

Workshop on Strengthening Legal and Institutional Arrangements for Transboundary
Water Cooperation and Data and Information Exchange
Beirut, Lebanon, 30-31 May 2023

Water and climate change adaptation
in transboundary basins
Activities of the Water Convention

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Water Convention secretariat, UNECE

Structure

- Why transboundary cooperation in climate change adaptation?
- Water Convention activities
- Possible stages/steps in climate change adaptation process
- Examples
- Ingredients for success and additional resources



Water in global climate processes



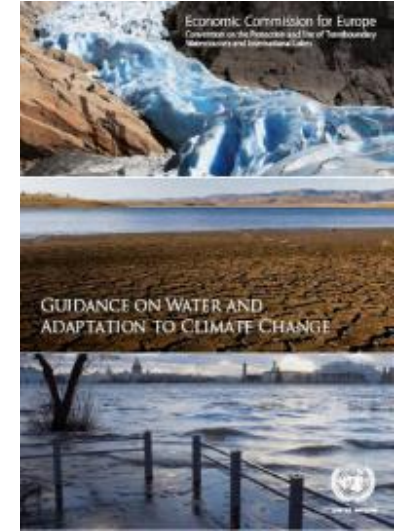
It is a momentum...

UNFCCC COP 27: [the decision on Sharm el-Sheikh Implementation Plan](#) emphasizes the importance of protecting, conserving and restoring **water and water-related ecosystems**, including **river basins, aquifers and lakes**, and integration of **water into countries adaptation efforts**

Why basin-wide/ transboundary cooperation in climate change adaptation?



- Sharing data, thereby reducing uncertainties
- Addressing floods, droughts and water scarcity more efficiently
- Enlarging the planning space and identification of better priorities and avoiding mal-adaptation
- Can support adaptation planning at the country level
- Supporting sustainable development

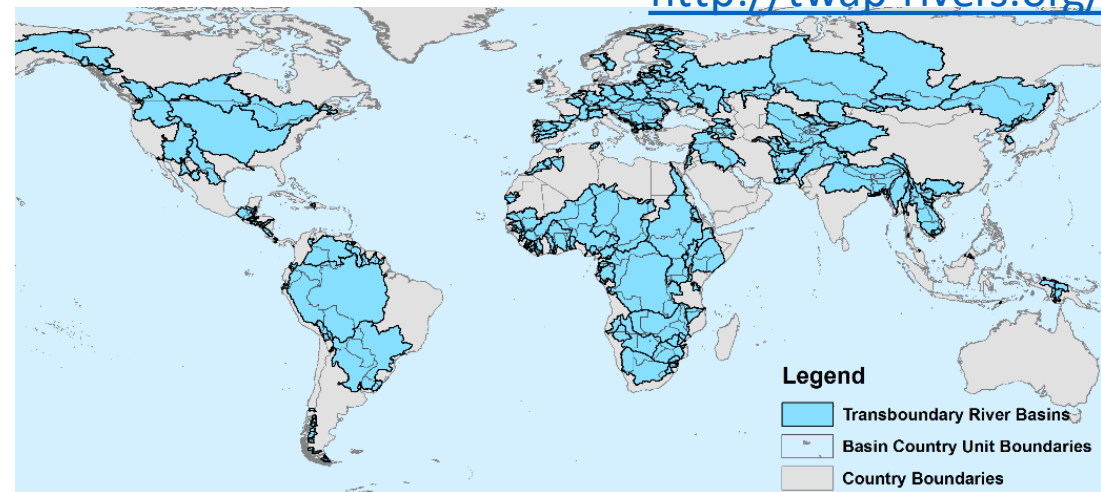


and regional integration

Sharing costs and benefits

Transboundary cooperation can help to use resources more efficiently (human and financial resources)

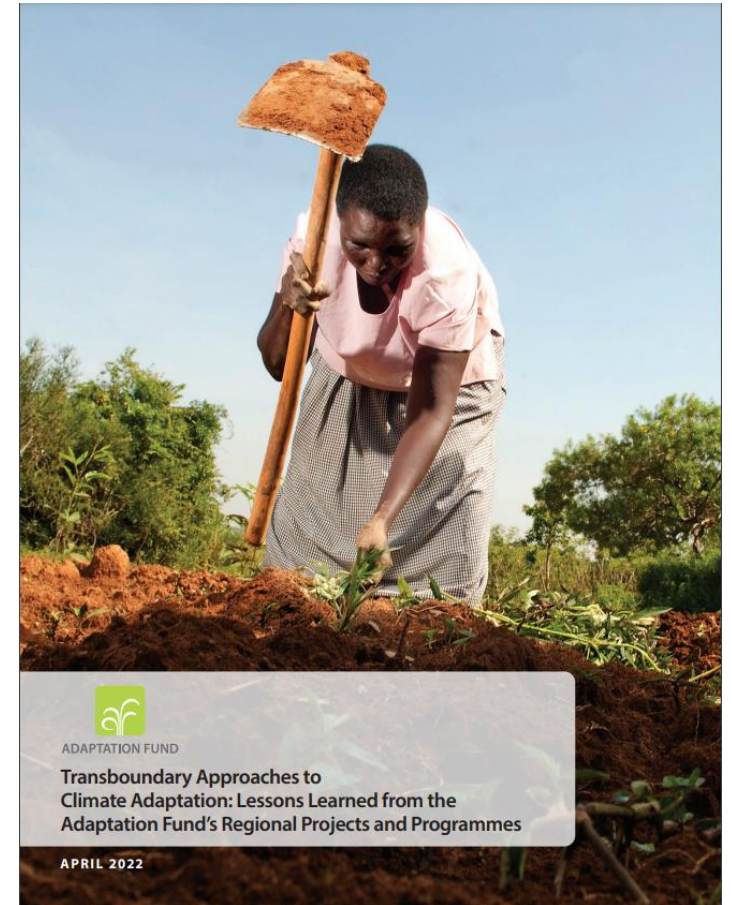
<http://twap-rivers.org/>



Synthesis of findings of the Adaptation Fund study on transboundary projects

Increased cost-effectiveness and enhanced coordination

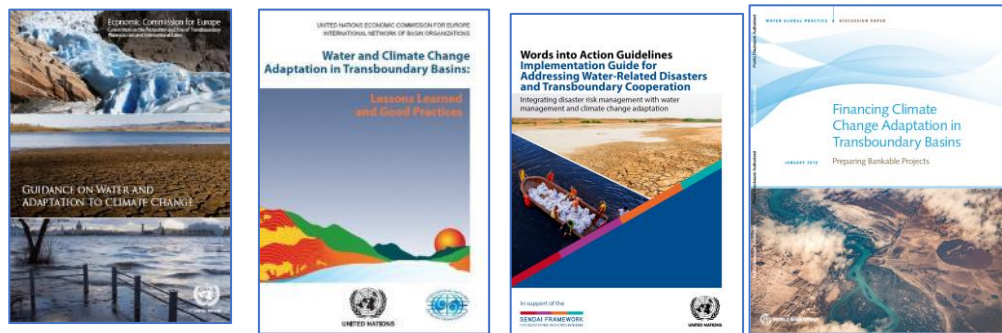
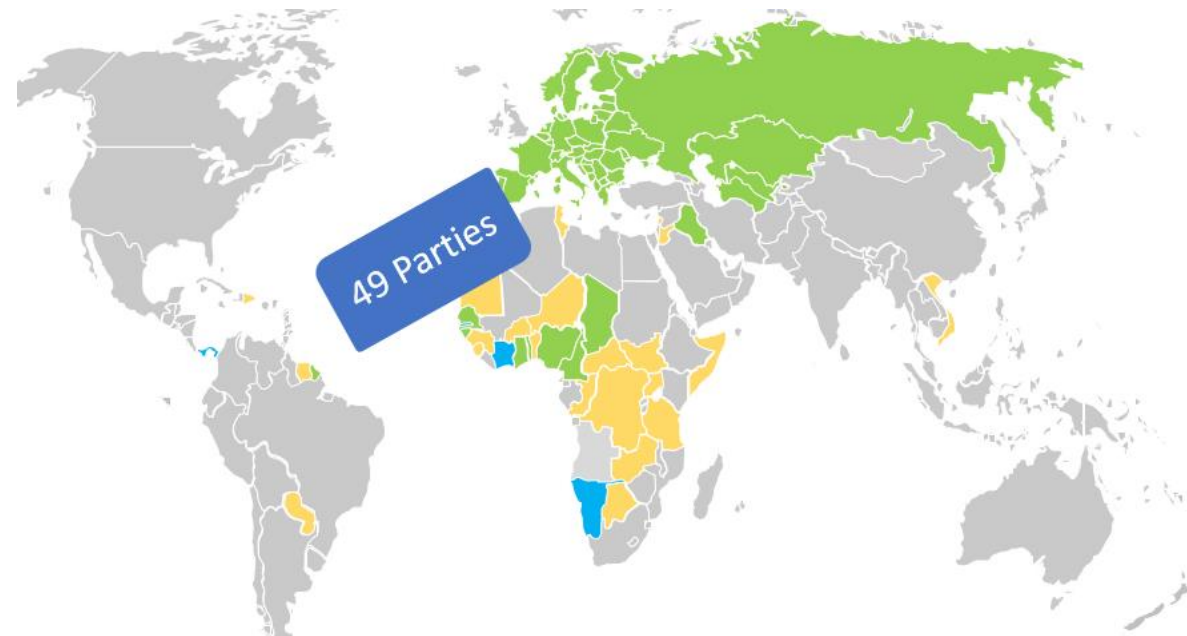
- **Up-to-date climate and socioeconomic data and information** from national-level agencies, regional institutions and international organizations lead to a strong proposal and builds trust with national-level agencies
- Inclusion of **comprehensive risk assessment and adaptive management** in implementation arrangements from the outset
- Comprehensive **understanding of the institutional landscape** across region is key (incl. regional or basin-level authorities)
- A transboundary approach to adaptation can achieve **cost savings**
- Transboundary projects offer many opportunities for **learning and knowledge transfer**, about what works, where and why, across local, national and supranational scales



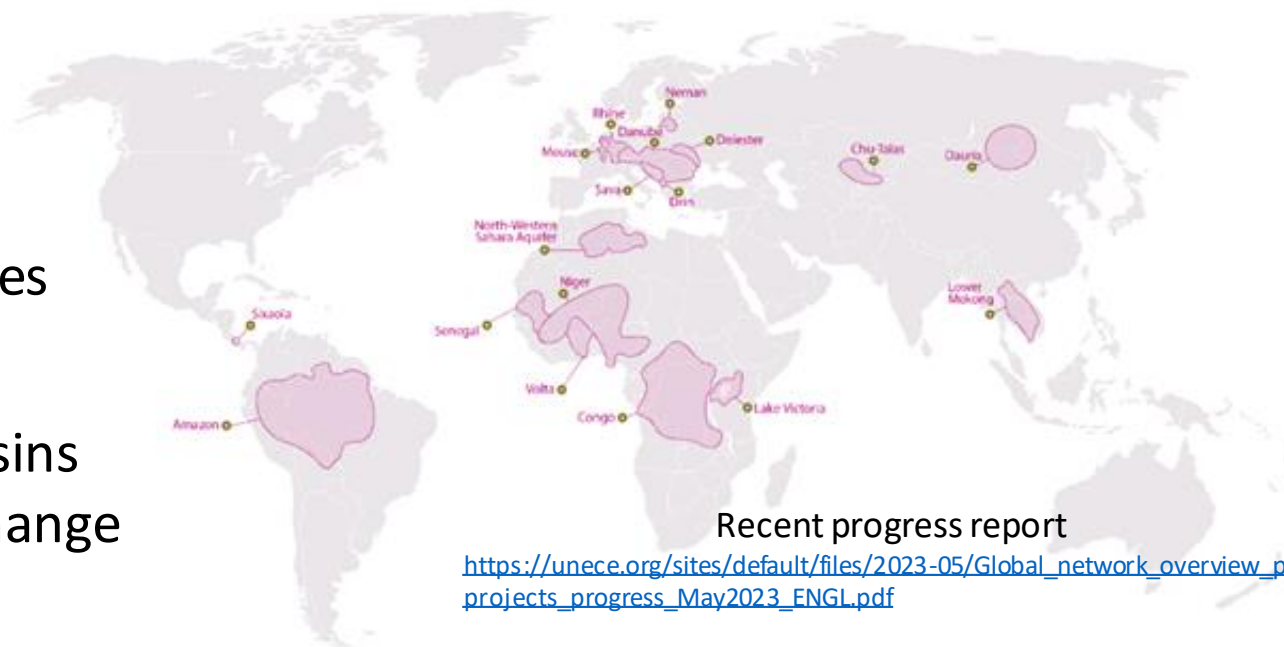
<https://www.adaptation-fund.org/wp-content/uploads/2022/04/Transboundary-Adaptation-final-April-2022.pdf>

Water Convention

- Unique global legal and intergovernmental UN framework on transboundary cooperation which offers capacity building, sharing knowledge and experience
- Task Force on Water and Climate since 2006
- Guidance and publications on water and climate



- Promoting water and climate in global processes
- Regular global workshops
- Pilot projects
- Global Network of basins working on climate change adaptation

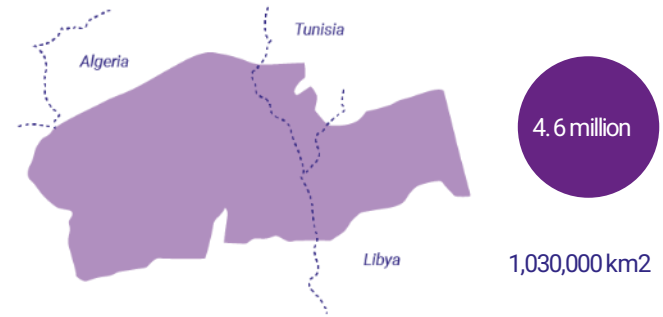


Recent progress report

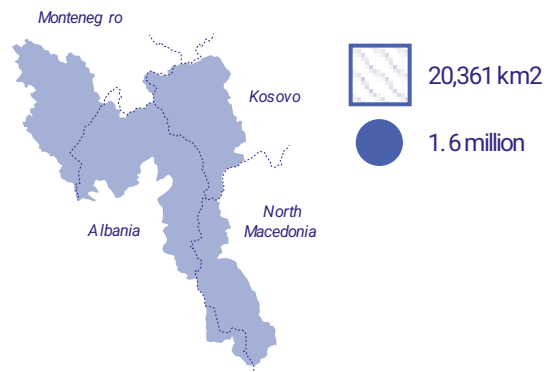
https://unece.org/sites/default/files/2023-05/Global_network_overview_pilot_projects_progress_May2023_ENGL.pdf

Since the early 2000s, the Water Convention has supported building resilience for **31 million people** across 6 basins:

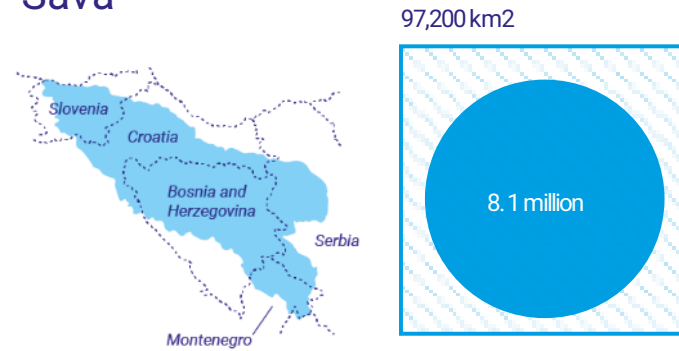
North Western Sahara Aquifer



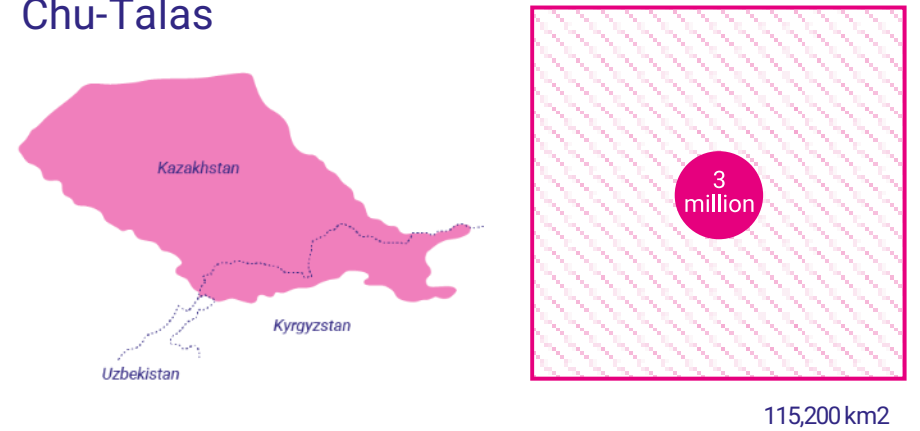
Drin



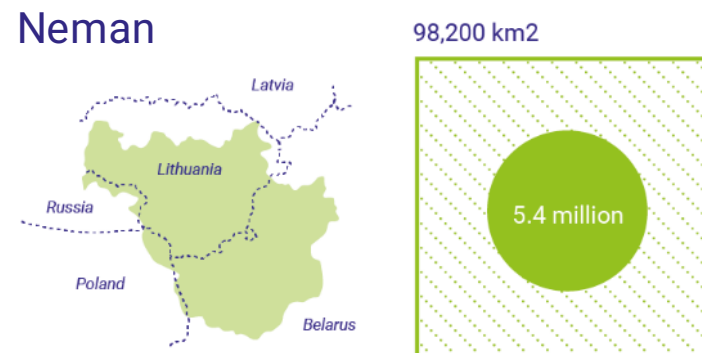
Sava



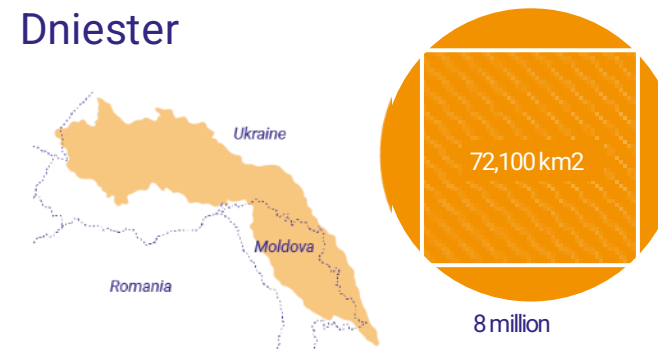
Chu-Talas





Neman

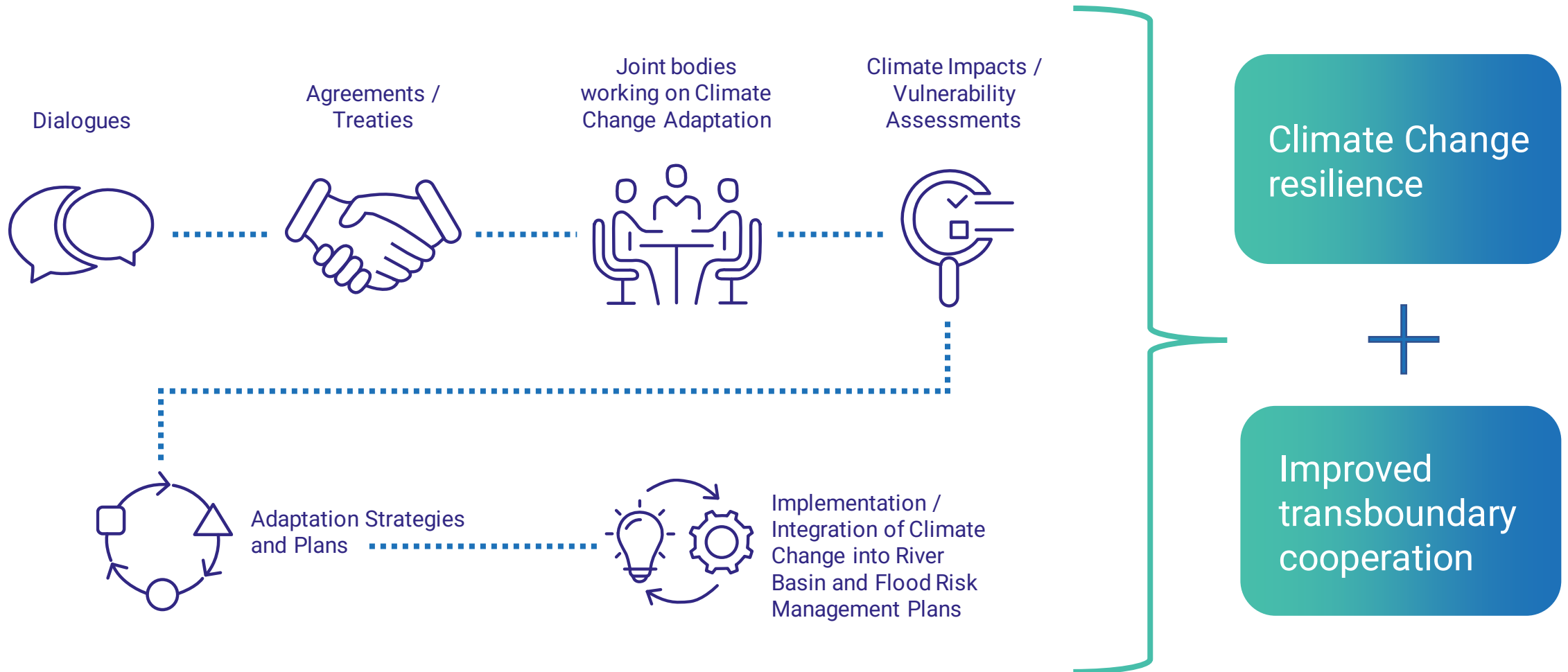


Dniester









 Basin Area
 Basin Population

The Water Convention supports countries through the 6 stages of the Climate Change Adaptation process:






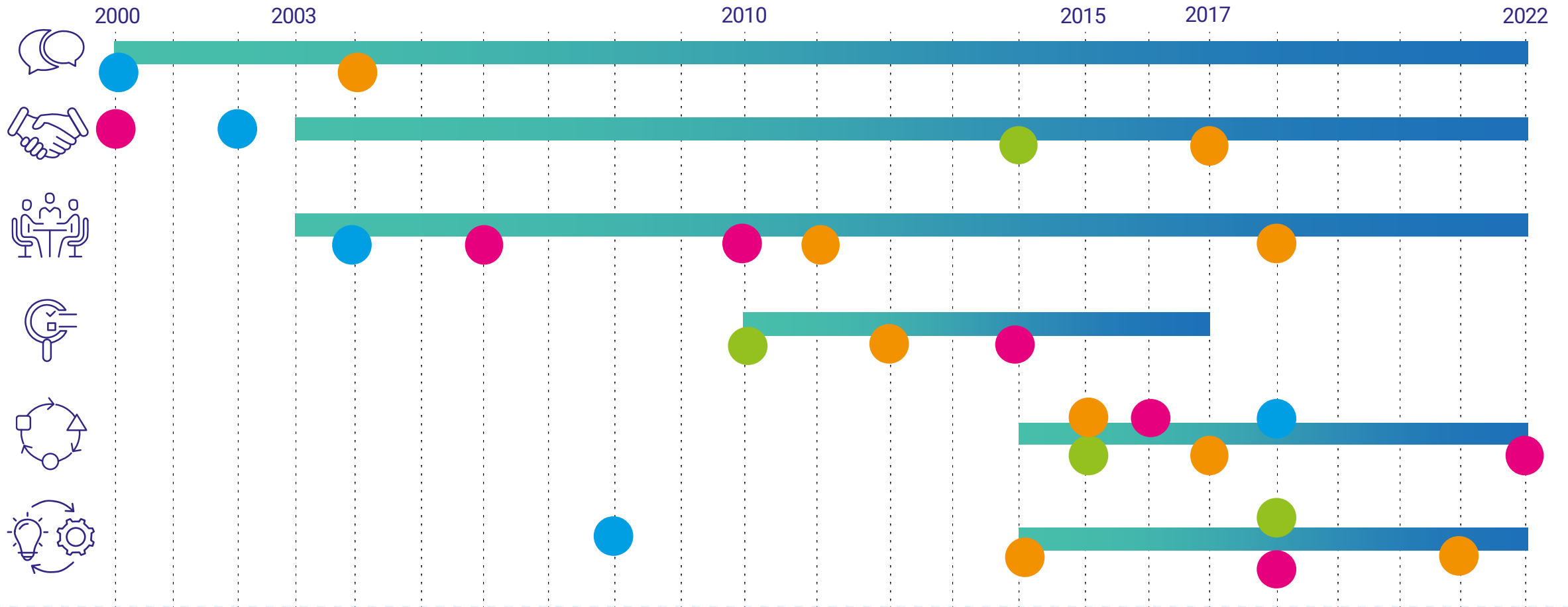
The Water Convention's support to countries progressing through the 6 stages of Climate Change

Adaption began in the early 2000s, and continues still to this day.

 Dialogues	 Climate Impacts / Vulnerability Assessments	 Implementation / Integration of Climate Change into River Basin + Flood Risk Management Plans
 Agreements / Treaties	 Adaptation Strategies and Plans	
 Joint bodies working on Climate Change Adaptation		

Basin Milestone Achievements:

 Dniester	 Chu-Talas
 Sava	 Neman



Possible steps in transboundary climate change adaptation



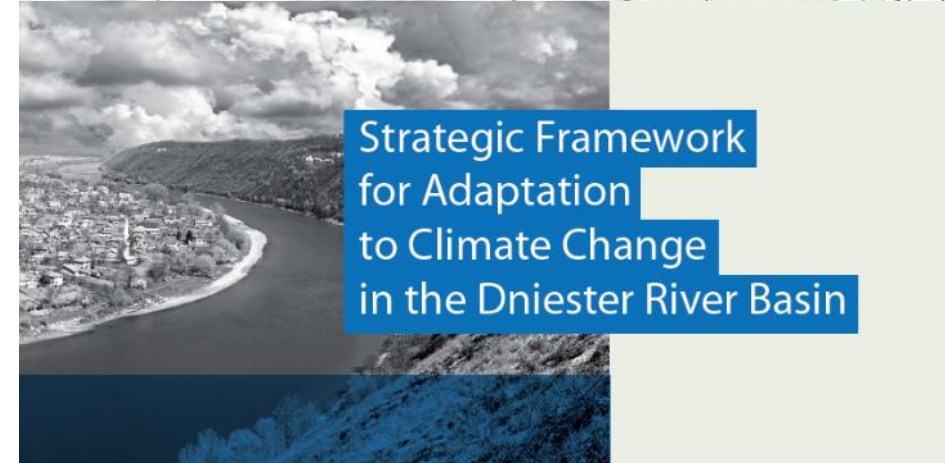
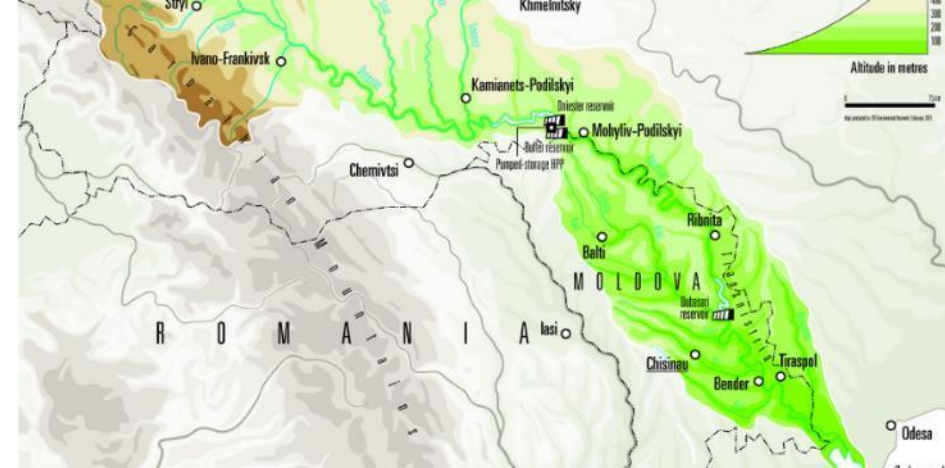
- Basin-wide analysis of climate change impacts
- Transboundary vulnerability assessment
- Basin-wide adaptation strategy and plan
- **Joint resource mobilization plan**
- Implementation of priority adaptation measures
- **Integration of transboundary adaptation into the basin and flood risk management plans as well as national climate and sectoral policies**

Good examples worldwide:

- Chu-Talas, Danube, Dniester, Neman, Rhine, Volta, Lake Chad, Lake Victoria, Mekong and Niger

Transboundary cooperation supports national adaptation: example of the Dniester basin

- **Dniester basin** shared by Moldova and Ukraine (support from UNECE, OSCE, UNDP, UNEP)
- Basin-wide **climate change impacts and vulnerability assessment**
- **Strategic Framework** for Adaptation to Climate Change was endorsed in 2015 and followed by development of its **Implementation and Resource Mobilization Plan**
- **Adaptation measures implemented:** floodplain restoration, Dniester youth competition, flood risk modeling and mapping, flood forecasting incl. installation of monitoring stations; and reforestation
- Facilitation of the entry into force of the transboundary **Dniester Treaty** in 2017 and the establishment of the **Dniester Commission** in 2018



WEBSITE OF THE DNIESTER COMMISSION
SAVE THE DNIESTER RIVER TOGETHER

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Ministerul Agriculturii, Dezvoltării Regionale și Mediului

Міністерство енергетики та захисту довкілля

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DNIESTER COMMISSION

The Commission on Sustainable Use and Protection of the Dniester River Basin (the Dniester Commission) was established under the Treaty between the Government of the Republic of Moldova and the Cabinet of Ministers of Ukraine on Cooperation in the Field of Protection and Sustainable Development of the Dniester River Basin (Moldovan, Ukrainian), which was signed in Rome on 29 November 2012. The treaty covers almost all aspects relating to river basin issues, except for navigation and hydropower, and is aimed at strengthening and expanding cooperation between the Republic of Moldova and Ukraine, which started in 1994. Besides, the execution of this document was an important step in fulfilling the obligations undertaken by the Republic of Moldova and Ukraine under the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (1992) and the EU Water Framework Directive (2000).

RULES AND COMPOSITION

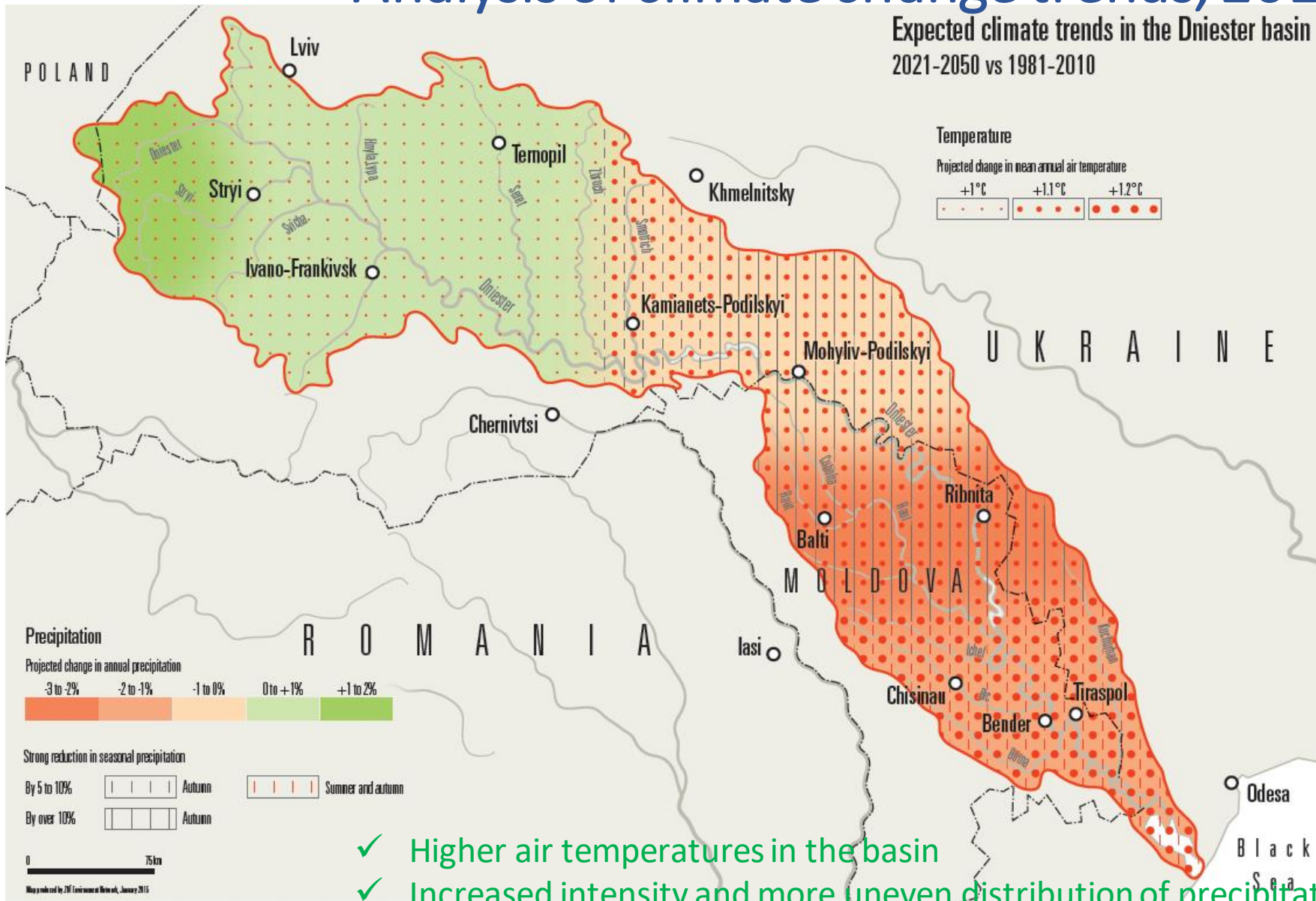
The rules of procedure and proceedings of the Commission were approved at the first meeting of the Commission (Chisinau, 17 September 2018).

[READ MORE >](#)

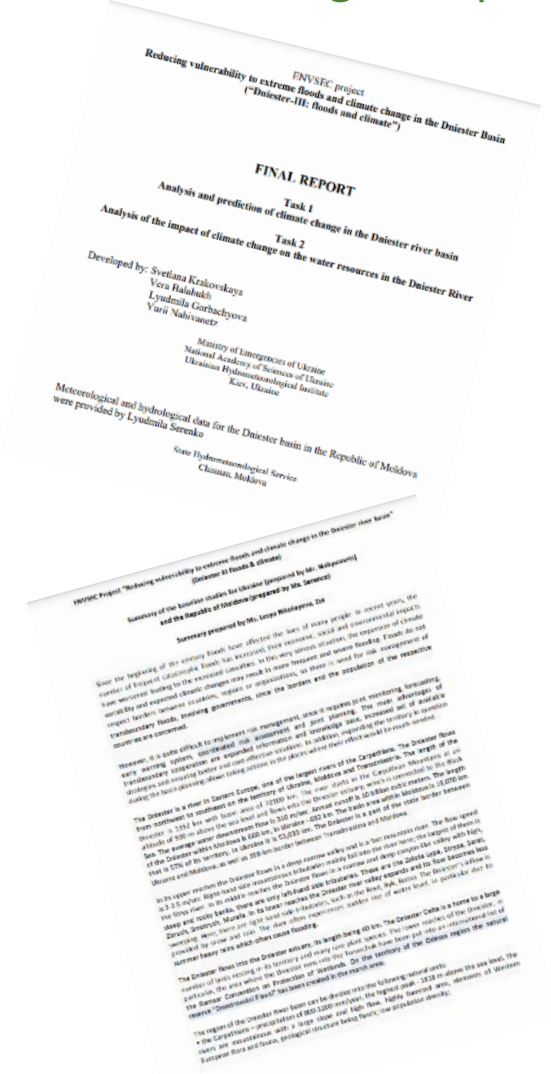
WORKING GROUPS

The composition of the Moldovan and Ukrainian parts of the Commission is represented by the following working groups:

Analysis of climate change trends, 2010-2011



WG on Flood Management and Climate Change Adaptation



- ✓ Higher air temperatures in the basin
- ✓ Increased intensity and more uneven distribution of precipitation
- ✓ Drier conditions in the southern part of the basin

Key transboundary problems caused by climate change

- more intense and increasingly frequent **floods**
- **decline in the flow** of water available for use in **small rivers**
- a deterioration in **water quality**
- worsening of adverse impacts on the basin's **ecosystem**

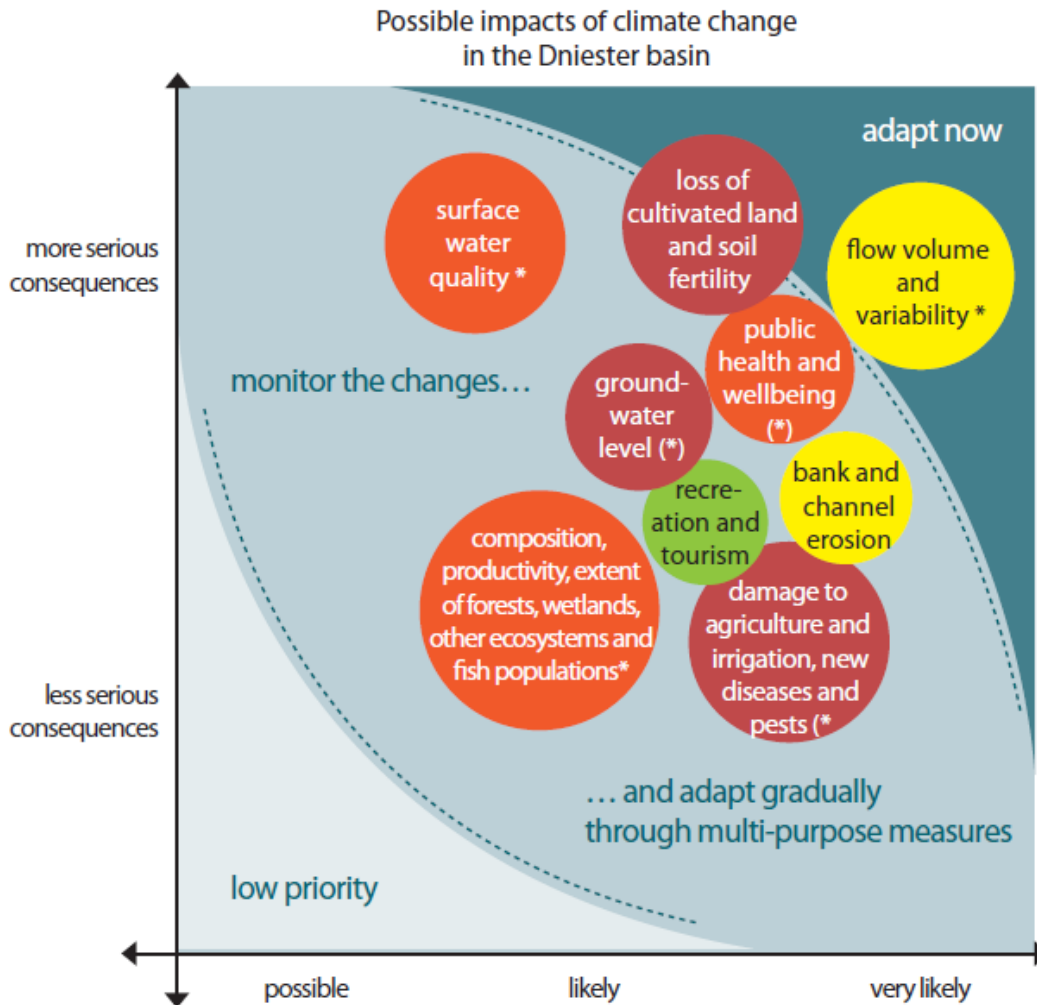
Vulnerability assessment, 2011 - 2013

Executive Summary

A project "Reducing vulnerability to extreme floods and climate change in the Dniester River basin" was one of the pilot projects under the program of adaptation to climate change in the transboundary basins, carried out in accordance with the UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes. The Convention is considering the climate change not only as a challenge to mankind, but also as one of the drivers of transboundary cooperation, which can be the starting point in activities to improve relations between the riparian countries. A joint analysis of problems, priorities and solutions as the determining factor of transboundary cooperation, defined the agenda and methods to execute the task of a project. Harmonization of efforts of the executors from Ukraine and Moldova, as well as used means, models and scenarios, information exchange and the increased using of results of researches, projects and programs in the field of a studied problem have determined the format and content of a present report.

Sector-consultative process

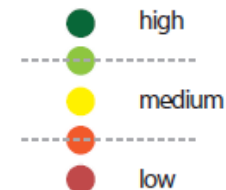
- WG on Flood Management and Climate Change Adaptation
- International and national consultants
- A lot of group discussions with relevant sectoral stakeholders



Produced by ZOİ Environment Network, January 2015

Based on the results of consultations in Moldova and Ukraine.
Source: UNECE, OSCE, UNEP 2013.

Adaptation capacity:

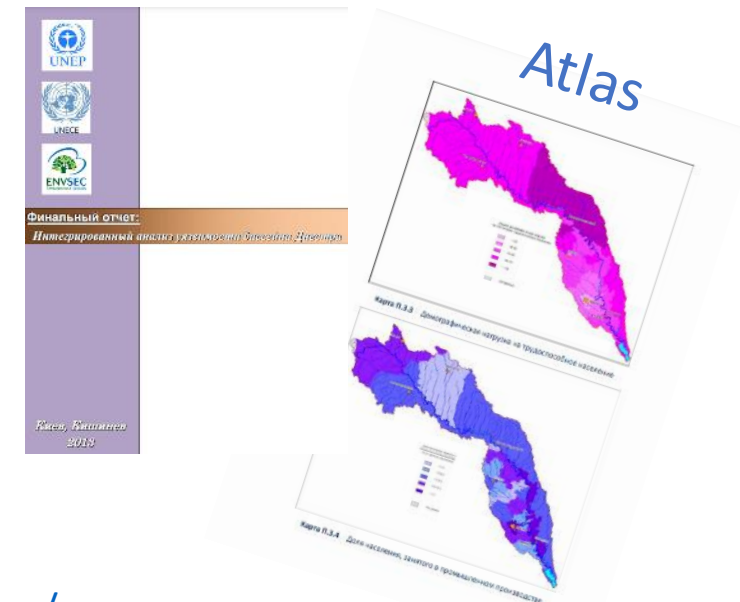


Notes:

star (*) indicates that coordinated basin-level actions may be needed;

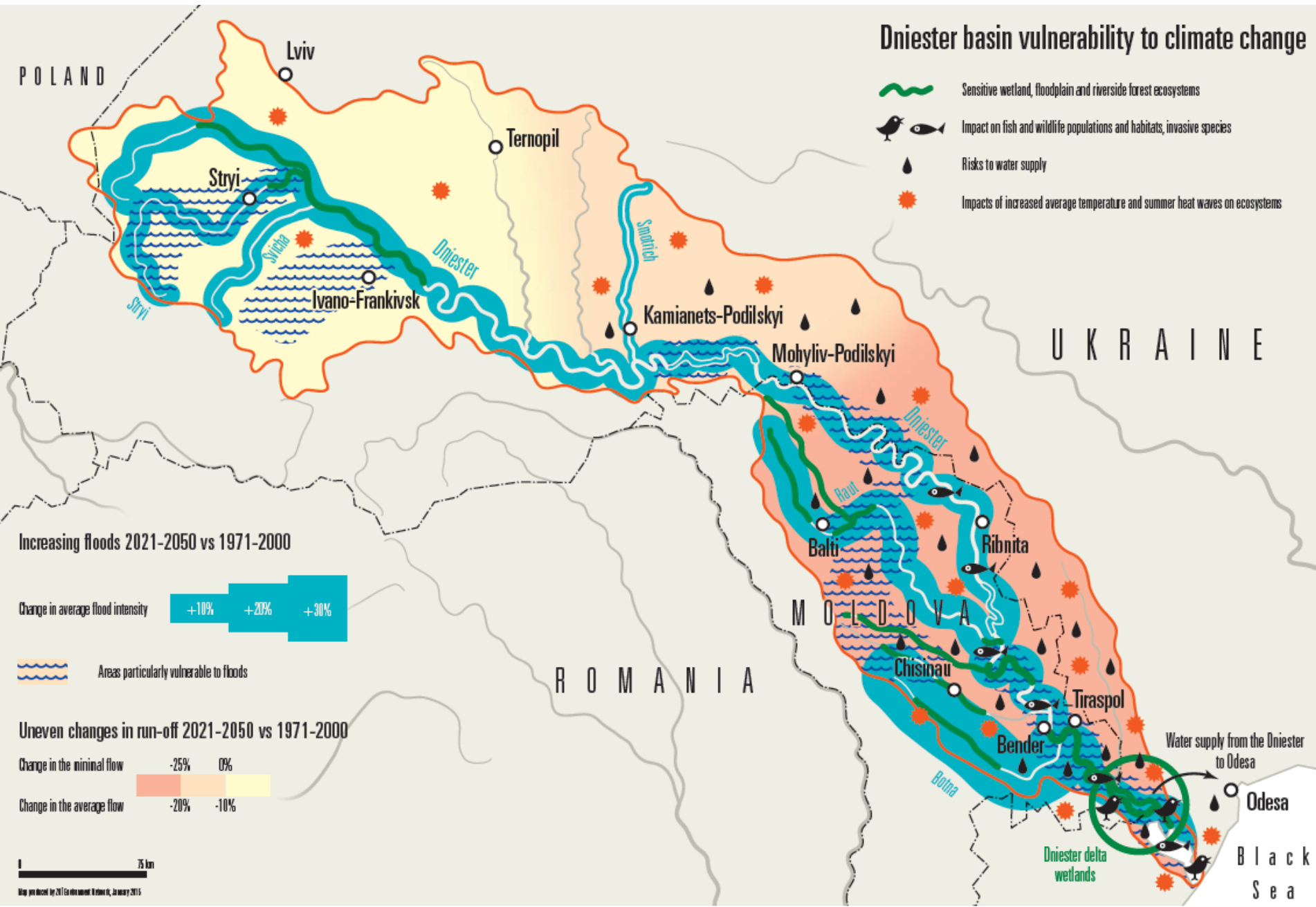
circle size does not reflect the relative importance of various issues.

Final report



https://dniester-commission.com/wp-content/uploads/2018/12/8_EN_Vulnerability_assessment_summary.pdf

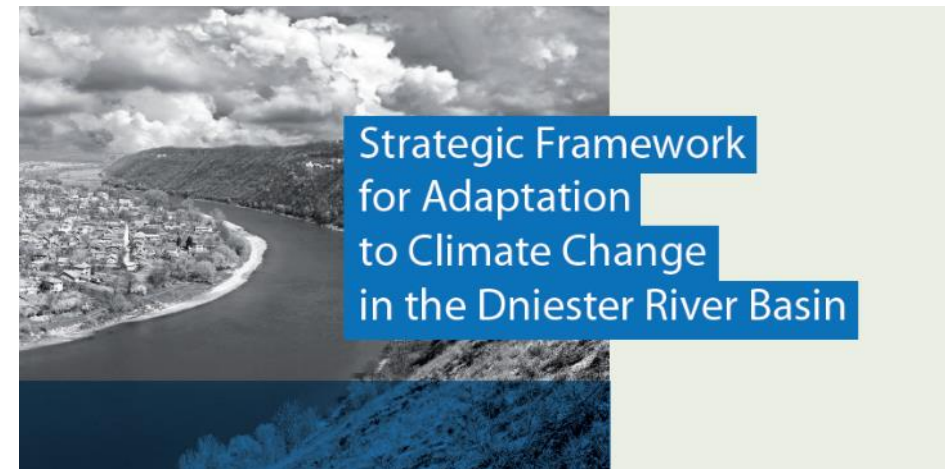
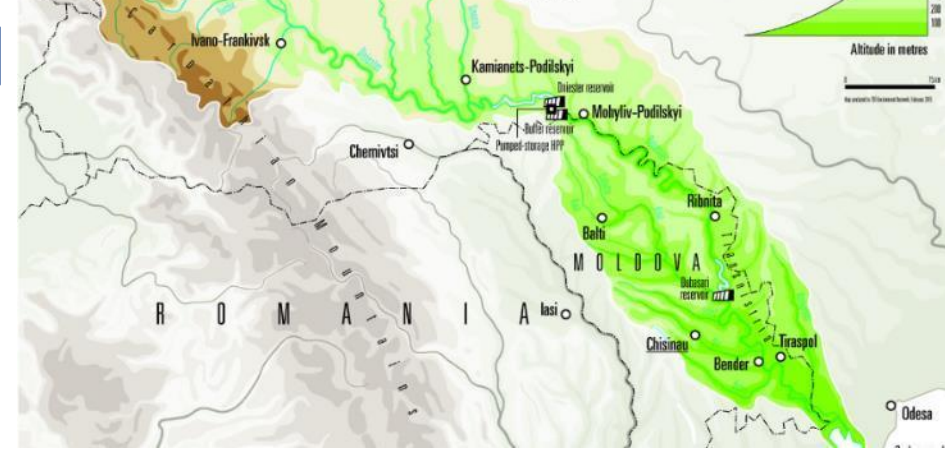
Vulnerability assessment, 2011 - 2013



- ✓ Communication
- ✓ Visualization
- ✓ Served as a basis for development of the **adaptation strategy and river basin management plan**

Transboundary cooperation supports national adaptation: example of the Dniester basin

- **Dniester basin** shared by Moldova and Ukraine (support from UNECE, OSCE, UNDP, UNEP)
- Basin-wide **climate change impacts and vulnerability assessment**
- **Strategic Framework** for Adaptation to Climate Change was endorsed by two ministers in 2015 and followed by development of its **Implementation and Resource Mobilization Plan (2017)**
- **Pilot adaptation measures** implemented
- Facilitation of the entry into force of the transboundary **Dniester Treaty** in 2017 and the establishment of the **Dniester Commission** in 2018
- Climate work facilitated **GEF funding**
- **Integration** of climate change measures into the **river basin management plan** and **Commission's activities** with support of GEF project



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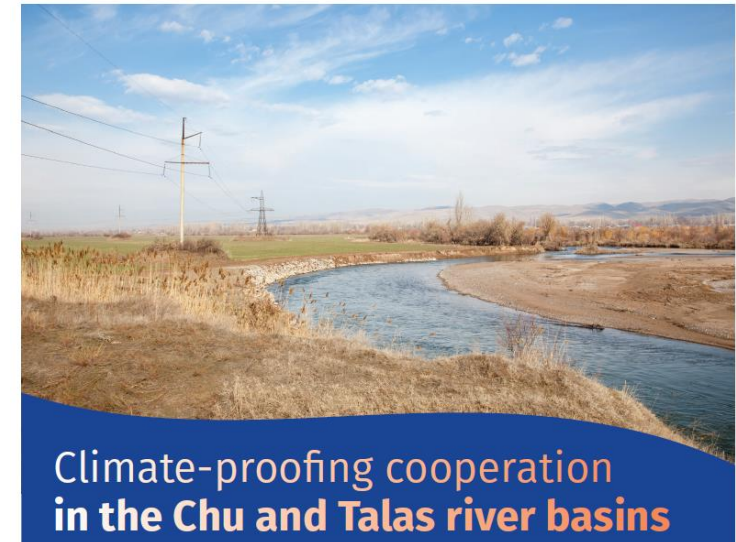
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WORKING GROUPS

The composition of the Moldovan and Ukrainian parts of the Commission is represented by the following working groups:

Climate change needs to be integrated into basin management plans: example of Chu - Talas basin

- The **Chu-Talas basin** shared by Kazakhstan and Kyrgyzstan (support from UNECE and UNDP)
- **Basin-wide modelling** of climate change impacts and a **vulnerability assessment**
- Elaboration, **cost-assessment and implementation of climate change adaptation measures**, covering issues from water quality to monitoring and education
- Measures were integrated into a **transboundary diagnostic analysis (TDA)** and a **Strategic Action Programme (SAP)**
- The Joint Bilateral **Chu-Talas Water Commission** played a crucial role and created a climate change sub-group



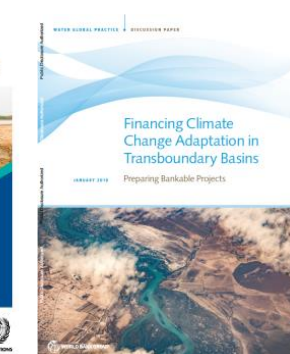
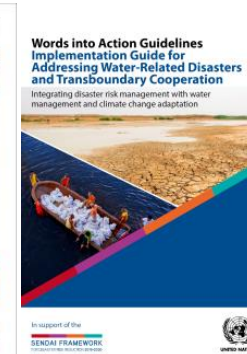
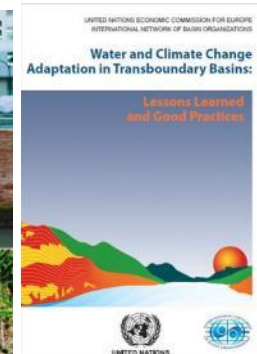
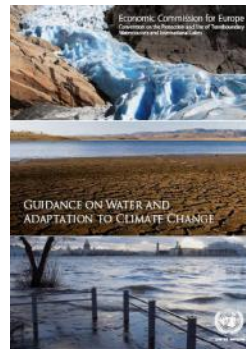
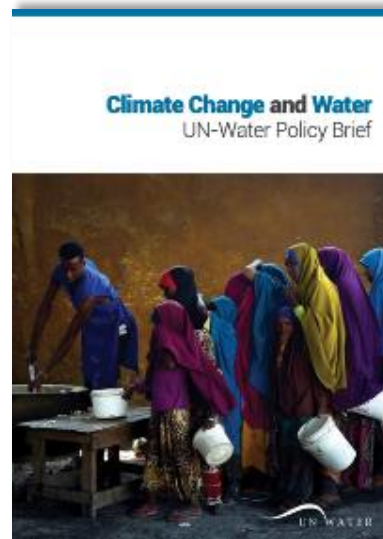
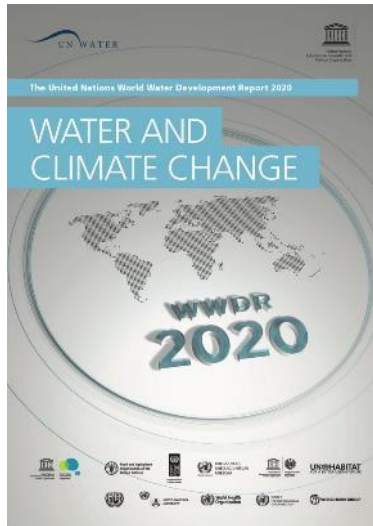
Ingredients for success

- Strong basin organisations
- Good communication
- Consultative process and inter-sectoral cooperation
- Partnership between different organisations
- Active engagement from civil society and private sector actors
- Data sharing and joint/coordinated monitoring and early-warning
- Capacity building support
- Funding mechanisms



Additional relevant resources

- World Water Development Report “Water and Climate Change”, 2020
- UN-Water Policy Brief on Climate Change and Water, 2019
- Towards sustainable renewable energy investment and deployment, 2020
- Financing Climate Change Adaptation in Transboundary Basins: Preparing Bankable Projects, 2019
- Implementation Guide for Addressing Water-Related Disasters and Transboundary Cooperation, 2018
- Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices, 2015
- Guidance on Water and Adaptation to Climate Change, 2009



https://unece.org/publications/oes/welcome?f%5B0%5D=program%3A441&f%5B1%5D=work_area%3A1046



Thanks for
your attention!

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For more information:

www.unece.org/env/water/