



# Freshwater

## Freshwater Management: Indicators and Policies



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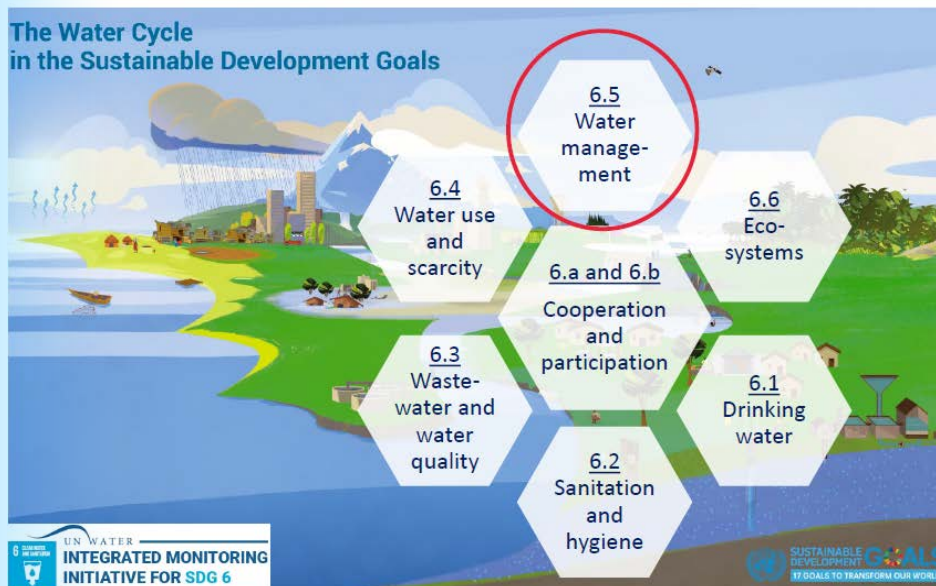
### From the global perspective for water policies...



#### **Ensure availability and sustainable management of water and sanitation for all**

Life on earth and human health depends heavily on sufficient freshwater with an adequate quality. All ecosystems on earth depend on a specific amount of water. To sustainably ensure this common resource for all with their specific necessities, there are a number of objectives in respect of which a sufficient quantity shall be ensured and its quality is to be protected. The Sustainable Development Goal 6 (SDG 6) therefore recognizing these common global challenges, comprises of eight targets with 11 indicators on water and sanitation in order to support a transition towards a sustainable use of this wet resource. Good data to track progress is a prerequisite for supporting water policies.

# SDG6 Ensure availability and sustainable management of water and sanitation for all



6.1.1	Safely managed drinking water services (WHO, UNICEF)
6.2.1	Safely managed sanitation services and hygiene (WHO, UNICEF)
6.3.1	Wastewater safely treated (WHO, UN-Habitat, UNSD)
6.3.2	Good ambient water quality (UNEP)
6.4.1	Water use efficiency (FAO)
6.4.2	Level of water stress (FAO)
6.5.1	Integrated water resources management (UNEP)
6.5.2	Transboundary basin area with water cooperation (UNECE, UNESCO)
6.6.1	Water-related ecosystems (UNEP, Ramsar)
6.a.1	Water- and sanitation-related official development assistance (WHO, OECD)
6.b.1	Participation of local communities in water and sanitation management (WHO, OECD)

Source: <https://unece.org/environment/documents/2021/04/presentations/23tiefenauersdg-652statusseis2021-04-20>

United Nations Agencies consider the dedicated water and sanitation goal as unique since it requires the coordination of custodians in the framework of the United Nations water including the United Nations Economic Commissions for Europe (UNECE), United Nations Environment Programme (UNEP), United Nations Educational, Scientific and Cultural Organization (UNESCO), Food and Agriculture Organization of the United Nations (FAO), World Health Organization (WHO) and others.

## Freshwater resources are shared resources



### Target 6.5: By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

Water has a transboundary nature as well as a global scope. Most of the world’s water resources are shared. To address, protect and manage effectively this vital resource, international cooperation for common responsibilities is required. Within the SDGs, the only SDG indicator on transboundary cooperation is Indicator 6.5.2: Proportion of transboundary basin area with an operational arrangement for water cooperation. As in other sectors, shared work on protection of water between international organisations, UN bodies and global conventions, institutions in non-European countries and regions has the potential to frame and mediate regional-to-global and global-to-regional flows of knowledge, information and data and the supply of the associated expertise and knowhow thus contributing to tackle the SDGs.

The key messages from the Sustainable Development Goals Report (United Nations, 2020) for the need of transboundary water management are:

- Prerequisite for ecologically sound management of freshwater resources & peaceful regional integration
- > 60 % of global freshwater flow comes from basins that cross national borders.
- 67 out of 153 countries share transboundary waters
- average share of national transboundary basins operational arrangement was 59 % (2017-2018)
- only 17 countries reported that all their transboundary basins were covered by such arrangements.

Already in 1992, the **UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention<sup>1</sup>)** was adopted and entered into force in 1996. It is a

<sup>1</sup> [https://unece.org/DAM/env/water/publications/WAT\\_Text/ECE\\_MP.WAT\\_41.pdf](https://unece.org/DAM/env/water/publications/WAT_Text/ECE_MP.WAT_41.pdf)

unique international legal instrument and intergovernmental platform, which aims to ensure the sustainable use of transboundary water resources by facilitating cooperation. Almost all countries are sharing transboundary waters in the UNECE region, which puts an emphasis on a transition to a global legal framework for transboundary water cooperation. This global cooperation is, moreover, also vital for the protection and management of other natural resources.

## Water is a connector

The United Nations Framework Convention on Climate Change (UNFCCC) **Paris Agreement** (2016) addresses the need to limit the rise of global average temperature to well below 2°C above pre-industrial levels by the end of this century, and to adapt to the impacts of climate change. The implementation phase of the Paris Agreement focuses on Parties working to define and enact their national commitments. The **Sendai Framework for Disaster Risk Reduction** (2015–2030) calls as one of their priorities, for the strengthening and implementation of global mechanisms on hydrometeorological issues, to raise awareness and improve understanding of water-related disaster risks and their impact on society and to advance strategies for risk reduction. While these global agreements are discrete frameworks with their own sets of targets, mechanisms and reporting requirements, they have an overlapping agenda (as shown in the figure below).



The role of water as a connector among the global commitments. [https://www.unwater.org/app/uploads/2019/10/UN\\_Water\\_PolicyBrief\\_ClimateChange\\_Water.pdf](https://www.unwater.org/app/uploads/2019/10/UN_Water_PolicyBrief_ClimateChange_Water.pdf)

## ... to regional partnership perspectives

### Water is a crosscutting theme...

Realization of SDG 6 and other water- and ecosystem-related targets are essential for society's health and well-being, improving nutrition, ending hunger, ensuring peace and stability, preserving ecosystems and biodiversity, and achieving energy and food security. Water is also an essential component of national and local economies. Water management fosters gender equality and social inclusion, and supports the creation and maintenance of jobs across all sectors of the economy.

With 2030 steadily approaching, there is urgent need to enhance action, coherence and coordination among them to reduce duplication or even triplication of effort, misalignment and competition over funding. Given water's inherent centrality to achieving these goals, it can play a connector role among them, reinforcing and strengthening each country's commitments to mitigating and adapting to climate change, reducing disaster risks, ending poverty and inequality, and "leaving no one behind".

Against the background of the SDGs, water supports the attainment of the other 16 SDGs. Realization of SDG 6 and other water- and ecosystem-related targets are essential for society's health and well-being, improving nutrition, ending hunger, ensuring peace and stability, preserving ecosystems and biodiversity, and achieving energy and food security. Water is also an essential component of national and local economies. Water management fosters gender equality and social inclusion, and supports the creation and maintenance of jobs across all sectors of the economy.

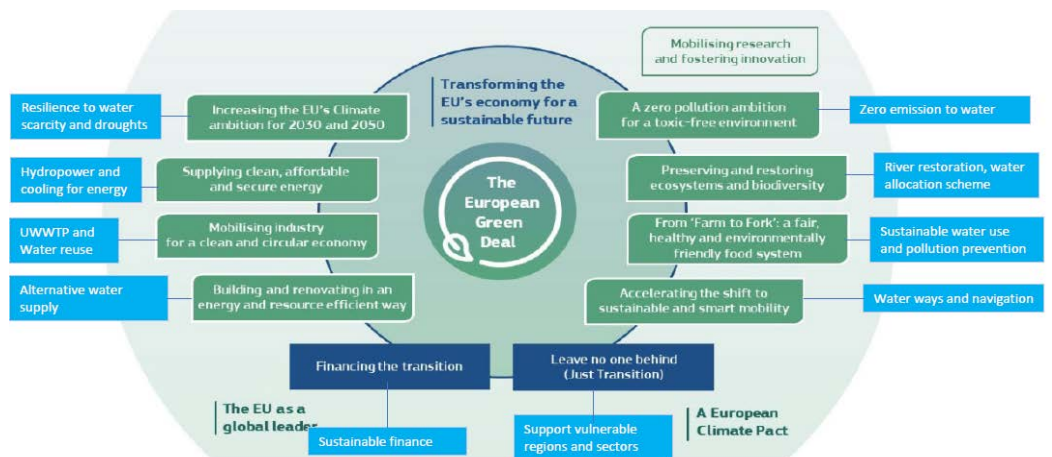


Source: Environment Agency Europe (EEA) thematic working areas–2021-2030,

As for the European Union (EU), next to the SDGs also all UNECE member States do have water legislation and policies in place. The Water Framework Directive (WFD, Directive 2000/60/EC of the European Parliament and of the Council), adopted in 2000, as an example of these policies in place is at the heart of water related European Union directives and put forward an integrated approach for EU water policy, centered on the concept of river basin management with the objective of achieving good status of all EU waters by 2015.

Water and nature are also an integral part of the European Green Deal and relevant across all other EU policy areas. It is important to mobilize water sector stakeholders to take an active part in the implementation of the Green Deal, since water as part of the natural environment has great potential to promote sustainable economic growth and job creation during the crisis but more importantly afterwards.

## EU Green Deal -A comprehensive response to sustainable transition

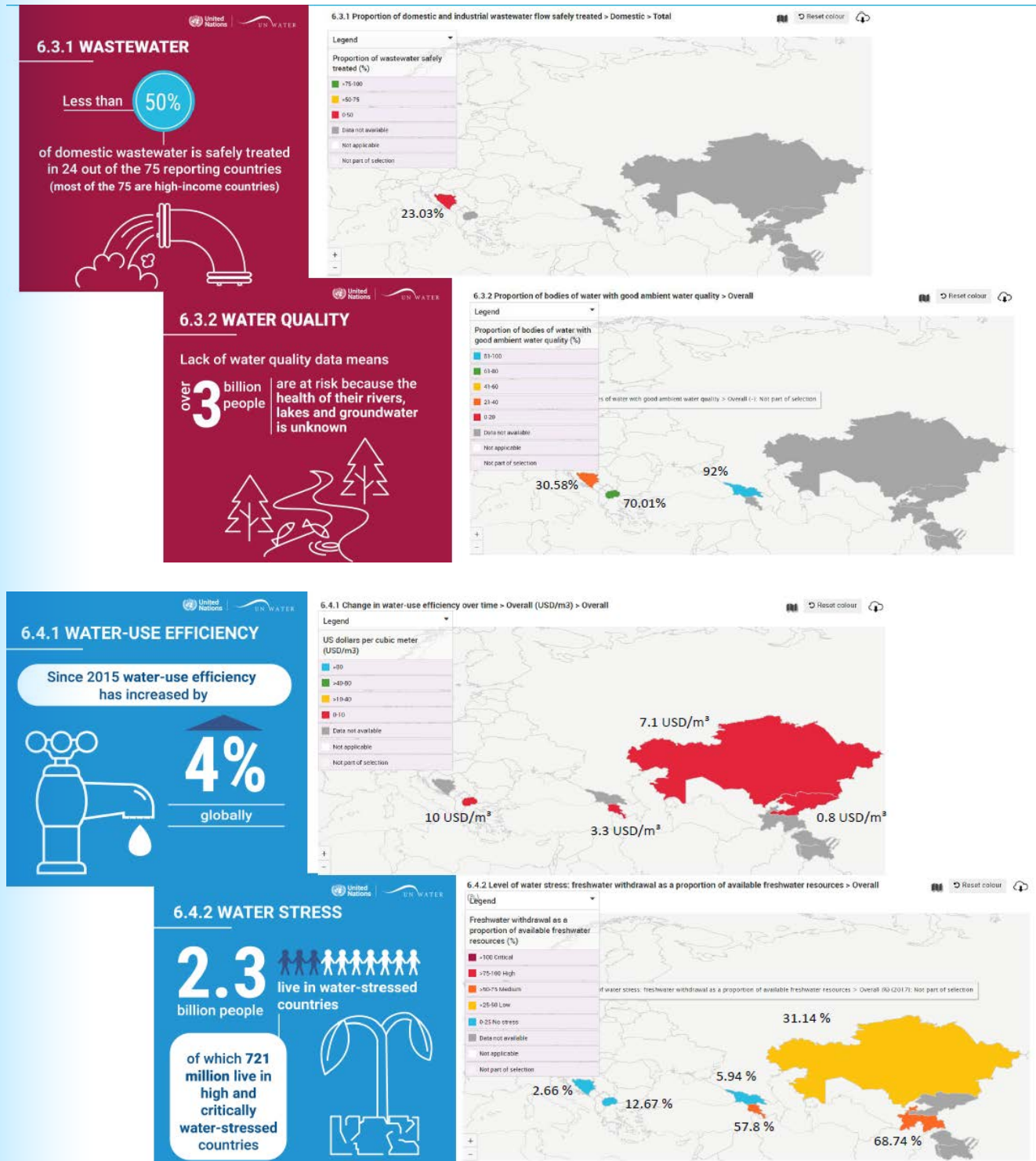


## The EU Water Framework Directive – an integrated approach at river basin level to protect water bodies and sustainable use of water resources

Source: Assessing the EEA cooperation with Western Balkans, ENI East and Central Asia on integrated water management. [https://unece.org/sites/default/files/2021-04/2.1%20EEA\\_UNECE\\_SEIS\\_Webinar\\_2021%2004%2021\\_v3\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.1%20EEA_UNECE_SEIS_Webinar_2021%2004%2021_v3_0.pdf)

# What do we know about the current state of water in the target countries of the UNDA<sup>2</sup> project?

Based on the SDG 6 indicator data, the following snapshots provide an overview of the current situation in the region:



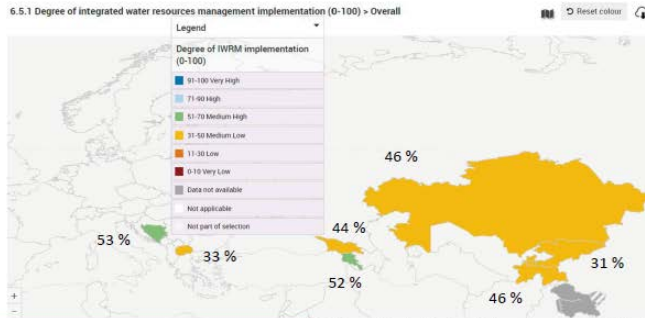
<sup>2</sup> The UN Development Account (UNDA) is funding capacity development projects of the United Nations Secretariat aimed at enhancing the capacities of developing countries in the priority areas of the UN development agenda. This UNDA project was dedicated to Improved environmental monitoring and assessment in support of the 2030 Sustainable Development Agenda in South-Eastern Europe, Central Asia and the Caucasus and implemented in seven target countries.

### 6.5.1 INTEGRATED WATER RESOURCES MANAGEMENT



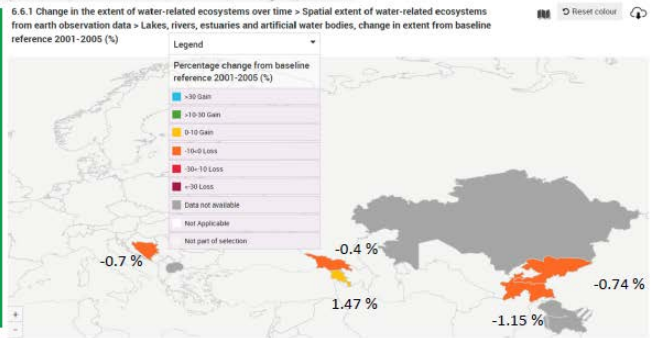
**129** countries are not on track to have sustainably managed water resources by 2030

Globally, the current rate of progress needs to be doubled



### 6.6.1 ECOSYSTEMS

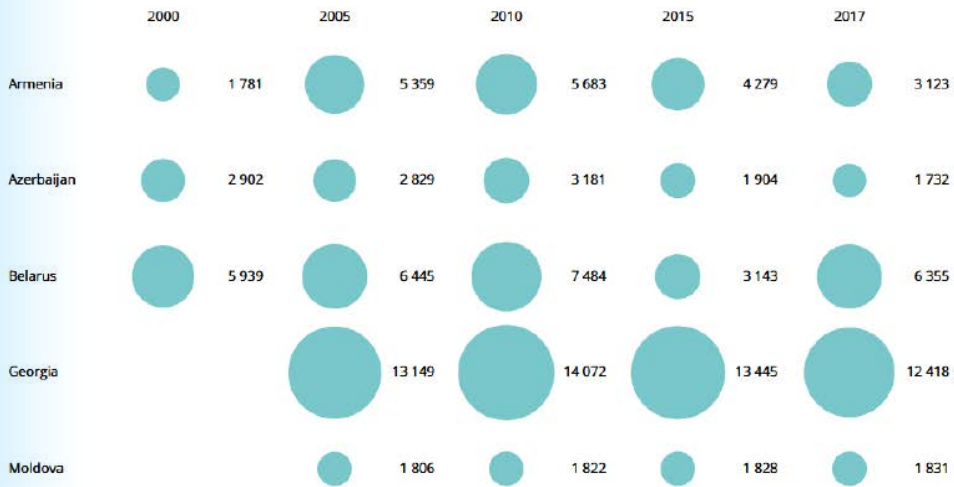
**1/5** of the world's river basins are experiencing rapid changes in the area covered by surface waters



Source: The UNEP Global Environment Monitoring System for Freshwater (GEMS/Water) and GEMStat: [https://unece.org/sites/default/files/2021-04/2.2\\_2021-04-21\\_Philipp%20Saile\\_UNEP\\_GEMSWater\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.2_2021-04-21_Philipp%20Saile_UNEP_GEMSWater_0.pdf)

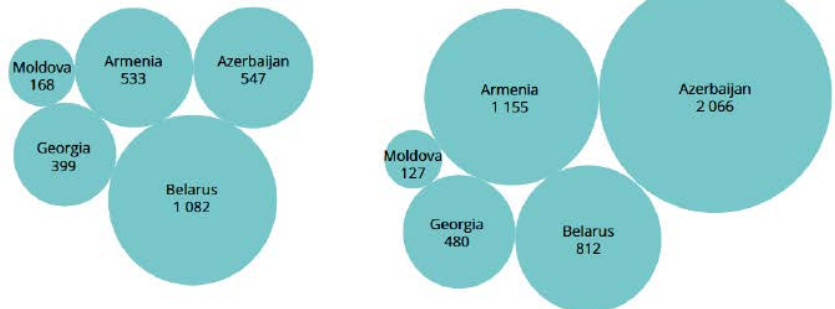
## What are the key water challenges?

Pressure on water demand is related to water availability as well as efficiency in water supply and use:



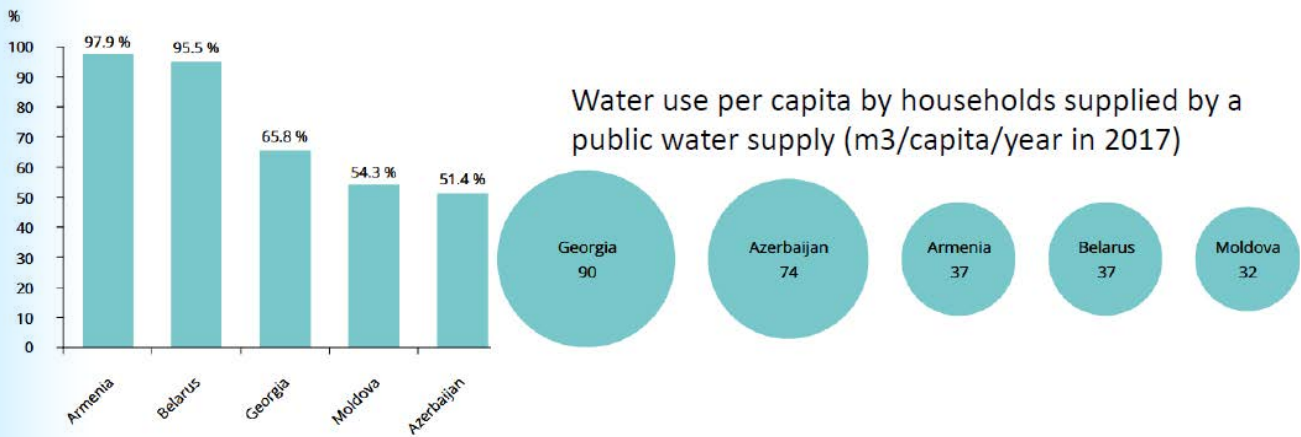
Development of water availability per capita (m<sup>3</sup>/capita/year)

2000 → 2017

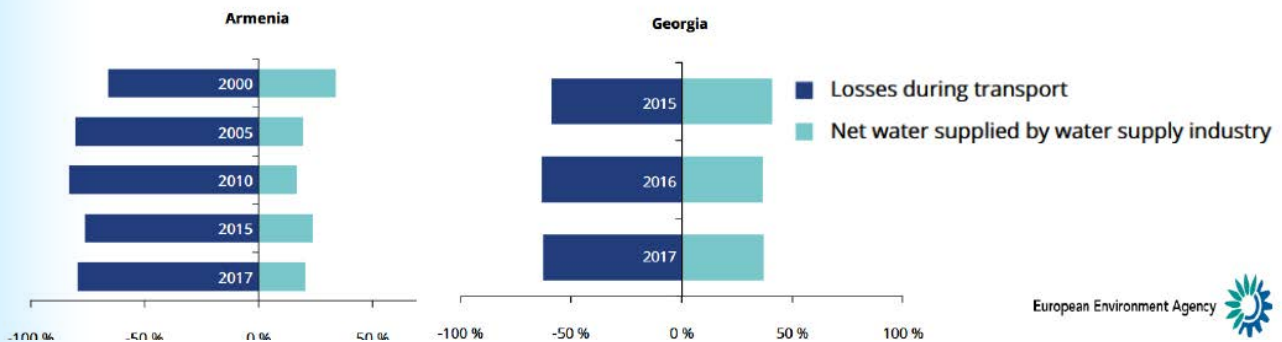


Increasing pressure of water abstraction on **groundwater** due to climate change impacts and surface water pollution in Armenia and Azerbaijan

## Population connected to public water supply



## Water use per capita by households supplied by a public water supply (m3/capita/year in 2017)



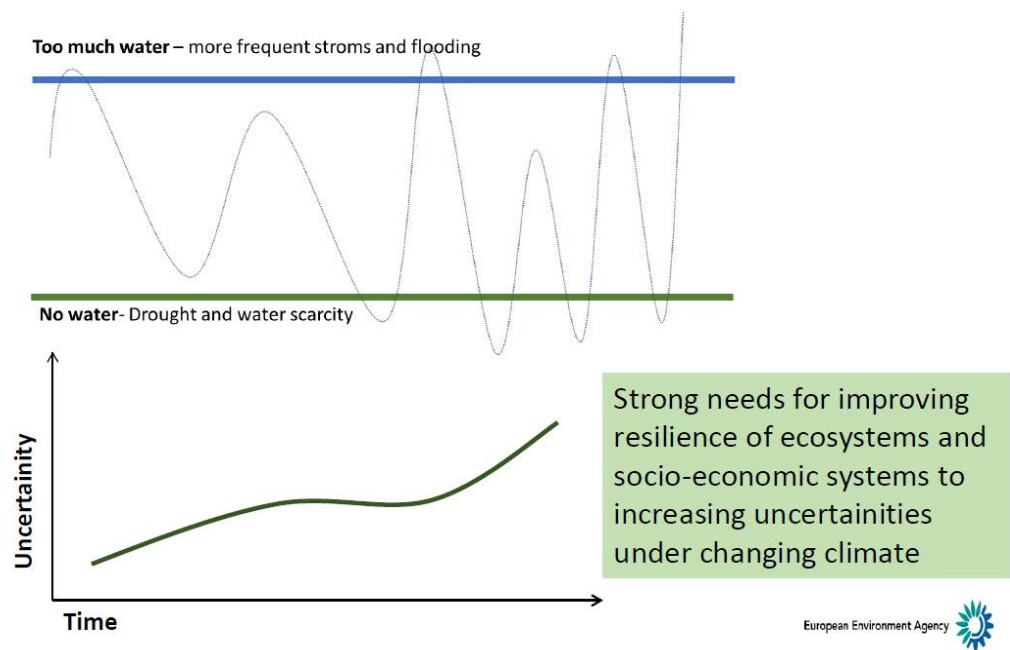
Source: Assessing the EEA cooperation with Western Balkans, ENI East and Central Asia on integrated water management. [https://unece.org/sites/default/files/2021-04/2.1%20EEA\\_UNECE\\_SEIS\\_Webinar\\_2021%2004%2021\\_v3\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.1%20EEA_UNECE_SEIS_Webinar_2021%2004%2021_v3_0.pdf)

## Other key challenges:

- Water scarcity is an increasing problem in the region
- High water losses and leakages further exacerbate it
- Agriculture is the main pressure on water resources in the region and water abstraction for agriculture presents increasing trend
- Water pollution due to discharge of untreated or insufficiently treated wastewater and diffuse pollution from agriculture into water bodies – which also causes over abstraction from groundwater in downstream areas.

## How is water doing worldwide and in the European Union?

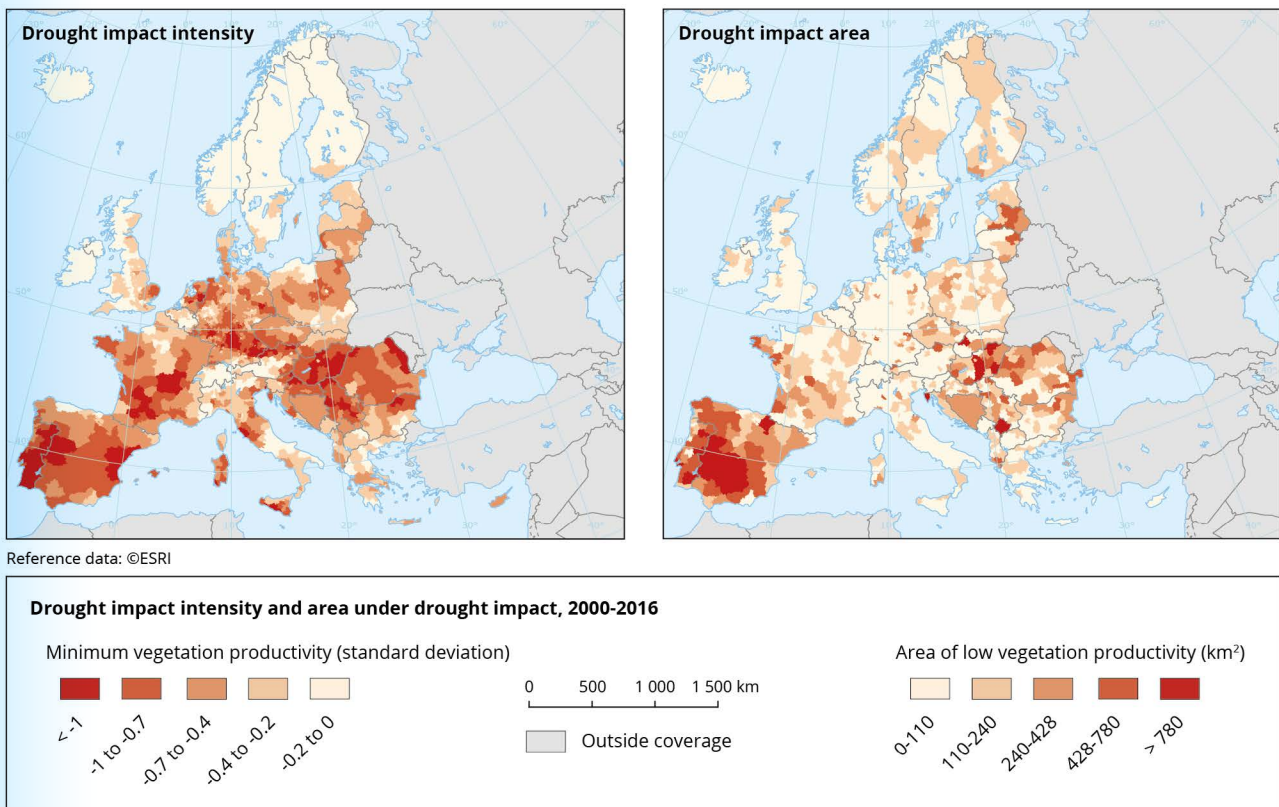
The global climate change crisis is increasing the uncertainty on the variability in the water cycle (see figure below), affecting water quality, exacerbating water scarcity and threatening sustainable development worldwide. These impacts disproportionately affect poor and vulnerable communities and are compounded by contributing factors, including change in use patterns, population increase, migration, land-use change, reduced soil health, accelerated groundwater extraction, widespread ecological degradation and biodiversity loss.



Source: Assessing the EEA cooperation with Western Balkans, ENI East and Central Asia on integrated water management. [https://unece.org/sites/default/files/2021-04/2.1%20EEA\\_UNECE\\_SEIS\\_Webinar\\_2021%2004%2021\\_v3\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.1%20EEA_UNECE_SEIS_Webinar_2021%2004%2021_v3_0.pdf)

Between 2000 and 2016, Europe was already affected by severe droughts, causing average yearly vegetation productivity losses covering around 121 000 km<sup>2</sup>. This was particularly notable in 2003, when drought affected most parts of Europe, covering an estimated 330 000 km<sup>2</sup> of forests, non-irrigated arable land and pastures.

Intensity and area affected by water deficit in Europe (EEA member countries and associated countries), 2000-2016:

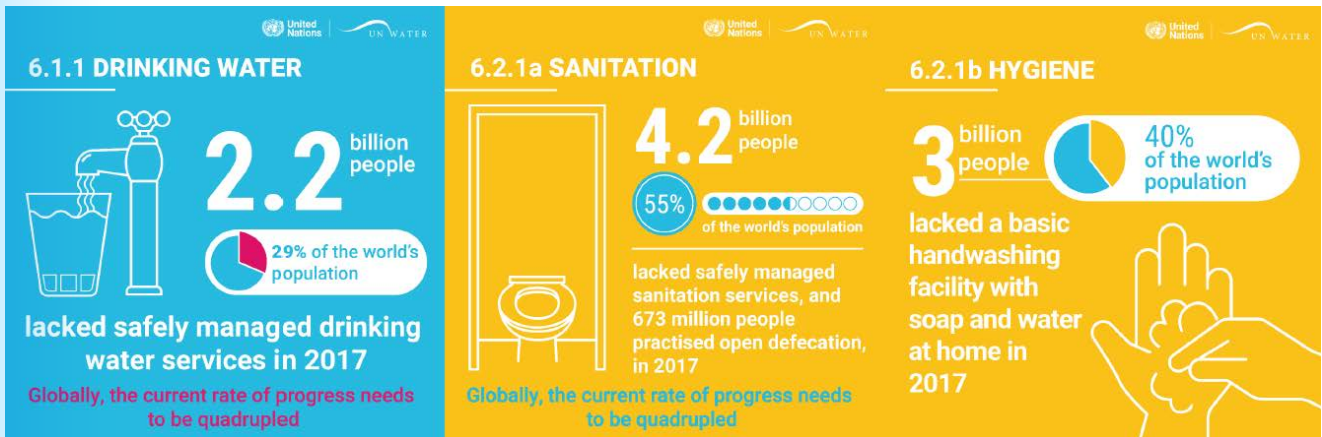


Source: <https://www.eea.europa.eu/ims/drought-impact-on-ecosystems-in-europe>



The extent (% of territory) of vegetation productivity loss is analysed in areas with statistically significant drought pressure, measured as precipitation shortages and low soil moisture content.

Regarding the SDG indicators 6.1.1, 6.2.1a, 6.2.1b, there is a lack of safe drinking water, sanitation services and hygienic facilities:

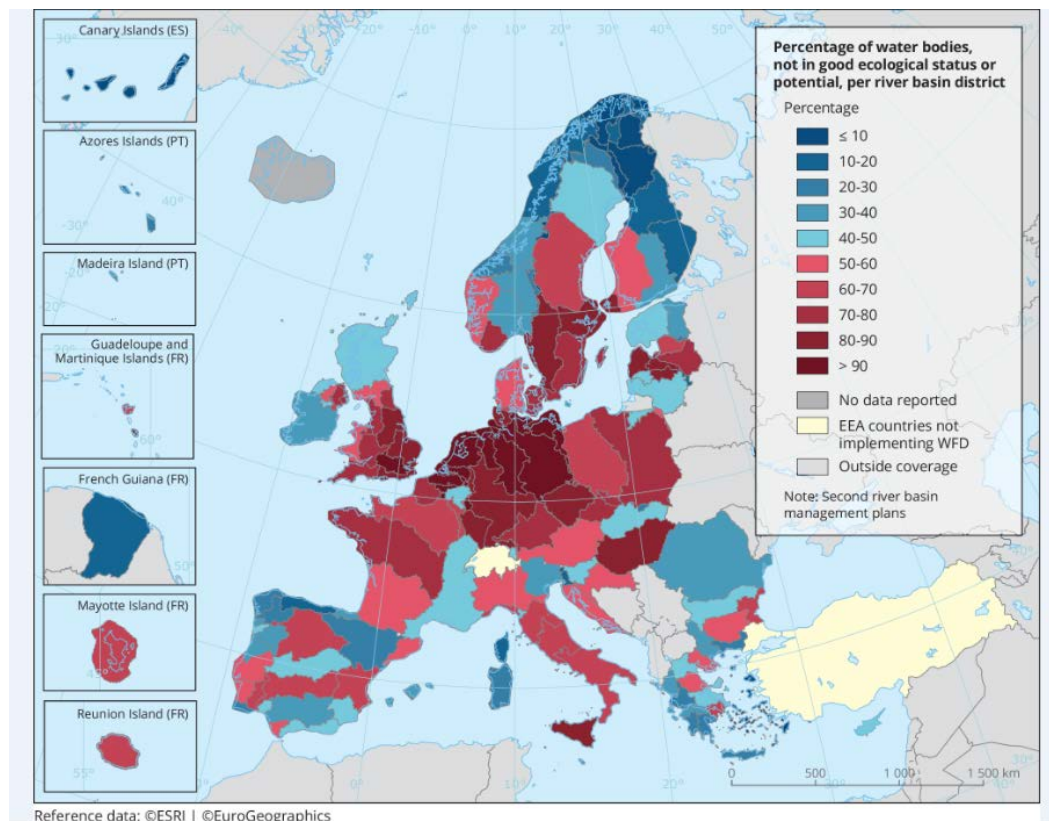


Source: The UNEP Global Environment Monitoring System for Freshwater (GEMS/Water) and GEMStat: [https://unece.org/sites/default/files/2021-04/2.2\\_2021-04-21\\_Philipp%20Saile\\_UNEP\\_GEMSWater\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.2_2021-04-21_Philipp%20Saile_UNEP_GEMSWater_0.pdf)

Clean water is under multiple pressures. Currently, only 40% of surface water bodies in the European Union achieve a good ecological status. In addition, even though EU countries have managed to reduce selected pressures, the status of our marine ecosystems remains critical, both in terms of species and habitats. Therefore, more efforts are needed to achieve EU freshwater and marine-related environmental targets.

The main pressures on surface water bodies are pollution from point (e.g. waste water) and diffuse (e.g. agriculture) sources, and various hydromorphological pressures such as barriers (dams), and low-flow or channeled rivers, with the main impacts being nutrient enrichment, chemical pollution and habitat alterations due to morphological changes.

Percentage of water bodies, not in good ecological status or potential, per river basic district:



<https://www.eea.europa.eu/ims/ecological-status-of-surface-waters>

Wastewater treatment and reductions in nutrient losses from agriculture have led to significant improvements in water quality in Europe. However, many of Europe's freshwater bodies are still not doing well.

## Case studies - addressing the challenges

### Georgia

In Georgia, the IWRM (Integrated Water Resource Management) Support Programme has enabled stakeholder consultations under the SDG 6.5.1 reporting objectives. An arrangement of transboundary water cooperation has been achieved, aiming at a joint body / joint mechanism, formal communication between riparian countries, a joint strategy (management plan, action plan) and regular exchange of data and information.

Currently, Georgia is involved in ongoing work on a bilateral monitoring agreement with Armenia with the support of the European Union Water Initiative + (EUWI+) supports the transition to healthy waters | Eastern partnership countries. The project helps Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine bring their legislation closer to EU policy in the field of water management, with a main focus on the management of trans-boundary river basins. In the planned water reform, a draft law on Water Resources Management, which will be based on EU legislation, River Basin Management and economic incentives such as surface water abstraction fees and a permit system will be elaborated.

#### Planned Water Reform - RBMPs



Source: <https://unece.org/environment/documents/2021/06/presentations/37presentation-gvantska-svidzivdaze-26>

### Kazakhstan

Kazakhstan is facing multiple water supply challenges such as the provision of quality drinking water for the population and the lack of irrigation water during the growing season. Overall, the ecological situation in the country and the provision of water-related ecosystem services is dependent on the water policy of neighboring states. Water bodies are polluted by discharges and water resources are depleted through irresponsible use. From an economy point of view, the water infrastructure is deteriorated, there is no protection from floods and low water levels and the recycling of water from industrial purposes is underdeveloped.

#### Target indicators of the national project by 2030



Source: <https://unece.org/environment/documents/2021/04/presentations/31kazakhstanpresentation-1>

## North Macedonia

The NATIONAL WATER POLICY is following the EU Water policy through transposition and implementation of EU Water related Directives.

FRESHWATER INDICATORS: For water permits and protected areas for water there is a constant trend towards reaching the targets. Concerning nutrients in freshwater, however, Northern Macedonia is still far from the targets.

## What are the policies, good practices and tools to improve transboundary cooperation?

### ...at a global and regional scale...

Water has been identified by ENI East countries (Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova and Ukraine) as one of the three thematic priorities for which the ENI SEIS II project should support the countries in collecting data, implementing indicators and undertaking the assessment for knowledge-based decision making in environmental management.

Water issues are serious and worsening in many parts of Europe including Eastern Europe and Caucasus region. Many river basins in the Region have transboundary character, which require effective cooperation and collaboration among countries and various sectorial players. Knowledge-based decision-making is crucial for effective policy dialogue in water resources management. For that purpose, obtaining relevant, reliable, robust and harmonized water data, implementing the indicators to assess the state and pressure on water resources as well as undertaking the necessary assessment to provide the information needed for the policy making are crucially important.

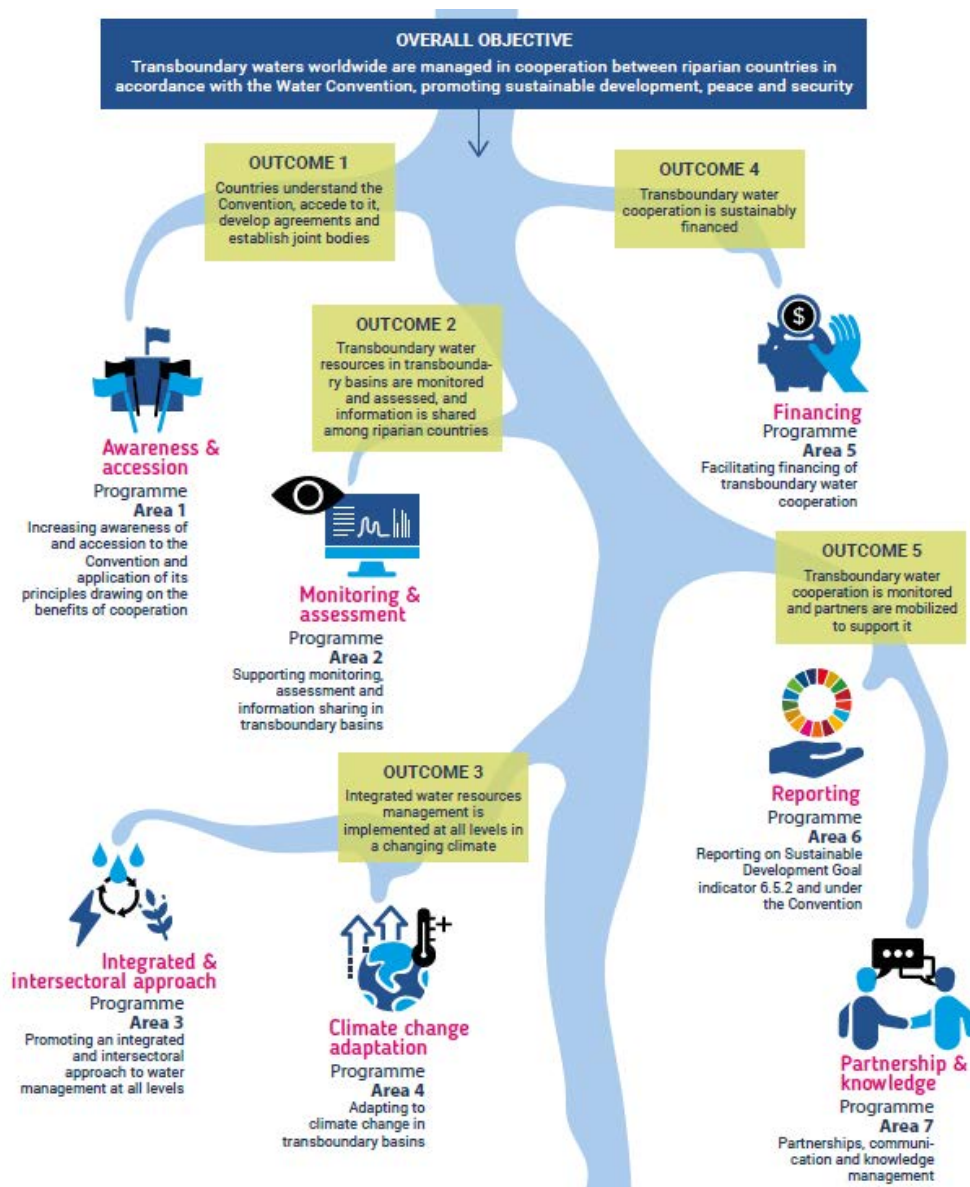
### The Water Convention

The Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention) provides a unique global legal and intergovernmental framework for promoting the sustainable management of transboundary waters through cooperation. Following its global opening in 2016, Chad and Senegal acceded in 2018, many other countries are in the process and more than 120 countries participate in its activities.

The Convention requires Parties to develop agreements and joint bodies, which are crucial for efficient, cooperative management and development of transboundary basins and therefore for the sustainability of investments.

The Water Convention is a powerful tool to operationalize multilateral environmental agreements and the 2030 Agenda for Sustainable Development and the SDGs. The Water Convention and its Programme of Work 2019-2021 support the achievement of numerous multilateral environmental agreements and international commitments including the recently adopted:

- Paris Agreement
- Addis Ababa Action Agenda
- Sendai Framework for Disaster Risk Reduction 2015-2030
- Outcome document of the United Nations Conference on Sustainable Development "The future we want"



Source: Programme of work. <https://unece.org/environment-policy/water/areas-work-convention/programme-work>

Specific activities such as the reporting under the Convention essentially contribute to the global water knowledge base.

## UNEP GEMS/Water

GEMS<sup>3</sup>/Water was established in 1978 to collect world-wide water quality data for assessments of status and trends in global inland water quality and works globally with the assistance of government nominated National Focal Points, River Basin Commissions and Collaborating Focal Points for specific monitoring programmes. GEMS/Water supports the Sustainable Development Goal for Water (SDG 6) with methodology support, data management, quality assurance, indicator calculation and capacity development.

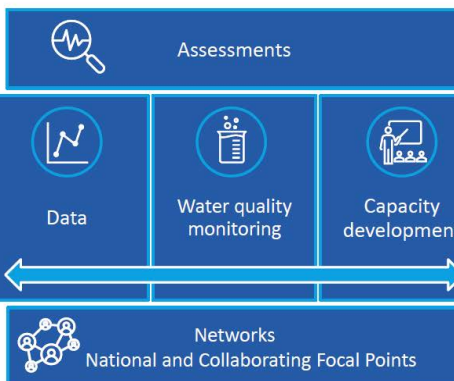
## The UNEP Global Environment Monitoring System for Freshwater (GEMS/Water)

2014: UNEA Res. 1/9  
 ⇒ GEMS/Water  
 2018: UNEA Res. 3/10  
 ⇒ WWQA  
 ⇒ SDG 6

UN environment programme **GEMS/Water** GEMS/Water Coordination Unit  
 Nairobi, Kenya



**GEMS/Water Data Centre**  
 Koblenz, Germany



**GEMS/Water Capacity Development Centre**  
 Cork, Ireland



Source: The UNEP Global Environment Monitoring System for Freshwater (GEMS/Water) and GEMStat <https://unece.org/environment/documents/2021/04/presentations/222021-04-21philipp-saileunepgemswater-0>

## Reporting under the Water Convention and on SDG indicator 6.5.2 and the Protocol on Water and health

The decision to introduce a reporting mechanism under the Water Convention in 2015 coincided with SDGs and reporting on SDG indicator 6.5.2 on transboundary water cooperation.

## Initial results of the 2<sup>nd</sup> reporting in 2020 on SDG 6.5.2



Indicator 6.5.2: Proportion of transboundary basin area with an operational arrangement for water cooperation

### High levels of engagement

- ⇒ In 2020: **129** out of 153 countries submitted reports (all Parties to Water Convention responded)
- ⇒ Only **24 countries** report **all** transboundary surface waters and groundwaters covered by **operational arrangements**
- ⇒ Only additional **22 countries** with more than **70%** of their waters covered by operational arrangement

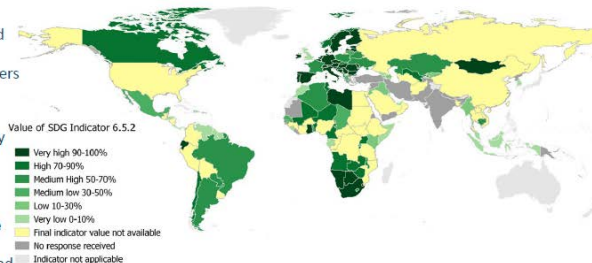
### Not on track

- ⇒ Progress must be **accelerated** to ensure that all transboundary basins are covered by operational arrangements by 2030
- ⇒ Insufficient knowledge on **groundwater** systems

### Acceleration

- ⇒ Reporting triggered **follow-up actions** in countries to **improve cooperation**
- ⇒ Capacity development, financing, data and information etc. and decisive political action needed to achieve the target

### SDG Indicator 6.5.2 values and responses received as of 1 April 2021



Source: <https://unece.org/environment/documents/2021/04/presentations/23tiefenauersdg-652statusseis2021-04-20>

The value and uptake of reporting on transboundary water cooperation provides the impulse for direct progress at all levels:

### National:

- Preparing the report with a consultative approach (nationally and with riparians) helps raising attention and support on the topic and incentive for countries to improve cooperation
- Interactions between co-custodians and countries, help identify data (gaps), improve knowledge and support cooperation

### Transboundary :

- Consultation on relations with riparians helps developing a common understanding of challenges and opportunities that can become a basis for discussion for next steps with riparians or basin organisations

### Regional and global:

- 2ndProgress report on SDG 6.5.2

- 2nd Progress report on the implementation of the Water Convention
- SDGs Reports feed into political dialogue at regional and global level (i.e. HLPF, UN Statistical Division).

### Reporting under the Protocol on Water and Health

The objective of the Protocol on Water and Health to the Convention on the Protection and Use of Transboundary Watercourses and International Lake is to promote at all appropriate levels, nationally as well as in transboundary and international contexts, the protection of human health and well-being, both individual and collective, within a framework of sustainable development, through improving water management, including the protection of water ecosystems, and through preventing, controlling and reducing water-related disease.

Reporting under the Protocol requires parties to the Protocol to submit summary reports, which provide an overview of the national situation with water, sanitation, hygiene and health. The reporting cycle is a rich data hub for the pan-European region, containing information on existing environmental and health legislation and policies as well as data on several thematic aspects covered by the Protocol.

<https://unece.org/reporting-parties-and-other-states>

### Integrated Monitoring Initiative (IMI-SDG6)



The purpose and approach of the Integrated Monitoring Initiative (IMI-SDG6) 2015-2030 is the acceleration of the achievement of SDG 6 on water and sanitation through evidence based policies, regulations, planning and investments. By 2030, increased availability and holistic analysis of high quality data shall contribute to better informed water and sanitation policy, regulation, planning and investment at all levels.

Objectives:

- Countries collect, analyse and report SDG 6 data
  - Maintain monitoring framework for SDG 6 global indicators
  - Technical support to countries to collect, analyse, report and use water and sanitation data
  - Compile country data and report on global progress towards SDG 6
- Policy and decision makers at all levels use SDG 6 data
  - Institutional support to countries on cross cutting issues and integration
  - Inform policy and decision makers on SDG 6 status and interlinkages
  - Coordinate global monitoring and reporting

### EIONET & SEIS

To monitor and share information of environmental data on a European scale, the European Environment Information and Observation Network (Eionet) has been established. As a partnership network of the European Environment Agency (EEA) and its 38 member and cooperating countries it aims at delivering data and knowledge to achieve Europe's environment and climate ambitions with the help of SEIS (the Shared Environmental Information System) and supported by WISE (Water Information System for Europe). SEIS, an integrated, web-enabled, EU-wide environmental information system by simplifying and modernising existing information systems and processes is in place. SEIS itself integrates a wealth of information from the Eionet and other networks and partners, citizen science, crowd sourcing, and new environmental information gathering initiatives such as Copernicus. With ENI, the SEIS is extended to the European neighbourhood<sup>4</sup>.

The EEA has been cooperating with the Western Balkan partners already since 1997. From 2014 onwards, the EEA intensified its activities in the region with a focus on guiding the countries towards 'technical readiness' for EEA membership. Currently, the six Western Balkan partners participate in the Eionet on a similar basis as the 32 EEA member countries and are referred to as 'EEA cooperating countries'. In the water context, specifically, the participation is strengthened by

- Capacity building in reporting data to WISE

<sup>4</sup> Shared Environmental Information System principles and practices in the Eastern Partnership countries to support the promotion of environmental protection by strengthening environmental governance.

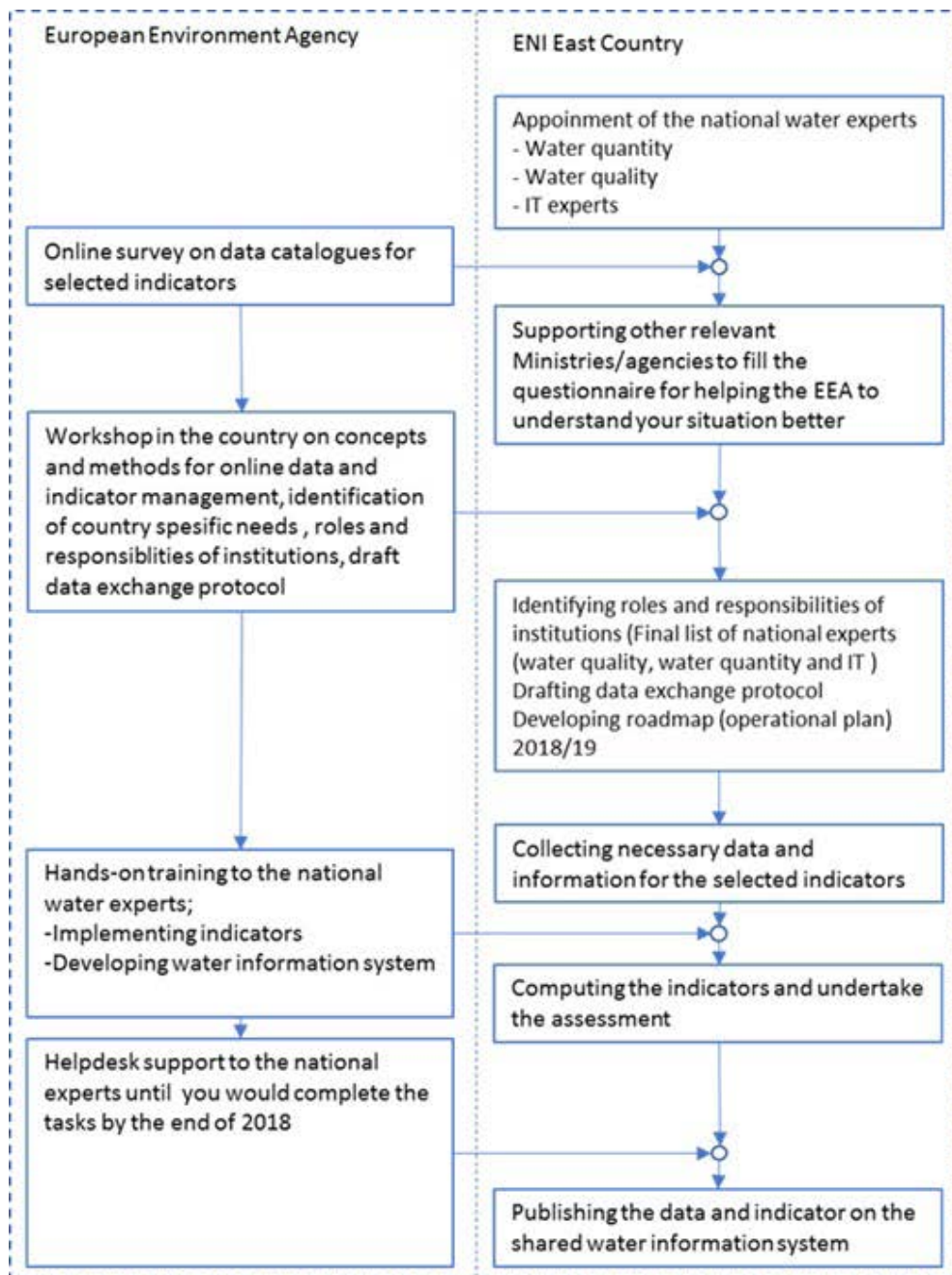
- Developing water indicators as part of these report and improve the expert capacity in undertaking ecosystem-based management
- Pilot activities tailored to the national needs in the implementation of Monitoring, Data, Information, Assessment and Knowledge (MDIAK-C) chain in water.

Regarding Central Asia, EEA liaises with UNEP and UNECE and for follow up the cooperation with Central Asia on the policy debate under the Environment for Europe process.

## ENI-SEIS

The water component of ENI-SEIS primarily aims at supporting ENI (European Neighborhood Initiative) East countries gradually develop and extend their national portal of water information systems in line with the SEIS principles in terms of institutional cooperation, content and infrastructure. As a result, this should help countries to better respond to international commitments, such as, reporting under the Sustainable Development Goals (SDGs), regional water conventions as well as to support water resources management at the appropriate scale. In addition, by means of implementation of the indicators, the water component will support the countries to undertake knowledge-based assessment on water resources management.

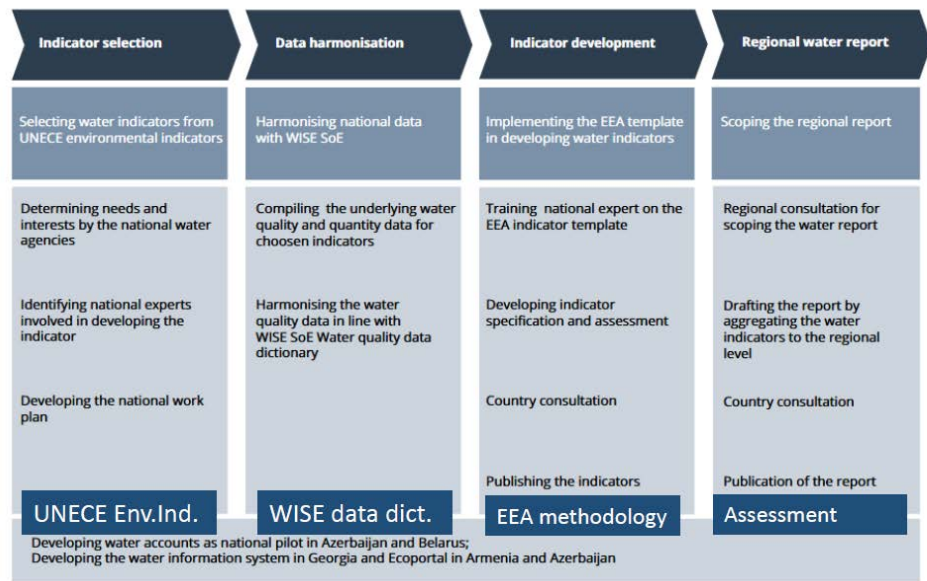
The primary aim of the ENI SEIS II East project was to improve the capacity at national levels by sharing the EIONET expertise and knowledge with ENI East countries.



Source: ENI SEIS II East. <https://eni-seis.eionet.europa.eu/east/areas-of-work/data/water>

Based on the EEA –Eionet Strategy–2021-2030, on SEIS and on WISE, the concept is replicated in the ENI countries.

## Implementation of the Shared Environmental Information System (SEIS) principles and practices in the ENP East region - Water



Source: Assessing the EEA cooperation with Western Balkans, ENI East and Central Asia on integrated water management. [https://unece.org/sites/default/files/2021-04/2.1%20EEA\\_UNECE\\_SEIS\\_Webinar\\_2021%2004%2021\\_v3\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.1%20EEA_UNECE_SEIS_Webinar_2021%2004%2021_v3_0.pdf)

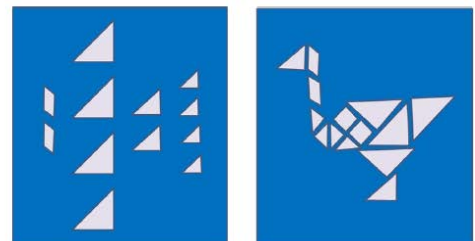
### WISE (Water Information System Europe)

WISE was launched for public use as a web-based service in 2007 providing a web-portal entry to water related information ranging from inland waters to marine. The web-portal is now grouped into sections for EU water policies (directives, implementation reports and supporting activities...), data and themes (reported datasets, interactive maps, statistics, indicators,..), modelling (now - and forecasting services across Europe..), projects and research (inventory for links to recently completed and ongoing water related projects and research activities).

With the help of water quality data from Armenia and Georgia, the concept of WISE for strengthening water data and information management was replicated in Georgia and Armenia:

### Data harmonisation and indicator development

Georgia and Armenia have already harmonised water quality data in line with the WISE SoE Data dictionary



Water resources and water quality can be compared across the ENI East countries

Water indicators	Armeni	Azerbaijan	Belarus	Georgia	Moldova	Ukraine
C1. Renewable freshwater resources						
C2. Freshwater abstraction						
C3. Total water use						
C4. Household water use per capita						
C5. Water supply industry and population connected to water-supply industry						
C10. BOD and concentration of ammonium in rivers						
C11. Nutrients in freshwater						

Source: Assessing the EEA cooperation with Western Balkans, ENI East and Central Asia on integrated water management. [https://unece.org/sites/default/files/2021-04/2.1%20EEA\\_UNECE\\_SEIS\\_Webinar\\_2021%2004%2021\\_v3\\_0.pdf](https://unece.org/sites/default/files/2021-04/2.1%20EEA_UNECE_SEIS_Webinar_2021%2004%2021_v3_0.pdf)



# Good Practice examples on transboundary cooperation & data exchange in the UNECE region

## Ukraine & Moldova

**The Dniester Process** (<https://unece.org/environment-policy/water/areas-work-convention/projects-eastern-europe>)

The 1,362-km-long Dniester River is one of the largest Eastern European rivers. It starts in the Carpathian Mountains in Ukraine, flows through the Republic of Moldova and then re-enters Ukraine where it discharges into the Black Sea. In addition to supplying drinking water for a large part of the basin, including the major city of Odessa (Ukraine), hydropower generation and fisheries are other important sectors the river serves.

The Dniester process supporting the development of transboundary cooperation between the two Riparians, the Republic of Moldova and Ukraine, has been jointly managed by the Organization for Security and Cooperation in Europe (OSCE), the United Nations Environment Programme (UNEP) and United Nations Economic Commission for Europe (UNECE) as part of the Environment and Security Initiative (ENVSEC). Three projects – Dniester-I, II and III – have supported the development of the transboundary cooperation on the Dniester River Basin, including the involvement of institutions in Transnistria. Finland and Sweden have provided financial support.

Currently the GEF/UNDP/OSCE/UNECE project “Enabling transboundary cooperation and integrated water resources management in the Dniester River Basin” is supporting the countries and the Commission on Sustainable Use and Protection of the Dniester River Basin (the Dniester Commission) in integrated water resource management in the Dniester River Basin.

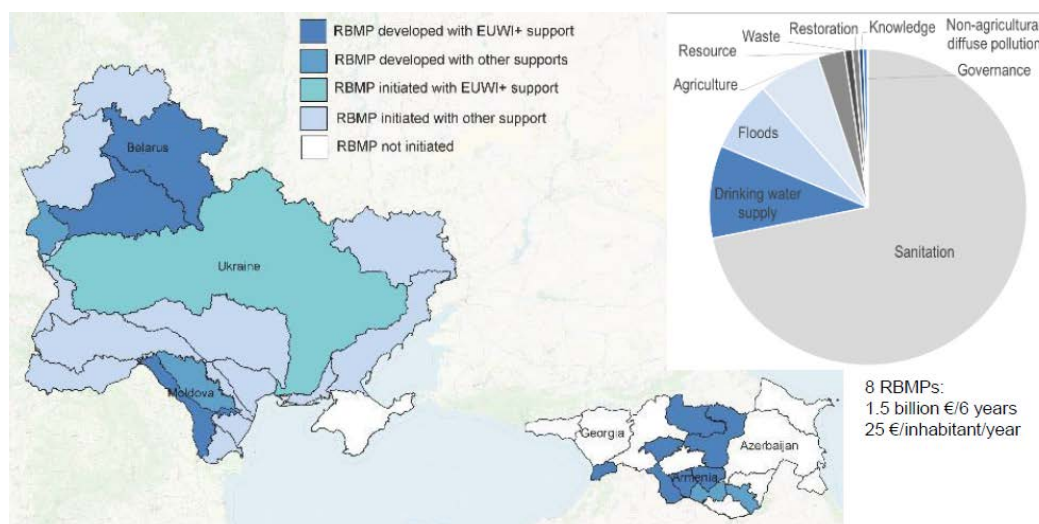
## Armenia & Georgia



The European Union Water Initiative (EUWI) was launched at the World Summit on Sustainable Development in Johannesburg in 2002. The overriding aim of the Initiative is to coordinate EU development assistance in the field of water. EUWI+ for the Eastern Partnership programme is implemented from 2016-2020 and builds on the results of previous EU-funded regional projects in the field of water including a previous phase of the EU Water Initiative. The project is funded by the European Union (DG NEAR Eastern Partnership). The total EU contribution to the EUWI+ is 23.5 million EUR, thus presenting the main EU commitment in the water sector in the region. The overall objective of the EUWI+ is to improve the management of water resources, in particular of transboundary rivers, in the Eastern Partnership (EaP) countries.

The specific objective is to achieve convergence of national policies and strategies with the EU Water Framework Directive (EU WFD), Integrated Water Resources Management (IWRM) and relevant Multilateral Environmental Agreements (MEAs), including the Water Convention and the Protocol on Water and Health. The action supports the development and implementation of pilot river basin management plans, building on the improved policy framework and ensuring a strong participation of local stakeholders.

Progress in Eastern Partnership Countries: River Basin Management Plans (RBMP) and program of measures:



Source: <https://www.euwipluseast.eu/en>

Based on the general agreement on cooperation in environmental management between Armenia and Georgia (1988) and the draft protocol (agreement) on Cooperation on Protection and Sustainable Use of Transboundary Water resources a guidance document on joint river monitoring procedures has been elaborated and a draft bilateral monitoring agreement between Armenia and Georgia will be signed.

The main components of transboundary monitoring are a shared goal, compatibility, joint reporting, data exchange, data harmonization and field/lab work. Assessment systems have to be compatible to work in transboundary basins. EU Water Framework Directive ( Directive2000/60/EC).

## Bosnia and Herzegovina

([www.bhas.gov.ba](http://www.bhas.gov.ba))

Activities of the **SDG Framework in Bosnia and Herzegovina:**

- Planning for the realization of the SDGs by the relevant institutions of BiH has been supported by the UNCT in BiH since 2015.
- SDG Working Group for BiH has been established
- Three Sub-Groups have been set up:
  - Sub-Group for SDG Framework for BiH,
  - Sub-Group for Voluntary Report,
  - Sub-Group for SDG Data.

In the „Environmental Protection Strategy of Bosnia and Herzegovina 2030 (ESAP 2030)“, 7 Working Groups of environmental areas including WATER have been established.

## CENTRAL ASIA

In Central Asia, several **initiatives for transboundary cooperation** are already existing:

- Executive Committee of IFAS
- ICWC
- BWO “Syrdarya”, BWO “Amudarya”
- Chu-Talas Water Commission

Until recently, the region was facing several challenges for consistent watershed cooperation such as outdated agreements, absence or malfunction of infrastructure, complicated mechanisms and protocols of cooperation, lack of institutions and low human capacity on local level.

## Kazakhstan & Kyrgyzstan

### The Aspara River Basin

This case study was developed within the project “Stakeholders’ partnerships in collaborative policymaking: Fostering transboundary cooperation on small watersheds in Central Asia” and financed by USAID, in collaboration with the project “Support towards local initiatives in the environmental governance and water resources management in Central Asia” project, funded by the Norwegian Ministry of Climate and Environment.

### Basin Plan development



- Small basin council on Kazakh side
- Small basin council on Kyrgyz side
- **First joint meeting** – in a month after establishment
- **First dialogue** for more than 20 years
- Joint decision – installation of automated water measuring equipment on the main hydropost – decreasing the conflict among farmers and local communities
- **River flow data** received fir the first time since 1987

TRUST BUILDING AND CONFLICT PREVENTION

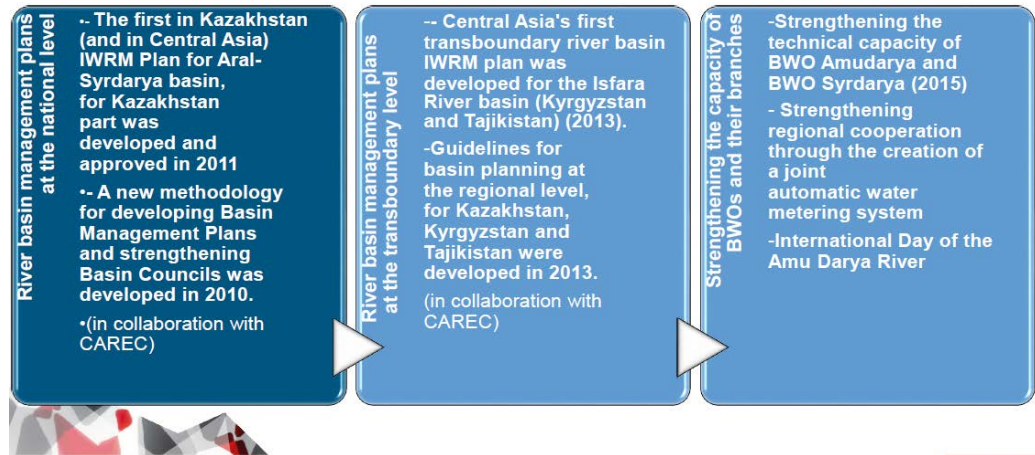
# Kyrgyzstan & Tajikistan

## Water Basin Plan for the Isfara River

A cooperation on transboundary rivers in Central Asia has been developed, which was part of the "Strategy for a New Partnership" between the European Union and the countries of Central Asia.

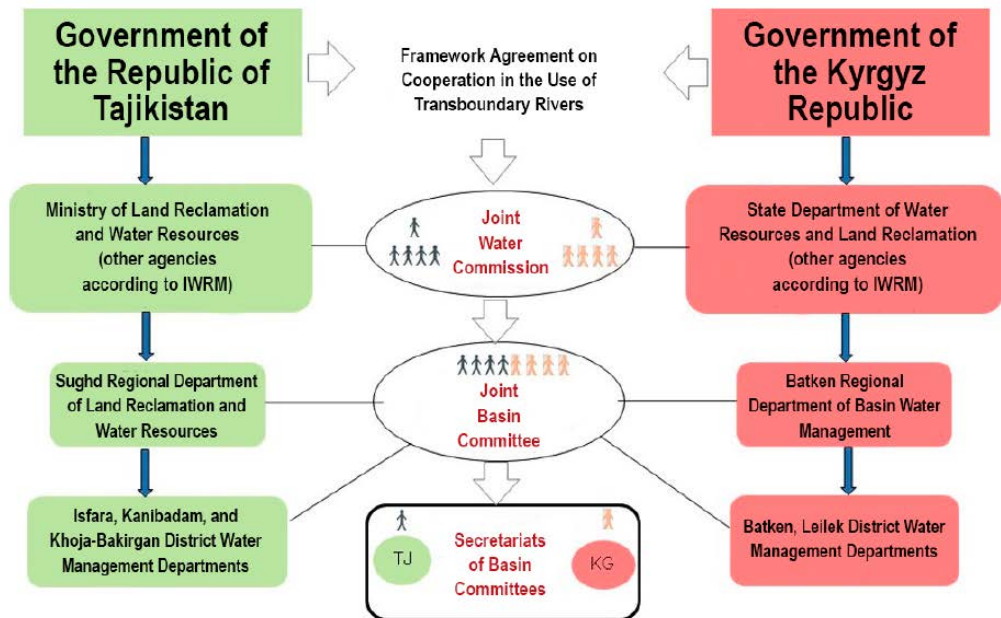
### Program "Transboundary Water Management in Central Asia"

Component II: Improving the management of transboundary river basins



Source: <https://unece.org/environment/documents/2021/04/presentations/3420210421gca-twmcakyrtairegionalcoopgiz-1>

### Structure of the draft framework agreement



Source: <https://unece.org/environment/documents/2021/04/presentations/3420210421gca-twmcakyrtairegionalcoopgiz-1>

## North Macedonia

### Strengthening the participation of the Western Balkans in the work of the European Environment Agency 2020-2021: Actions for Water and Foresight assessments

Aims and objectives of the project:

- Support strengthening expert capacity of countries in reporting data to WISE SoE data flows () and in implementing the water chapter of the National State of Environment Report (SOER)
- Via Global Megatrend (GMT) assessment, facilitate a process to incorporate or strengthen the use of participatory foresight outputs into integrated assessments and national SoE reporting.
- Strengthen reporting to international reporting obligations
- Support capacity building in line with the EU Sustainability Agenda, with a focus on ecosystem-based management
- Support the implementation of pilot activities tailored to national needs in the implementation of Monitoring, Data, Information, Assessment and Knowledge (MDIAK-C) chain in water quality.
- Develop an assessment method for potential implications of Global Megatrends

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*(2013) Convention on the Protection and Use of Transboundary Watercourses and International Lakes.* [https://unece.org/DAM/env/water/publications/WAT\\_Text/ECE\\_MP.WAT\\_41.pdf](https://unece.org/DAM/env/water/publications/WAT_Text/ECE_MP.WAT_41.pdf)

**UNESCO** <https://en.unesco.org/themes/water-security/hydrology>

**UN-WATER SDG6 MONITORING** [www.sdg6monitoring.org/indicator-652](http://www.sdg6monitoring.org/indicator-652)

**UN-WATER SDG6 DATA PORTAL** [www.sdg6data.org/indicator/6.5.2](http://www.sdg6data.org/indicator/6.5.2)

**UN** *International Decade for Action "Water for Life" 2005-2015.* [https://www.un.org/waterforlifedecade/transboundary\\_waters.shtml](https://www.un.org/waterforlifedecade/transboundary_waters.shtml)

**UN-WATER POLICY BRIEF ON CLIMATE CHANGE AND WATER (2019)** [https://www.unwater.org/app/uploads/2019/10/UN\\_Water\\_Policy-Brief\\_ClimateChange\\_Water.pdf](https://www.unwater.org/app/uploads/2019/10/UN_Water_Policy-Brief_ClimateChange_Water.pdf)

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