

# Lessons learned from the development of transboundary adaptation strategies and implementation plans

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# The Water Convention: a living instrument

Objective: to protect and ensure the quantity, quality and sustainable use of transboundary water resources by facilitating cooperation

## The Convention is based on three main pillars:

- Principle of prevention
- Principle of reasonable and equitable utilization
- Principle of cooperation
- Sustainability of resources is the overarching objective

Support to transboundary water cooperation thanks to:



A sound  
legal  
framework



An active  
institutional  
framework



Activities and  
projects on the  
ground

# Convention's global opening

The Convention was opened up to all UN Member States in March 2016 through an amendment, for the following reasons:

- ✓ Build on the success achieved => practice had demonstrated usefulness
- ✓ Apply the principles and provisions worldwide
- ✓ Share the experiences of the Convention
- ✓ Learn from other regions of the world
- ✓ Broaden political support for transboundary cooperation
- ✓ Jointly develop solutions to common challenges

**In practice, participation in the Convention's activities is already global:**

- **More than 110 countries participate in its activities**
- **Several are in the accession process**

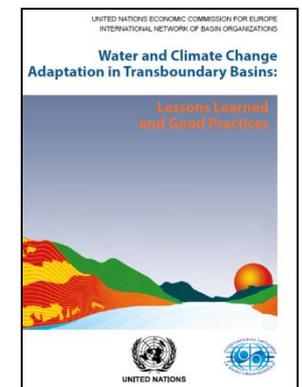
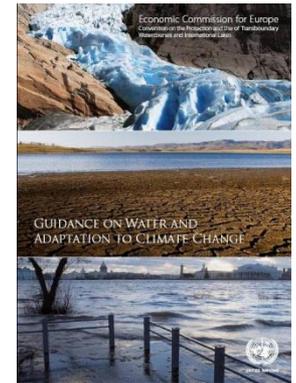


# Why basin-wide cooperation in adaptation?

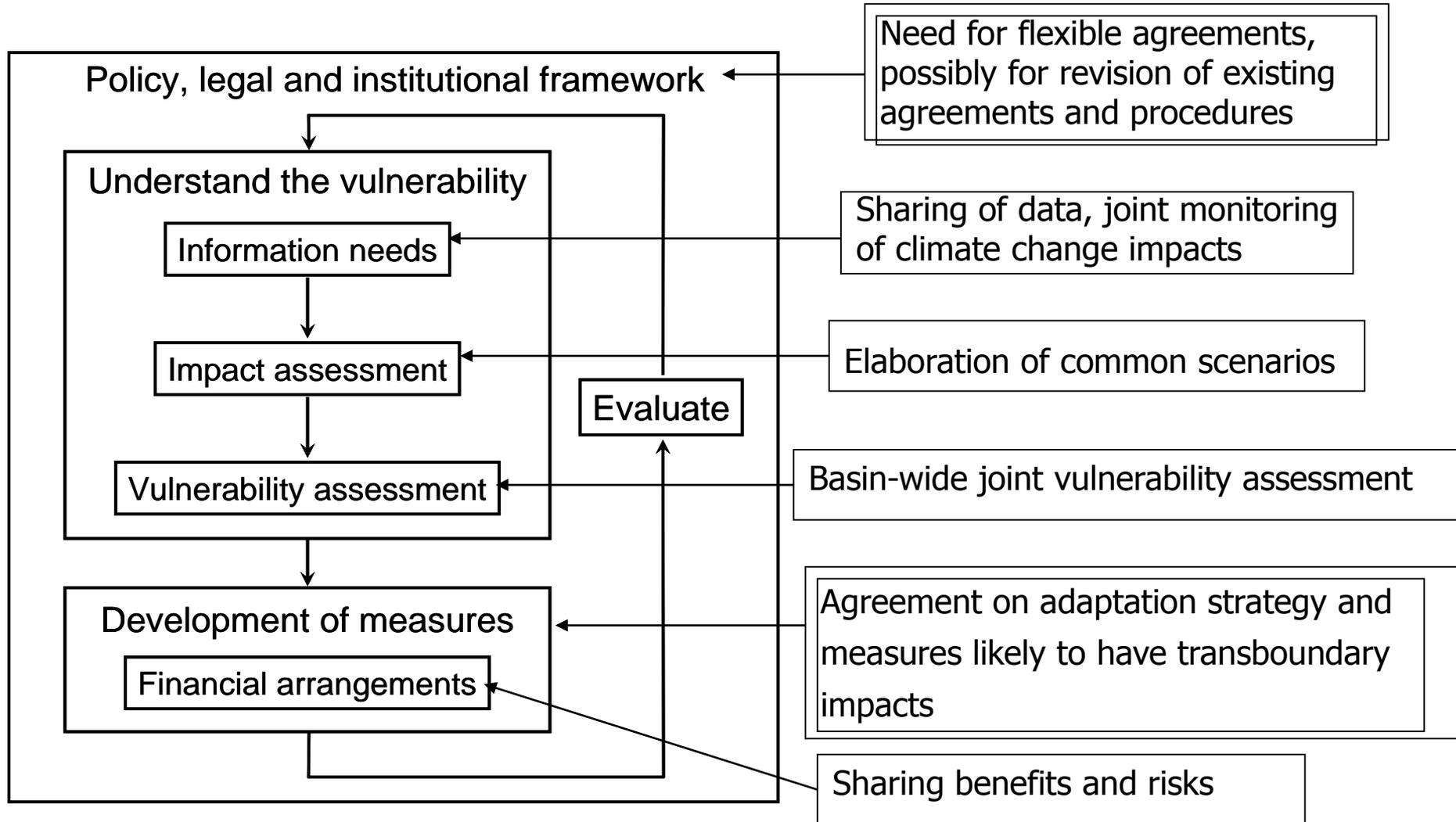
- Prevent negative impacts of unilateral adaptation measures in riparian countries, thereby preventing potential conflict
  - Enable more effective and efficient adaptation through:
    - Wider knowledge base
    - Larger planning space: take measures in the basin where they have optimum effect
    - Possibility to share costs and benefits
- Transboundary/ basin-wide cooperation reduces uncertainty and costs!

# Climate change activities under the Water Convention

- Provisions of the Water Convention can help countries and basins adapt to climate change
- Guidance on Water and Adaptation to Climate Change adopted in 2009
- Programme of pilot projects on climate change adaptation in transboundary basins (Chu Talas, Neman, Dniester, Sava rivers)
- (Global) Platform for exchanging experience on this: regular workshops
- Global network of 14 basins working on climate change
- Collection of good practices and lessons learned published in 2015
- Policy work in global processes, such as UNFCCC COPs, ISDR



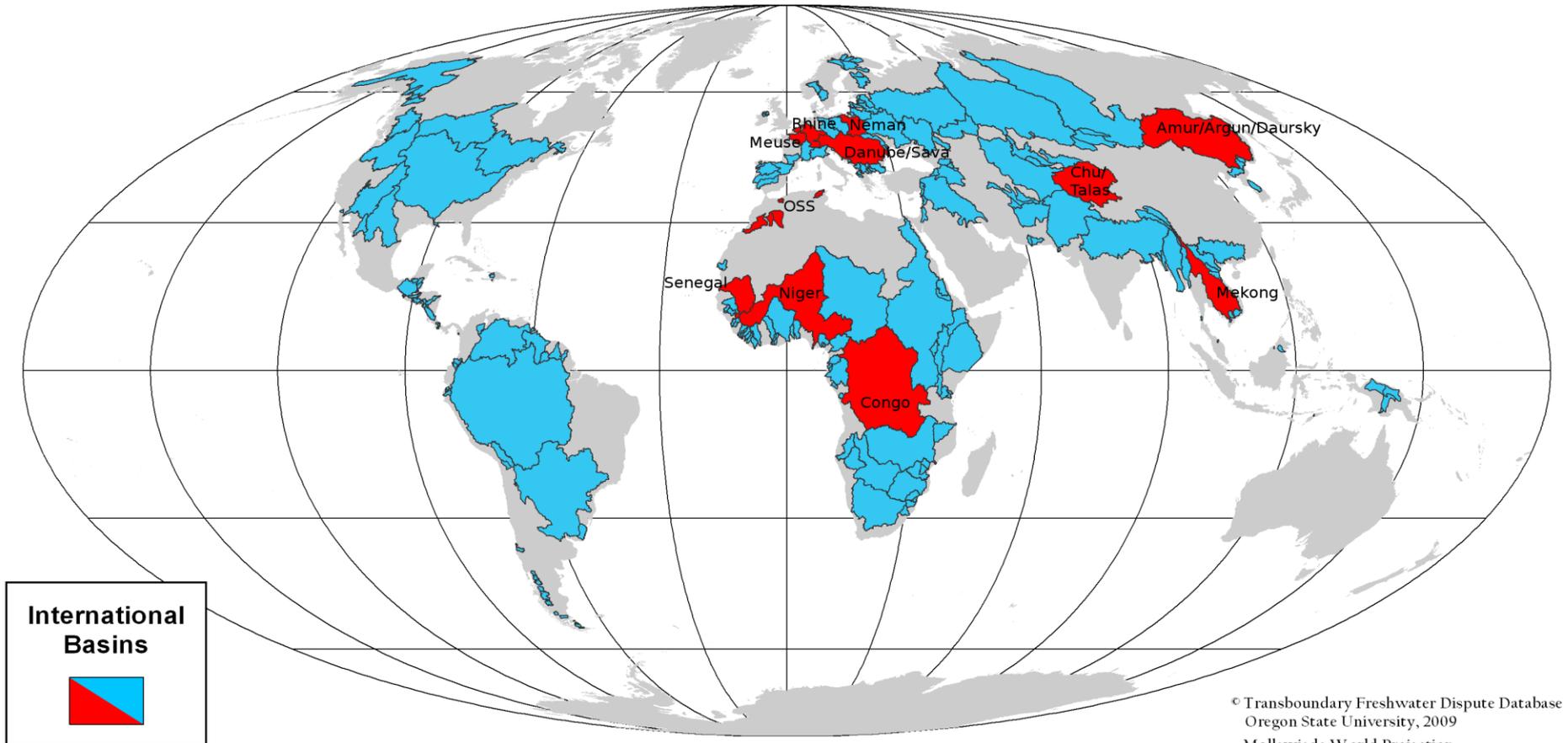
# Cooperation needs in every step of developing an adaptation strategy



# Basins in the global network of basins

## Working on climate change

### International River Basins



© Transboundary Freshwater Dispute Database  
Oregon State University, 2009  
Mollweide World Projection  
WGS 1984 Geographic Coordinate System

# Examples of transboundary adaptation strategies

Transboundary adaptation strategies developed for:

- Neman (2015)
- Dniester (2015)
- Rhine (2014)
- Danube (2012): now revision of strategy
- Nile climate change strategy (2013)
- Lake Victoria Basin
- Climate investment plans for Niger basin and lake Chad

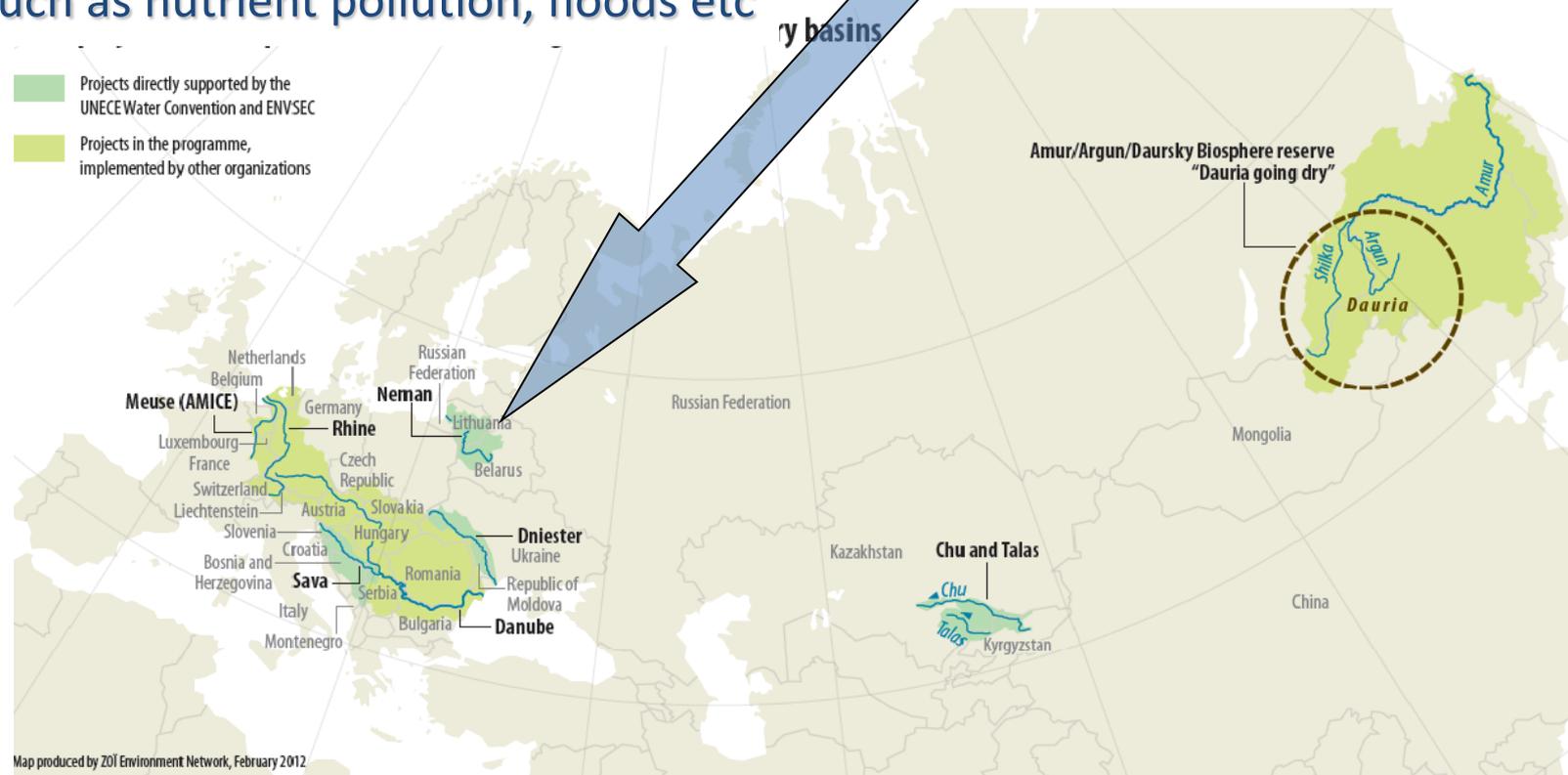
Transboundary strategies under development :

- Mekong
- Sava

# Example: Neman pilot project shared by Belarus and Lithuania (and Russia)

## Baseline situation in 2010:

- Political tensions between the countries, geopolitical hotspot
- Absence of contacts at political level, some expert contacts
- Absence of a legal and institutional framework for cooperation
- Problems such as nutrient pollution, floods etc



Map produced by ZOI Environment Network, February 2012

# Situation in the Neman in 2016

- Strengthened capacity to adapt to climate change of the riparian countries e.g. through developing a transboundary adaptation strategy
- Common understanding on future water availability and water use taking into account possible climate change impacts
- Input by Belarus to Lithuanian river basin management plan for Neman
- Improved transboundary cooperation in times of a changing climate in the Neman: draft bilateral technical Protocol (BY-LI) elaborated

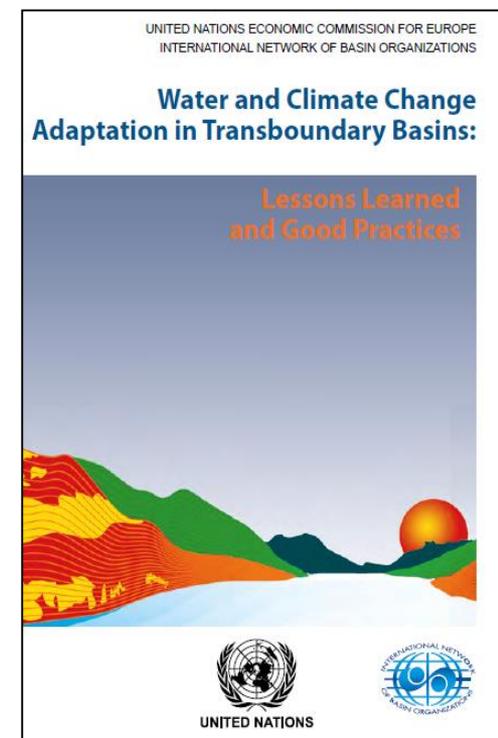


# How was this done?

- *Starting cooperation at expert level*: Assessment of the current state of the water resources of the Neman River basin
- *Focusing on a non-political issue of common concern: climate change*: Elaboration of common cc scenarios and forecasting of runoff changes, calculation of water balances, assessment and forecast of climate change impact on water quality
- *Comparing systems*: Analysis of the meteorological, hydrological, hydrochemical and hydrobiological monitoring systems in the basin
- *Sharing data*: Development of a common information platform
- *Joint experiences*: Common Field trip on the Neman in 2012
- *Involving stakeholders*: Three multi-stakeholder workshops in each basin country with stakeholders from different regions and sectors, many expert meetings and one high-level project conference
- *Agreeing on climate change impacts and actions*: Basin vulnerability assessment and strategic framework for basin adaptation

# Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices

- Published by By INBO and UNECE in 2015
- 58 case studies from basins around the world
- 63 lessons learned
- Topics covered:
  - legal frameworks for adaptation in transboundary basins
  - information and data needs
  - impact and vulnerability assessment
  - developing and prioritizing adaptation measures
  - financing
  - evaluation
  - communication
  - capacity building
  - stakeholder involvement



# Water and Climate Change Adaptation in Transboundary Basins: Lessons Learned and Good Practices: Selected Lessons Learned

- 4. Integrate climate change within river basin management planning
- A flexible legal framework, such as a transboundary agreement, is important
- 48. Develop a mix of structural and non-structural measures, consider also ecosystem-based measures
- 52. Assess the economic, environmental and social costs and benefits of adaptation options at a basin scale
- 53. When selecting adaptation measures consider their impact on mitigation
- 54. Establish a participatory, transparent and explicit prioritization process
- 55. Locate adaptation measures at most beneficial location in a transboundary basin. Consider sharing costs & benefits



# **Lessons learned of the strategies developed**

1. Having a clear mandate is important, ideally for and RBO
2. Process can take several years and
3. Title of the strategy may be slightly changed
4. Often some climate change studies had already been done nationally, but with different methodologies: importance of joint scenarios, modelling, needs and vulnerability assessment a
5. Importance of link between political and experts' level, e.g. through creation of a working group and regular meetings
6. Importance of concrete activities and involving population through concrete adaptation measures
7. Important, but challenging to link transboundary to national level, need for coordination and mainstreaming: e.g. organize national workshops
8. Strategy does not need to be perfect, can be updated

# Conclusions

- Transboundary adaptation is a challenge, but it can be more efficient and effective
- It can eventually positively influence cooperation in general
- There is a need to communicate and reflect this in the climate negotiations, climate funds etc.
- Need for further work on financing climate change adaptation in transboundary basins
- Invitation to join the global network of basins by INBO and UNECE
- Invitation to our next global workshop on climate adaptation in basins on 11-13 December in Geneva



**Thank you for your attention!**

**More information**

**<http://unece.org/env/water>**

**[www.unece.org/env/water/water climate activ](http://www.unece.org/env/water/water_climate_activ)**

**[https://www2.unece.org/ehlm/platform/display/  
ClimateChange](https://www2.unece.org/ehlm/platform/display/ClimateChange)**

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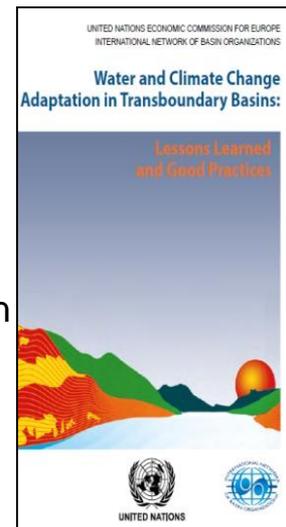
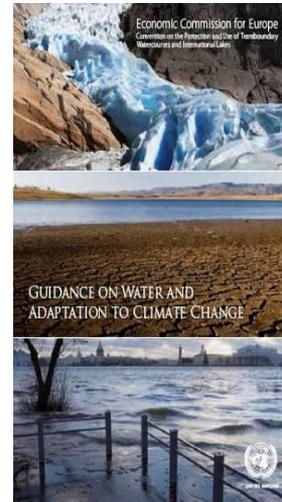


# Achievements on climate change adaptation/ flood management

- Important legal framework for cooperation on transboundary aspects of climate change
- Global platform for exchanging experience: Task Force on Water and Climate since 2006, annual workshops since 2010
- Knowledge management hub: Guidance and collection of good practices and lessons learned on Water and Adaptation to Climate Change, Model provisions on transb. Flood management
- Programme of pilot projects and global network of transboundary basins working on climate change (Dniester, Neman, Niger, Congo, Mekong, etc.)

## ➤ Selected Achievements:

- Transboundary vulnerability assessments for the Dniester and Chu Talas
- Development of transboundary climate change adaptation strategies in Dniester and Neman which prioritize adaptation measures from basin perspective
- Revival of transboundary cooperation at political level in the Neman basin through cooperation on climate change, contribution to RBMP
- Implementation of adaptation measures in 3 areas in the Dniester: monitoring and information exchange, ecosystem restoration, awareness-raising. Reservoir modelling by AGWA



# Activities on climate change in 2016-2018

- Increase recognition of the need for transboundary cooperation in climate change adaptation and disaster risk reduction
- Further mainstream climate change into the water community
- Exchange and collection of experience: e.g. focused on adaptation-mitigation linkages, scenarios, water scarcity, financing
- Replicate and upscale experience of the pilot projects and ensure their sustainability:
  - Implement developed transboundary adaptation strategies, e.g. implement some measures: Neman, Dniester, Chu-Talas
  - New basins in UNECE region having expressed interest: Alazani/Ganikh, Daugava, Mesozoic Transboundary Aquifer System (Belarus, Poland and Ukraine), Pripyat, Zapadny Bug, Panj, etc.
  - New basins outside the UNECE-region: Congo, Mekong, etc.



# Strategic framework for climate change adaptation: Overview of Measures



Group of measures	Description of measures	Total estimated cost
Direct actions at the basin level	Signing an international agreement on the Neman River Basin	-
	Setting up and functioning of an International Commission for the Neman River Basin.	€
	Development of the overall Neman River Basin Management Plan	€
	Evaluation of status of ground waters and their vulnerability to climate change	€€

€- up to 100 ths €; €€- up to 1 mln €; €€€- from 1 to 10 mln €; €€€€- over 10 mln €