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: [Georgia]

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*
Kura (Mtkvari) River	Basin	Azerbaijan, Turkey, Armenia, Iran	23,300 km²	Yes	No	Yes *(refers to Georgia-Azerbaijan cooperation)*	Yes *(refers to Georgia-Azerbaijan cooperation)*	Yes *(refers to Georgia-Azerbaijan cooperation)*	No	0
Alazani River	Sub-basin	Azerbaijan	6,500 km²	Yes	No	No	No	No	No	0
Iori River	Sub-basin	Azerbaijan	3,824 km²	Yes	No	No	No	No	No	0
Khrami River	Sub-basin	Azerbaijan	8,260 km²	Yes	No	No	No	No	No	0
Potskhovi River	Sub-basin	Turkey	1,330 km²	No	No	No	No	No	No	0
Debeda River	Sub-basin	Armenia	310 km²	Yes	No	No	No	No	No	0
Tergi River	Basin	Russia	1,064 km²	No	No	No	No	No	No	0
Asa River	Sub-basin	Russia	240 km²	No	No	No	No	No	No	0
Arghuni River	Sub-basin	Russia	450 km²	No	No	No	No	No	No	0
Tchorokhi river	Basin	Turkey	1,600 km²	No	No	No	No	No	No	0
Lake Kartsakhi	Lake basin	Turkey	13.9 km²	No	No	No	No	No	No	0
Lake Jandari	Lake basin	Azerbaijan		No	No	No	No	No	No	0
(A) Total surface area of transboundary basins/sub-basins of rivers and lakes covered by operational										0

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

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*
arrangements within the territory of the country (in km²) **(do not double count sub-basins)**										
(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)**			46,891.9 km²							

Table 2
Transboundary aquifers (please add rows as needed)

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*
Artesian Basin of Alazani	Azerbaijan	3,306.1 km^2	Yes	No	No	No	No	No	No	0
Artesian Basin of Iori-Shiraki	Azerbaijan	100 km^2	No	No	No	No	No	No	No	0
Artesian basin of Marneuli-Gardabani	Azerbaijan, Armenia	340 km^2	No	No	No	No	No	No	No	0
Javakheti East slope fractured groundwater district	Armenia		No	No	No	No	No	No	No	0
Fractured water system district of Akhalkalaki lava sheet	Armenia, Turkey		No	No	No	No	No	No	No	0
Akhaltsikhe Artesian Basin	Turkey		No	No	No	No	No	No	No	0
Fractured pressured water system of Achara-Imereti	Turkey		No	No	No	No	No	No	No	0

[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.

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	yy									
(C) Sub-total: surface area of transboundary aquifers covered by operational arrangements (in km^2)										0
(D) Total surface area of transboundary aquifers (in km^2)										

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 = 0

Aquifers:

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

C/D x 100 = 0

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 = 0

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:

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): [fill in]

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: [Kura (Mtkvari) river basin, sub-basins: Alazani, Iori, Khrami, Potskhovi, Debeda]

List of the riparian States: **[Azerbaijan, Turkey, Armenia]**

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 ☐

Percentage of your country's territory within the basin, sub-basin, part of a basin or group of basins: **[33.4% (Kura/Mtkvari river basin)]**

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 ☐

[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.

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)*** [fill in]

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: **[A draft Agreement between the Republic of Azerbaijan and Georgia on "Cooperation in the Field of Protection and Sustainable Use of the Water Resources of the Kura River Basin" has been developed with the support of OSCE and UNECE. The agreement hasn't been signed yet. Further negotiations on certain aspects of the draft agreement may be necessary between the countries. The last consultation meeting between the countries on the development of the agreement took place in 2017.]**

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)*: [fill in]

(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? [fill in]

(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*): [fill in]

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): **[The above-mentioned draft agreement has not been signed yet, thus there is no joint body established under a certain agreement/arrangement. Although, the neighbouring countries – Georgia and the Republic of Azerbaijan – cooperate within the frameworks of regional projects, under one of which (Kura II: Advancing IWRM across the Kura river basin through implementation of the transboundary agreed actions and national plans) joint bodies have been established in the form of Regional Project Advisory Group consisting of different stakeholders from the countres and the technical working groups consisting of experts from Georgia and Azerbaijan.]**

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 (*Regional working groups of experts*): **[under the UNDP-GEF Project "Kura II: Advancing IWRM across the Kura river basin through implementation of the transboundary agreed actions and national plans" the Regional Project Advisory Group and two regional working groups have been established with the different stakeholders and experts from Georgia and the Republic of Azerbaijan.**

The Regional Project Advisory Group consists of different stakeholders, including the National Focal Points from both countries' beneficiary ministires, experts, representatives of the municipal water supply companies, academia. The aim of the group is to share the national and regional water priorities within and across sectors.

Two working groups have been established at technical level in 2018. One regional working group (on Water Quantity Management) focuses on water quantity and the other (on Shared Water Quality Indicators) on water quality monitoring. The countries have agreed on the common indicators for water quality and the common methodology for quantitative data collection from the Kura river Basin, which on its end enabled harmonized analysis.]

(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)*: **[Georgia and the Republic of Azerbaijan]**

(d) Are there any riparian States that are not members of the joint body or mechanism? (please list): **[The project (Kura II) is being implemented only in Georgia and Azerbaijan.]**

(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 joint secretariat or does each country host its own secretariat? (Please describe): [fill in]

A subsidiary body or bodies ☐

Please list (e.g., working groups on specific topics): **[There are three key joint bodies under the Kura II project, Regional Project Advisory Group and regional working groups on Water Quantity Management and on Shared Water Quality Indicators; the working groups are not linked to any agreement and are solely established under the UNDP/GEF project.]**

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*): [fill in]

[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: [fill in]

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*): **[the joint bodies (Regional Project Advisory Group and the two working groups) between Georgia and the Republic of Azerbaijan are established under the project. Thus the joint bodies do not have formal framework of cooperation as they are not established under any continues formal agreement or arrangement.]**

(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? **[Some of the key achievements have been sharing the data collection methodology in terms of water quantity, and identification of common indicators in terms of water quality between the two riparian countries. These on their end have further enhanced the cooperation on transboundary waters and data exchange.]**

(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? [fill in]

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: **[In 2014 the Ministry of Environment and Natural Resources Protection of Georgia and the Ministry of Ecology and Natural Resources of Azerbaijan endorsed Strategic Action Programme (SAP) for the reduction of degradation in the Kura (Mtkvari) River Basin, developed with the support of the UNDP-GEF Project "Kura II". The document serves as a roadmap for the countries to implement the IWRM principles in the Kura (Mtkvari) river basin.]**

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 (*please describe*): **[<u>Environmental supervision and waste management at the national level:</u> The national legislation provides mechanisms for the protection of water resources, including through the means of economic regulation. It encompasses the system of penalties for the violation of national legislation. The Ministry of Environmental Protection and Agriculture of Georgia, namely its sub-agency Department of Environmental Supervision (DES) is the main institution responsible for the enforcement of environmental legislation in Georgia. In respect to water resources, the Department is responsible to identify and prevent illegal use and pollution of surface water resources and to control the compliance with the conditions of the issued permits, environmental decisions and decisions on extension of current activities.**

The Waste Management Plans for 2017-2022 adopted by municipalities of Georgia envision the closure and clean up on uncontrolled waste dumping sites by 2022. This will gradually eliminate pollution of waters with municipal waste.]

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	☐

(c) Please describe how information is exchanged (e.g. in connection with meetings of joint bodies): **[there is no regular format of data exchange. Although, the experts from Georgia and the Republic of Azerbaijan exchange data and information within the framework of established joint bodies under the UNDP-GEF Project "Kura II", in particular under the Regional Project Advisory**

Group and the two regional working groups on Water Quantity Management and Shared Water Quality Indicators. At the working group meetings the countries have shared information on surface and groundwater resources in Azerbaijan and Georgia and presented the results of the analysis on the agreed water quality indicators.

In addition, the respective public agencies of Georgia and Azerbaijan cooperate on the issues related to hydrological forecasting. For instance, the LEPL National Environmental Agency of the Ministry of Environmental Protection and Agriculture of Georgia, provides the data to the respective agency of Azerbaijan on the daily water level and flow from the certain locations of Kura (Mtkvari) river basin and Alazani river basin. The information is provided at the beginning of the spring flooding (from 15 March to 15 June). In addition, the data on the snow level in Gudauri and Bakuriani (resorts in Georgia) is also provided to the respective agency in Azerbaijan, responsible for hydrological forecasting.]

(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: [fill in]

(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*): [fill in]

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*): [fill in]

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: **[In 2018, the regional working groups were established, as noted above, within the GEF/UNDP project; the water quality working group selected 5 water quality parameters to be shared between Georgia and Azerbaijan. These parameters are Nitrate, Nitrite, BOD5, Heavy metals, and Phenol. This working group also selected 3 sites in each country along the Kura river to start monitoring of these parameters and exchange the results with each other. For the water quantity working group, they agreed to keep the already existing mechanism for hydrological**

data exchange between the two countries. The two countries currently exchange data on water levels and water flows on key points along the river for combating the impacts of flooding.]

(c) Please describe the main achievements regarding joint monitoring, if any: **[agreement on the joint methodology and parameters.]**

(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: [fill in]

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?

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? ***(The Regional Project Advisory Group established under the "Kura II" project between Georgia and Azerbaijan, consists of representatives from relevant public institutions, private sector (water supply companies), academia).***

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:
[fill in]

- 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 **[Environmental Assessment Code of Georgia]**

(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: **[Currently, there is large scope of activities subject to the Environmental Impact Assessment (EIA) and screening procedures. Activities, which are not subject to the environmental decision, are regulated by the 2014 Technical Regulation for the Abstraction of Water from Surface Bodies that requires from the water user to seek an approval of the Ministry of Environmental Protection and Agriculture of Georgia on the plan for the abstraction of surface water. In addition, by the Ministry, Maximum Admissible Discharges are established and adopted, state inventory of water use is conducted, drinking water quality monitoring is conducted, statistical forms submitted annually by users of water resources (irrigation companies, hydroelectric and thermoelectric enterprises and industries) are collected and processed, environmental supervision is conducted and penalties for the violation of the national legislation are issued.**

Currently the water abstraction fees for the surface water are not applied. The abstraction and use of groundwater require obtaining of a license that can be issued for maximum 25 years by the National Agency of Mines of the Ministry of Economy and Sustainable Development of Georgia. Charges for groundwater abstraction are set by the Law on Fees for Use of Natural Resources.]

(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): [fill in]

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): [fill in]

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: **[permit system for water abstraction and discharge is envisaged by the new draft Law on Water Resources Management, that has been prepared by the Ministry of Environmental Protection and Agriculture, and which will replace the current legislation (the 1997 Water Law).]**

(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: **[the system will be introduced after the adoption of the new draft Law on Water Resources Management.]**

(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*): **[According to the: Food/feed Safety, Veterinary and Plant Protection Code of Georgia, in case of Violation of the use of pesticide, there are fines and sanctions introduced.]**

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):* [fill in]

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: [fill in]

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

Yes ☒/No ☐

If yes, please briefly describe the most important measures: **[through the water quality monitoring, and introduction of penalties for water pollution.]**

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. [fill in]

*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: **[absence of transboundary agreements.]**

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: **[Georgia collaborates with neighboring countries (Armenia, Azerbaijan) in the field of the water resources management within the frames of different regional projects supported by international organizations. The main acievements are: development of the joint approaches in the field of the water resources management, exchange of the experience, exchange of information, and strengthening cooperation in the field.**

In addition, currently the preliminary bilateral negotiations are ongoing between Georgia and Armenia to strengthen the transboundary cooperation on Debeda river basin. The development of an arrangement for the transboundary cooperation is planned and the practical ways of cooperation are being discussed between the countries, especially on monitoring.]

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: **[We asked different departments, relevant to the content of the Indicator, to nominate one "focal point", to whom we would consult during the reporting. This made the reporting process easier to directly contact the focal points, discuss the specific questions and consult with them through the formal, as well as informal means of communication.**

The focal points were mainly from different agencies and departments of the Ministry of Environmental Protection and Agriculture of Georgia.]

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*): **[Gvantsa Sivsivadze, the First Category Senior Specialist at Water Division, Environment and Climate Change Department, Ministry of Environmental Protection and Agriculture of Georgia (Gvantsa.Sivsivadze@mepa.gov.ge)]**

Date: [30 June, 2020 (initial submission); 2 October, 2020 (final revised submission)]

Signature:

Thank you very much for taking the time to complete this report.