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*Towards Safe, Reliable  
and Sustainable Services*



# A Regional Overview of the Key Water Sector Issues

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# Outline

## “A Regional Overview of the Key Water Sector Issues”

- Introduction of the World Bank’s Water Diagnostic Framework
- What are major water security challenges in the region that countries are facing?
- What are the opportunities?
- Findings based on the water security deep dive assessments

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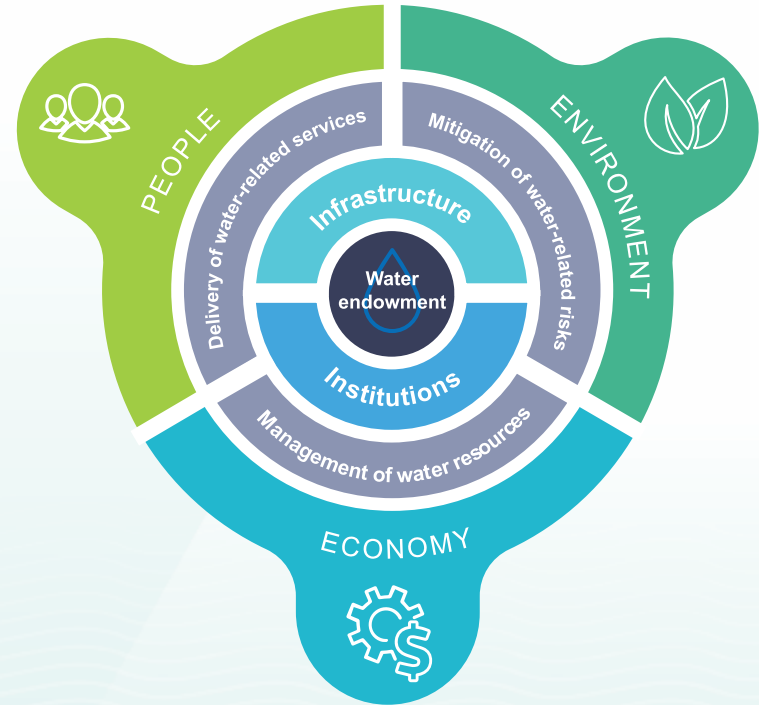


# Towards water security: The World Bank's Water Security Diagnostic Framework

*What are we getting from how we currently use and manage water?*

These are a result of **water sector performance** (resource management, service delivery, and risk mitigation), which depends on the **water sector architecture** (institutions, including information, and infrastructure).

All are conditioned by the **water endowment**.





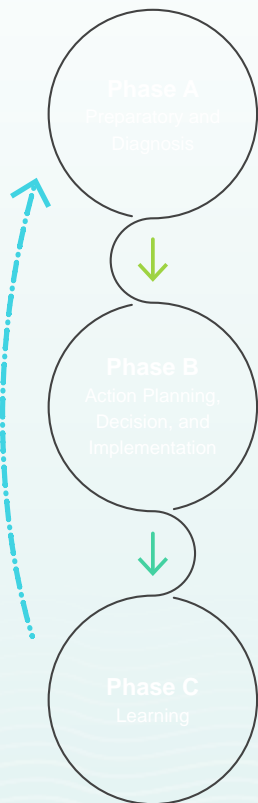
# Approach

Is an **agile**, data-driven and **participative** approach to understand the Water Security situation in a country or a region. It identifies **actionable pathways** to improve WS; **triggers** conversations on the way forward; **informs** the early implementation of key actions; and plans for the **next cycle** of support and interventions.





# ONE Water in country-level assessments



1. Understand **country needs**, agree on objectives, and define assessment scope
2. Assess **water security status** by applying the indicator-based approach combined with a qualitative assessment
3. Identify possible **future mid-term scenarios** by analyzing the impact of internal and external drivers on water security
4. Build the **country narrative**, considering current and future challenges, risks, and opportunities to water security

5. Generate a **long list** of potential actions/practices and policy measures. Prioritize and select actions with stakeholders
6. Develop a one-year **tactical plan to catalyze** the process of improving the sector's performance
7. Develop a five-year **strategic plan to implement** all actions that will have a structural impact on the water sector at country level
8. Identify the key data and information needed to strengthen the analytical assessment for the next cycle

9. Identify **lessons learned** and adjust the methodology
10. Plan next ONE Water cycle to retain momentum and continue to accelerate water action

## Main outputs



Actionable plans for the immediate and short term to accelerate water actions and trigger momentum to improve water security outcomes incrementally



# Initiative outputs

## 5 country deep dive assessments

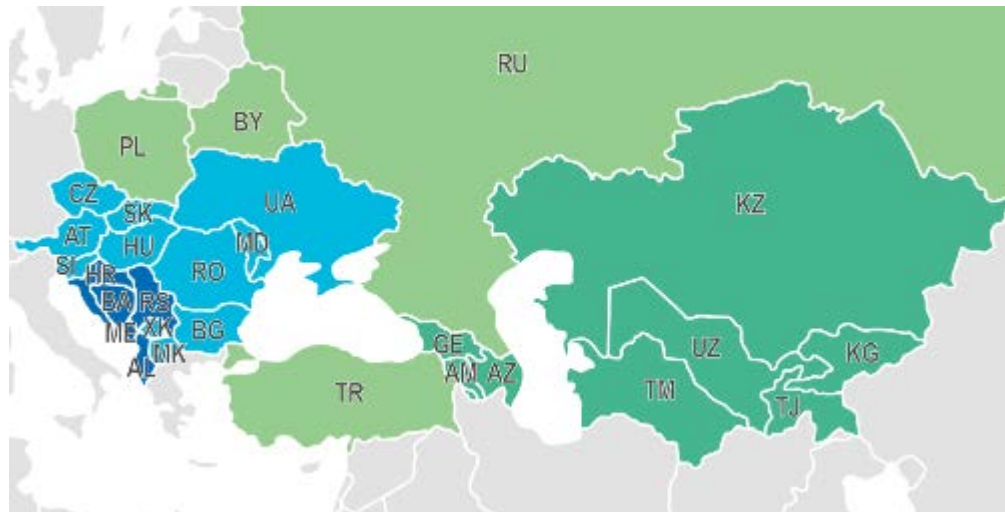
- Albania
- Bosnia and Herzegovina
- Croatia
- Montenegro
- Serbia

## 8 country general assessments

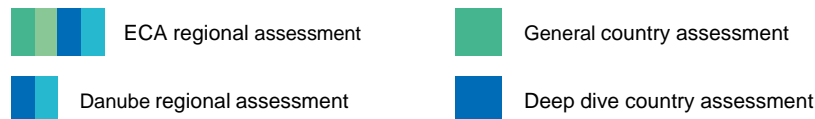
- Armenia
- Azerbaijan
- Georgia
- Kazakhstan
- Kyrgyz Republic
- Tajikistan
- Turkmenistan
- Uzbekistan

## 2 regional assessments

- ECA
- Danube river basin



Countries being assessed under the initiative





# Indicator framework



## Water Endowment

- Availability (8 Core)
- Demand (6 Core)



## Water Sector Architecture

- Infrastructure (12 Core, 5 Supporting)
- Institutions and governance (2 Core, 3 Supporting)



## Water Sector Performance

- Management of water resources (1 Core, 6 Supporting)
- Delivery of water-related services (1 Core, 5 Supporting)
- Mitigation of water-related risks (2 Core, 2 Supporting)



## Water Security Outcomes

- Economic outcomes (3 Core, 2 Supporting)
- Social outcomes (6 Core, 4 Supporting)
- Environmental outcomes (5 Core, 6 Supporting)

- Indicators selected based on **relevance**, **accessibility**, **reliability**, and **availability**
- **81 indicators:**
  - **CORE:** widely used and available from global databases (quantitative)
  - **SUPPORTING:** require local data; used to supplement the country assessment (qualitative)
- Indicator values are assigned **range bands** for benchmarking

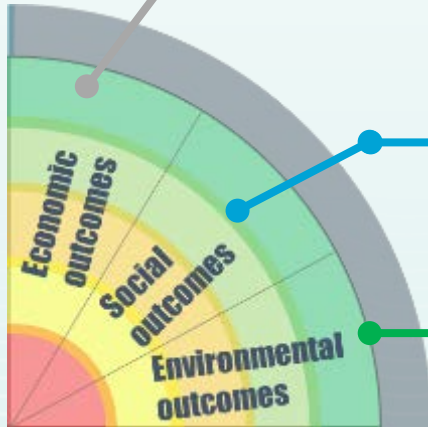




# Example



## Water Security Outcomes: 19 Indicators (16 core, 3 supporting)



Indicator	Definition	Source	Relevance	Ranking	Scope
<b>Economic water productivity (spatial)</b>	This indicator shows the water productivity in the country spatially explicit, by combining water demand data with GDP productivity into a map, also depicting subnational data.	IIASA database	Economic outcomes:  water in the economy	Core Indicator	National and subnational
<b>Deaths caused by diarrhea in children under 5 years of age</b>	Provides data that can be linked to inadequate drinking water/sanitation facilities, especially for children under the age of 5 years	UNICEF <a href="https://data.unicef.org/topic/child-health/diarrhoeal-disease/">https://data.unicef.org/topic/child-health/diarrhoeal-disease/</a>	Social outcomes:  who is most vulnerable	Core Indicator	National
<b>Water stress ratio (%)</b>	freshwater withdrawal as a proportion of available freshwater resources is the ratio between total freshwater withdrawn by major economic sectors and total renewable freshwater resources, after considering environmental water requirements.	WRI <a href="https://www.wri.org/aqueduct">https://www.wri.org/aqueduct</a>	Environmental outcomes: water ecosystem status and services	Core Indicator	National





# Indicator-based assessment of current situation: Example of qualitative indicator “Maturity Legal Framework”

LOW	LOW-MEDIUM	MEDIUM	MEDIUM-HIGH	HIGH
<ol style="list-style-type: none"><li>1. Legal framework does <b>not</b> cover critical functions and areas of the water sector</li><li>2. Numerous contradictions between reality and legal framework</li><li>3. Policies and strategies are outdated, non-existing or in contradiction with the legal framework</li></ol>	<ol style="list-style-type: none"><li>1. Legal framework covers <b>some</b> critical functions and areas</li><li>2. Framework has gaps and makes reforms hard to happen</li><li>3. Gaps, overlaps and weaknesses in policies and strategies are identified and there is an intention to close them</li></ol>	<ol style="list-style-type: none"><li>1. Legal framework covers <b>all</b> critical functions and areas</li><li>2. Efforts to review it and undertake reform are ongoing</li><li>3. Efforts to address gaps and weaknesses in policies and strategies are ongoing</li></ol>	<ol style="list-style-type: none"><li>1. Legal framework complete and adequate under <b>current situation</b></li><li>2. Reforms are possible or ongoing under the current framework to instill change</li><li>3. Legal framework supports sector policies</li><li>4. Policies and strategies exist with critical elements covered some areas need update</li></ol>	<ol style="list-style-type: none"><li>1. Legal framework complete and adequate in <b>future</b></li><li>2. Legal framework fully supports sector policies and strategies</li><li>3. Policies and strategies exist, are consistent and support operationalization of legal framework</li></ol>

#### Critical functions of the legal framework:

- Allocating water
- Regulating water resources and services
- Developing and managing water resources
- Organizing and building capacity in the water sector
- Planning strategically – collecting, managing, storing, and using water-relevant data

# Water security diagnosis

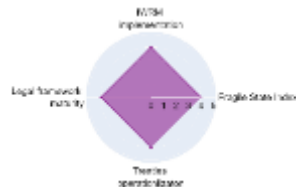
## Endowment

### Supply and demand



## Architecture

### Legal framework and institutions



### Water supply and sanitation infrastructure



### Irrigation and hydropower infrastructure

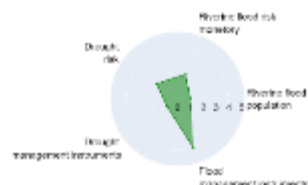


## Performance

### Water resources management



### Water supply and sanitation

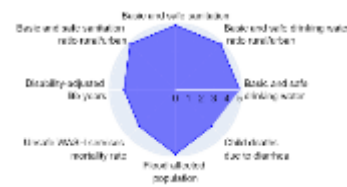


### Water risks mitigation



## Outcomes

### Social



### Environmental



### Economic



# Water Security Challenges

1. High investment needs to comply with water related EU Directives (WFD, GWD, DWD, UWWTD, Floods Directive, etc.)
2. Lack of capacities on national level, regional/local level and utility level to implement all projects according to national plans/strategies and EU deadlines.
3. Maturity of legal framework, institutions and governance
4. Institutional and organizational complexity due to transboundary river basins
5. Climate Change and other drivers: increase of floods and droughts, water stress, pollution

# High investment needs

1. Outdated infrastructure and maintenance backlogs (WSS, irrigation, reservoirs, flood protection)
2. Inadequacy of infrastructure – undersized/oversized – seasonal differences in water consumption (tourism)
3. High Non-Revenue-Water (40-70%) & increasing operational (energy) costs
4. Compliance with EU directives and national targets
5. Lack of human resources, capacity development programs needed

# Lack of capacities

1. Not enough key personnel at national level to fulfil all tasks in a timely manner. Even if funds for programs are secured, there are difficulties (bottlenecks) with the implementation of all projects.
2. Alignment with EU directives and water sector reform processes require additional human resources and capacity development.
3. Lack of management capacity at regional and municipal level (e.g. existing financing instruments not fully utilized)
4. Lack of qualified management and operational staff at utility level (e.g. qualified operational staff for WWTPs)
5. “Brain drain” and low salaries

# Legal framework, institutions and governance

1. Alignment of national legal framework with EU directives – water sector reforms
2. Gaps and overlaps of roles and responsibilities especially in countries with a complex institutional setup. Who has the mandate? Sufficient capacities?
3. Lack of coordination between the different ministries and other stakeholders
4. Lack of monitoring, reporting and availability of management instruments

# Transboundary issues

1. Institutional, organisational and legal complexity
2. Still gaps in transboundary and bilateral cooperation
3. Data collection, data management and exchange of data
4. Protection of water bodies require adequate monitoring in all countries sharing a river basin and the establishment of programs of measures (e.g water abstraction and pollution)



# Future Trajectories

Our future world is unknown.

With a changing climate, environment, population, economy, and politics, can we guess what the future will look like?

We can't say precisely where we're headed, but we can make certain assumptions to provide a range of possibilities.

Acknowledging and planning for different scenarios allows us to determine common and specific action courses.



# Opportunities

1. Early alignment with EU Directives → attracts donors and helps to meet future deadlines
2. High investments → business opportunities for the private sector (consultancy services, design, construction, supervision, supply of technology, etc.)
3. EU accession process → boost for necessary water reforms → clear roles and responsibilities
4. Awareness of Climate Change and other drivers → appropriate actions to increase resilience and improve performance



Thank you!

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