



# Jointly adapting to climate change in transboundary basins under the Water Convention

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## Why transboundary cooperation is very important in adaptation to climate change?

- To increase effectiveness of adaptation measures;
- To prevent negative impacts of unilateral adaptation measures in riparian countries;
- To 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

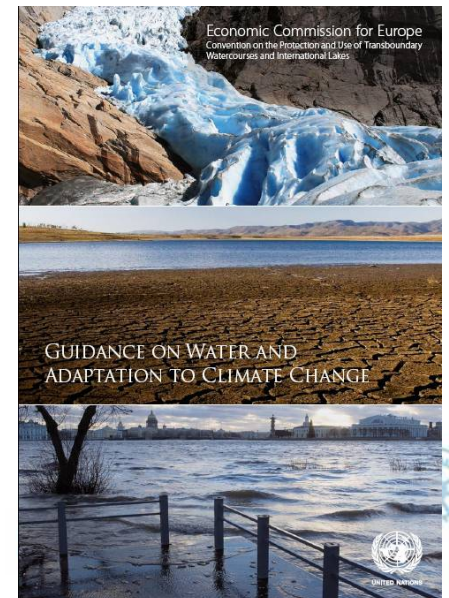




## UNECE Water Convention

→ principle of reasonable and equitable use; Precautionary principles; Obligation to exchange information and take measures to prevent, control and reduce transboundary impact

- Guidance on Water and Adaptation to Climate Change (2009)
- General roadmap towards adaptation of water management to climate change
  - Assess impacts of climate change
  - Develop policy, strategic and operational responses
  - Transboundary and health focus







## Global network of basins working on water and climate

- Promote cooperation on adaptation
- Focus mainly on developing a joint adaptation strategy & measures
- Specific focus defined by countries; some focus on water scarcity, others on floods

Platform for exchanging experiences

- Regular workshops and meetings of pilot projects members.
- Internet platform

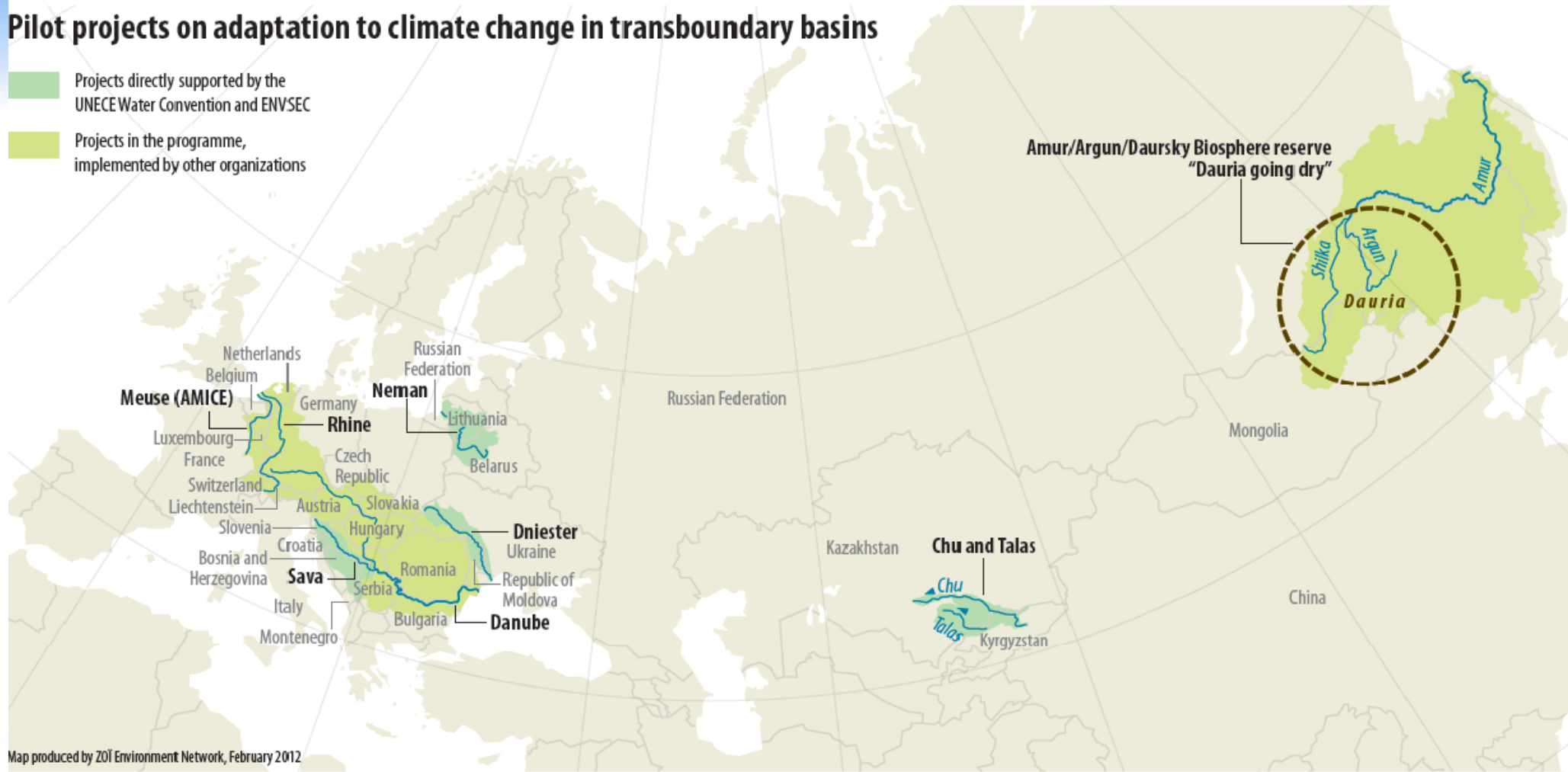
Collection of good practices and lessons learnt



# Global network of basins

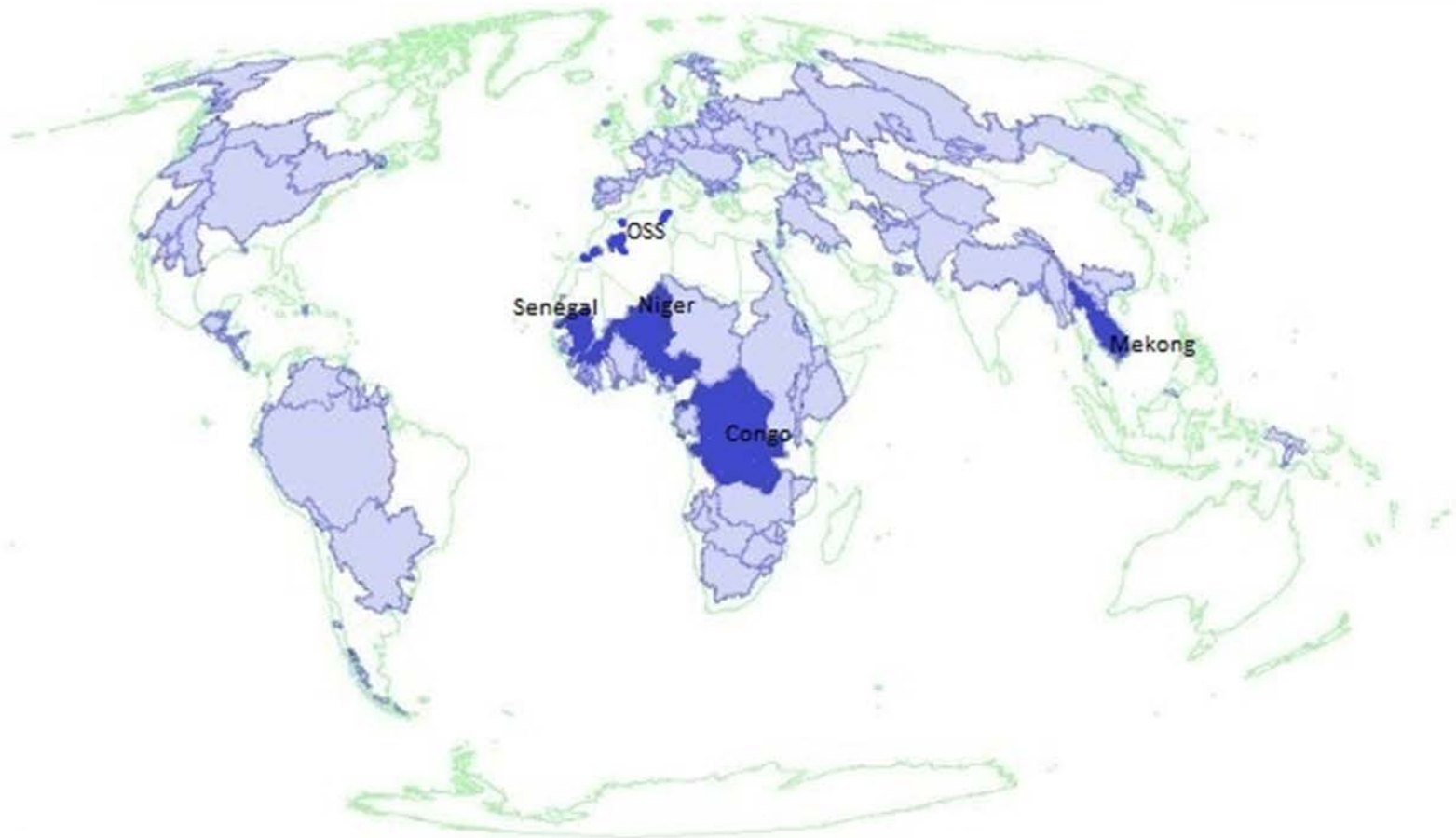
## Pilot projects on adaptation to climate change in transboundary basins

- Projects directly supported by the UNECE Water Convention and ENVSEC
- Projects in the programme, implemented by other organizations





**Basins that recently joined the global network are: Mekong, Niger, Congo, Senegal, OSS (Sub-Saharan Aquifer and Western Sahara)**

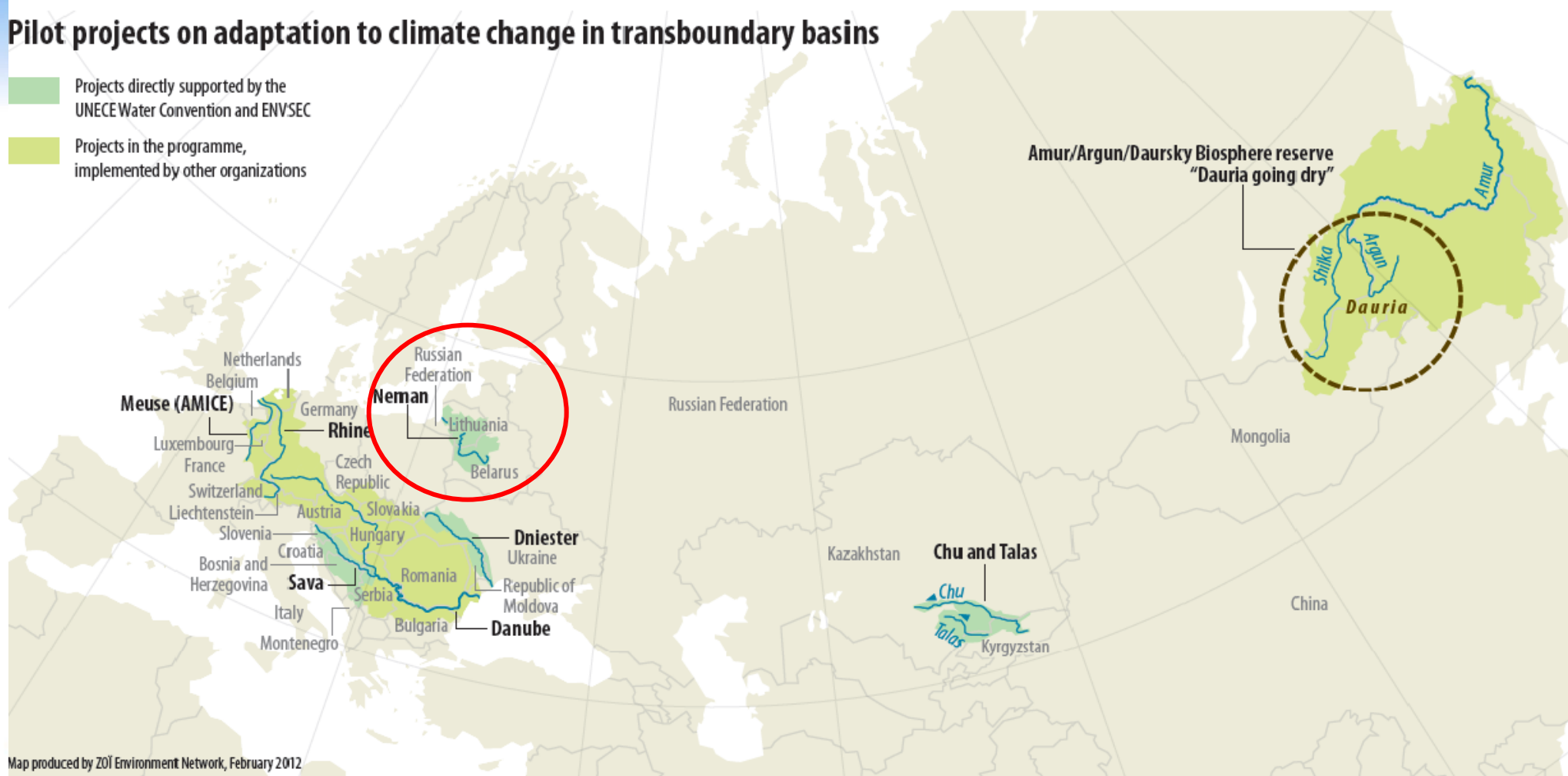




# Example: Neman pilot project

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# Neman river basin

Country

Catchment area, %

|                    |      |
|--------------------|------|
| Lithuania          | 47.7 |
| Belarus            | 46.4 |
| Russian Federation | 3.2  |
| Poland             | 2.6  |
| Latvia             | 0.1  |







**Objective:** Improve integrated river basin management and transboundary cooperation in times of a changing climate in the Neman river basin

Step 1: climate projections

Step 2: Run off projections

Step 3: Possible changes of water quality



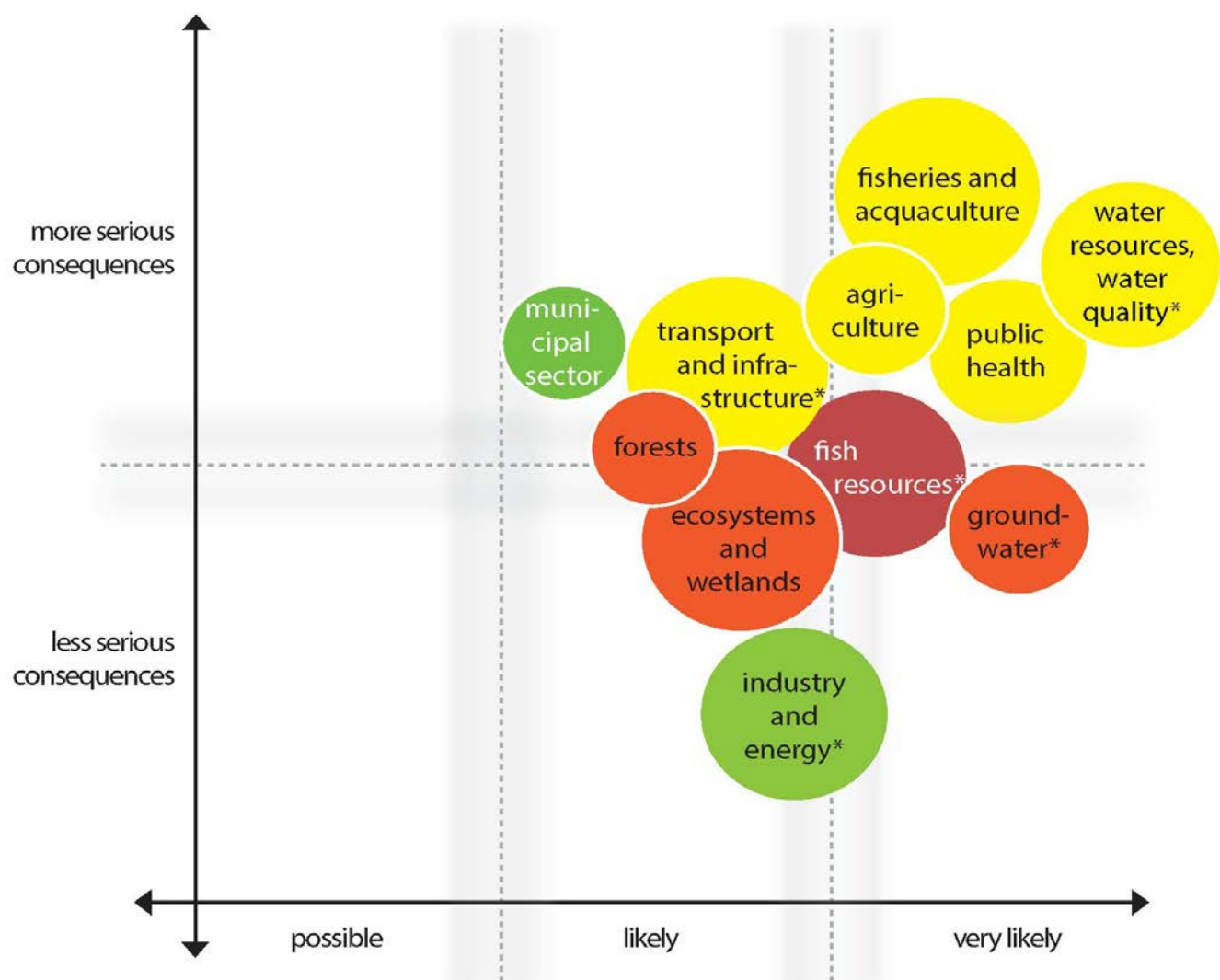
→ *determined that the impact of climate change will be more important for runoff in the Neman River Basin than forecasted impact of water use changes*

Step 4: Multi-stakeholders workshop





# Possible impacts of climate change in the Neman river basin



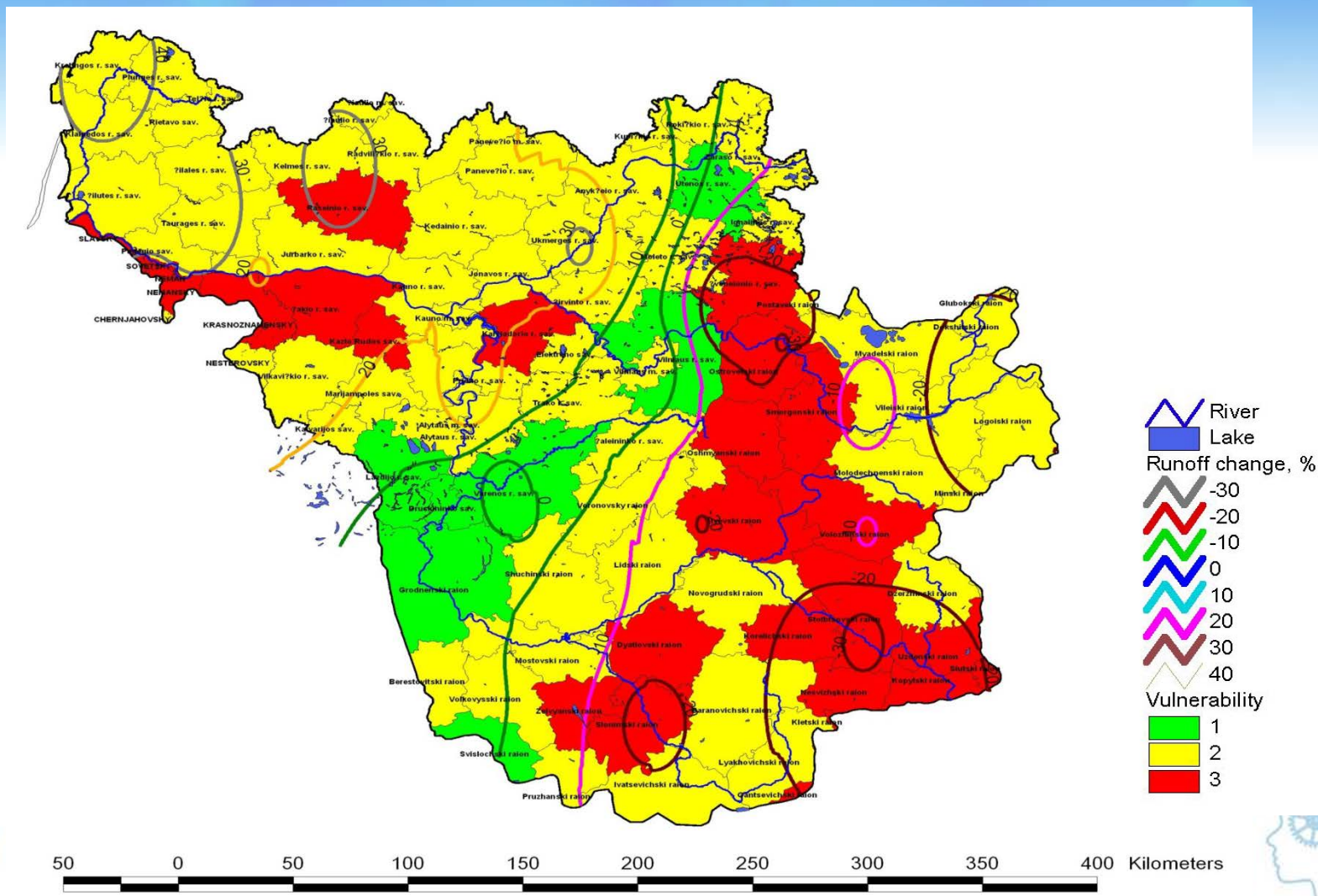
Current adaptation potential:

- high
- medium
- low

\*(coordinated) basin-level actions are needed



# Vulnerability analysis







## Outcomes of the project and lessons learnt

- **STRATEGIC FRAMEWORK FOR THE NEMAN RIVER BASIN ADAPTATION TO CLIMATE CHANGE**
- Communicate results appropriately to policy-makers
- Find a compromise, consider interests from all riparians
- Formal transboundary agreement or national documents about water management under changing climate conditions are crucial.
- Important role of local communities (public information and participation)
- Reduce differences of opinion and help find common solutions via effective communication





# Thank you!

Water and Climate Change website:

[www.unece.org/env/water/water\\_climate\\_activ.html](http://www.unece.org/env/water/water_climate_activ.html)

[www2.unece.org/ehlm/platform/display/ClimateChange/Welcome](http://www2.unece.org/ehlm/platform/display/ClimateChange/Welcome)

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