Year Basin wide Strategy (2017-2027) and Five Years Action /Strategic Plans for Easter Nile Technical Regional Office and Nile Equatorial Subsidiary Action Program Coordination Unit**]

5. How is the transboundary basin,–sub-basin, part of a basins or group of basins protected, including the protection of ecosystems, in the context of sustainable and rational water use?

Regulation of urbanization, deforestation, and sand and gravel extraction. ☐

Environmental flow norms, including consideration of levels and seasonality ☐

Water quality protection, e.g. nitrates, pesticides, faecal coliforms, heavy metals ☐

Water-related species and habitats protection ☐

Other measures : [**Strategies for Management of Environmental Flows, wetland management and Information Disclosure Policy and Interim Information and Data exchange Procedure were approved by the Nile Councile of Ministers**]

6. (a) Does your country regularly exchange information and data with other riparian States in the basin, sub-basin, part of a basin or group of basins?

Yes ☒/No ☐

(b) If yes, how often:

More than once per year ☒

Once per year ☐

Less than once per year ☐

Information and data are exchanged to prepare and warn downstream countries of flooding and other disasters as well as implementation of NBI Programs and projects as required

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): **[through letters and electronic media such as e-mail, website**]

(d) If yes, on what subjects are information and data exchanged?

Environmental conditions	☐
Research activities and application of best available techniques	☐
Emission monitoring data	☐
Planned measures taken to prevent, control or reduce transboundary impacts	☐
Point source pollution sources	☐
Diffuse pollution sources	☐
Existing hydromorphological alterations (dams, etc.)	☐
Flows or water levels (including groundwater levels)	☐
Water abstractions	☐
Climatological information	☒
Future planned measures with transboundary impacts, such as infrastructure development	☐

Other subjects (*please list*): [fill in]

Other comments, e.g. spatial coverage of data and information exchange: [fill in]

(e) Is there a shared database or information platform?

Yes ☒/No ☐

(f) Is the database publicly available?

Yes ☒/No ☐

If yes, please provide the web address: [**https://www.nbi.com**]

(g) What are the main difficulties and challenges to data exchange, if applicable?

Frequency of exchanges	☐
Timing of exchanges	☐
Comparability of data and information	☐
Limited spatial coverage	☐
Inadequate resources (technical and/or financial)	☐

Other (*please describe*): [**There an Inerim Procedure for Data and Information Exchange for NBI Programs/ Projects, pending the conclusion of the CFA and establishement of the Nile River Basin Commission. Therefore, the main challenge is the non-opertionalization of the CFA and lack of Protocol / Procedure for data and information exchange among the riparin countries (which is a downsteam work of the CFA**)]

Additional comments: [fill in]

(h) What are the main benefits of data exchange on the basin, sub-basin, part of a basin or group of basins? (*please describe*): [**for sound project design, drought and flood management]**

7. Do the riparian States carry out joint monitoring in the transboundary basin, sub-basin, part of a basin or group of basins?

Yes ☐/No ☒

(a) If yes, what does the joint monitoring cover?

	Hydrological	*Ecological*	*Chemical*
Border surface waters	☐	☐	☐
Surface waters in the entire basin	☐	☐	☐
Surface waters on the main watercourse	☐	☐	☐
Surface waters in part of the basin please describe [fill in]	☐	☐	☐
Transboundary aquifer(s) (connected or unconnected)	☐	☐	☐
Aquifer(s) in the territory of one riparian hydraulically connected to a transboundary river or lake	☐	☐	☐

(b) If joint monitoring is carried out, how is this done?

National monitoring stations connected through a network or common stations ☐

Please describe: [fill in]

Joint and agreed methodologies ☐

Please describe: [fill in]

Joint sampling ☐

Please describe: [fill in]

Common monitoring network ☐

Please describe: [fill in]

Common agreed parameters ☐

Please describe: [fill in]

(c) Please describe the main achievements regarding joint monitoring, if any: [fill in]

(d) Please describe any difficulties experienced with joint monitoring: [fill in]

8. Do the riparian States carry out joint assessment of the transboundary basin, sub-basin, part of a basin or group of basins?

Yes ☒/No ☐

If yes, please provide the date of the last or only assessment, the frequency and scope (e.g., surface waters or groundwaters only, pollution sources, etc.) of the assessment, and assessment methodology applied: [**A strategic Water Resources Management Analysis is being done by the Nile Basin Initiaitive Seceretariat with the support of Technical Working Group composed of senior water resources experts of the riprian ocountries. The Analysis inventerizes the existing and planned uses of the resource, identify the gaps and comeup with recommendations on how to meet the gaps beteen supply and demand**]

9. Have the riparian States agreed to use joint water quality standards?

Yes ☐/No ☒

If yes, what standards have been applied, e.g. international or regional standards (please specify which), or have national standards of the riparian States been applied? [fill in]

10. What are the measures implemented to prevent or limit the transboundary impact of accidental pollution?

Notification and communication	☐
Coordinated or joint early warning or alarm system for accidental water pollution	☐
Other (*please list*): [fill in]	
No measures	☐

If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]

11. What are the measures implemented to prevent or limit the transboundary impact of extreme weather events and climate change?

Notification and communication	☒
Coordinated or joint alarm system for floods	☐
Coordinated or joint alarm system for droughts	☐
Joint climate change adaptation strategy	☐
Joint disaster risk reduction strategy	☐
Other (*please list*): [fill in]	
No measures	☐

If not, why not? What difficulties does your country face in putting in place such measures?: [fill in]

12. Are procedures in place for mutual assistance in case of a critical situation?

Yes ☐/No ☒

If yes, please provide a brief summary: [fill in]

13. Are the public or relevant stakeholders involved in transboundary water management in the basin, sub-basin, part of a basin or group of basins?

Yes ☒/No ☐

If yes, how? (please tick all applicable)

Stakeholders have observer status in a joint body or mechanism	☒
Stakeholders have an advisory role in the joint body	☐
Stakeholders have a decision-making role in the joint body	☐

If yes, please specify the stakeholders for the joint body or mechanism:

[**Regional Nile Basin Discourse, representing hundreds of civil society organzations in the riparian countries**]

Intergovernmental organizations	☐
Private sectors organizations or associations	☐
Water user groups or associations	☐
Academic or research institutions	☐
Other non-governmental organizations	☒
General public	☐
Other (please specify): [fill in]	

Availability of information to the public	☒
Consultation on planned measures or river basin management plans[4]	☐
Public involvement	☐
Other (*please specify*): [fill in]	

[4] Or, where applicable, aquifer management plans.

Please remember to complete section II for each of the transboundary basins, sub-basin, part of a basin or group of basins. Please also remember to attach copies of agreements or arrangements, if any.

III. Water management at the national level

In this section, you are requested to provide general information on water management at the national level as it relates to transboundary waters. Information on specific transboundary basins, sub-basins, part of basins and groups of basins, should be presented in section II and not repeated here.

1. (a) Does your country's national legislation, policies, action plans and strategies refer to measures to prevent, control and reduce any transboundary impact?

Yes ☒/No ☐

If yes, please briefly describe the main national laws, policies, action plans and strategies [**Ethiopian Water Resources Management Policy (1999): Comply with those international covenants adopted by Ethiopia and manage transboundary waters accordingly; Ethiopian Water Sector Strateby (2001): Transboundary waters will be managed in compliance the international covenants adopted by Ethiopia**; **Ethiopian water Resources Managent Proclmation No. 197 /2000: shall stipulated that any water resources development /management shall be based on the National policy and relevant laws of the coutry. Currently, the above policy and strategy are revised and it is expected to be endorsed soon. The revised policy gives strong emphasis to the principle of prevention of the causing of significant harm. There are also a number of statements in the policy and strategy that promotes conservation, protection and sustainable utilization of the water resources of the country.**]

(b) Does your country's legislation provide for the following principles?

Precautionary principle Yes ☒/No ☐

Polluter pays principle Yes ☒/No ☐

Sustainable development Yes ☒/No ☐

User pays principle Yes ☒/No ☐

If yes, please briefly describe how these principles are implemented at the national level: [**It is implemented through the permit system the country put into practice. Recently, water uses charge regulation and national guidelines for water charge are in the process of approval at the Council of Ministers which is expected to put the above principles into practice.]**

(c) Does your country have a national licensing or permitting system for wastewater discharges and other point source pollution? (e.g., in industry, mining, energy, municipal, wastewater management or other sectors)?

Yes ☒/No ☐

If yes, for which sectors?

Industry ☒

Mining ☒

Energy ☐

Municipal ☒

Livestock raising ☐

Aquaculture ☐

Other (please list): [**Hydropower projects**]

Please briefly describe the licensing or permitting system, indicating whether the system provides for setting emission limits based on best available technology?

If yes, for which sectors? (please list): **[For any untreated waste discharged to water odies]**

If not, please explain why not (giving the most important reasons) or provide information if there are plans to introduce a licensing or permitting system: [fill in]

(d) Are the authorized discharges monitored and controlled?

Yes ☒/No ☐

If yes, how? (*Please tick the ones applicable*):

Monitoring of discharges ☒

Monitoring of physical and chemical impacts on water ☐

Monitoring of ecological impacts on water ☐

Conditions on permits ☐

Inspectorate ☐

Other means (*please list*): [fill in]

If your country does not have a discharge monitoring system, please explain why not or provide information if there are plans to introduce a discharge monitoring system: [fill in]

(e) What are the main measures which your country takes to reduce diffuse sources of water pollution on transboundary waters (e.g., from agriculture, transport, forestry or aquaculture)? The measures listed below relate to agriculture, but other sectors may be more significant. Please be sure to include these under "others":

Legislative measures

Norm for uses of fertilizers ☐

Norms for uses of manure ☐

Permitting system ☐

Bans on or norms for use of pesticides ☐

Others (please list): [fill in]

Economic and financial measures

Monetary incentives ☐

Environmental taxes (such as fertilizer taxes) ☐

Others (*please list*): [fill in]

Agricultural extension services ☐

Technical measures

Source control measures

Crop rotation ☒

Tillage control ☒

Winter cover crops ☐

Others (*please list*): [fill in]

Other measures

Buffer/filter strips ☒

Wetland reconstruction ☒

Sedimentation traps ☒

Chemical measures ☐

Others (*please list):* [**Wastewater recycle and reusing**]

Other types of measures ☐

If yes, please list: [fill in]

(f) What are the main measures which your country takes to enhance water resources allocation and use efficiency?

Please tick as appropriate (not all might be relevant)

A regulatory system regarding water abstraction ☒

Monitoring and control of abstractions ☒

Water rights are defined ☒

Water allocation priorities are listed ☒

Water-saving technologies ☒

Advanced irrigation techniques ☒

Demand management activities ☒

Other means (please list) ☐

(g) Does your country apply the ecosystems approach?

Yes ☒/No ☐

If yes, please describe how: [**The country is implementing the Eco Hydrology principles and technologies to rehabilitate and restore the waterbodies and related ecosystems**.]

(h) Does your country take specific measures to prevent the pollution of groundwaters?

Yes ☒/No ☐

If yes, please briefly describe the most important measures: [**The country's revised water policy has made the protection of groundwater its' priority. As it is stated in the policy one of the measures that will promote in**

groundwater protection is by applying minimum modification of groundwater recharge areas, including their natural eco-system, should be ensured to enable replenishment of aquifers and to reduce vulnerability to climate change and hydrological variability. Furthermore, legislations, standards and guidelines for sustainable management of groundwater will be established as part of the legal framework to foster conservation, precaution and protection of balanced development that supports economic and human health development.]

2. Do your national laws require transboundary environmental impact assessment (EIA)?

Yes ☒/No ☐

If yes, please briefly describe the legislative basis, and any related implementing procedures. [**Although it has not yet framed as a law but the Water Resources Management Policy of the country clearly states for sectors to ensure that all water resources development and management interventions in the sector undergo thorough viability study and environmental impact assessment.]**

*If not, do other measures provide for transboundary EIA? [*fill in]

IV. Final questions

1. What are the main challenges your country faces in cooperating on transboundary waters?

Differences between national administrative and legal frameworks	☐
Lack of relevant data and information	☒
Difficulties in data and information exchange	☐
Sectoral fragmentation at the national level	☒
Language barrier	☐
Resource constraints	☐
Environmental pressures, e.g. extreme events	☒
Sovereignty concerns	☒

Please list other challenges and/or provide further details: [**Lack of all inclusive Water use agreement or lack of political will to enter into all inclusive water use agreement from downstream riparian countries.**]

2. What have been the main achievements in-cooperating on transboundary waters?

Improved water management	☐
Enhanced regional integration, i.e. beyond water	☒
Adoption of cooperative arrangements	☒
Adoption of joint plans and programmes	☒
Long-lasting and sustained cooperation	☐
Financial support for joint activities	☐

Stronger political will for transboundary water cooperation	☒
Better knowledge and understanding	☒
Dispute avoidance	☒
Stakeholder engagement	☒

Please list other achievements, keys to achieving success, and/or provide concrete examples: [fill in]

3. Please indicate which institutions were consulted during the completion of the questionnaire

Joint body or mechanism	☐
Other riparian or aquifer countries	☐
National water management authority	☒
Environment agency/ authority	☒
Basin authority (national)	☒
Local or provincial government	☐
Geological survey (national)	☐
Non-water specific ministries, e.g. foreign affairs, finance, forestry and energy	☐
Civil society organizations	☐
Water user associations	☐
Private sector	☐

Other (please list): [fill in]

Please briefly describe the process by which the questionnaire was completed:

4. If you have any other comments please add them here (*insert comments*): [fill in]

5. Name and contact details of the person(s) who filled out the questionnaire (*please insert*): [fill in]

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