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Adaptation to Climate Change in the Transboundary Dniester River Basin

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Bridging boundaries

► Why basin-wide cooperation in adaptation?

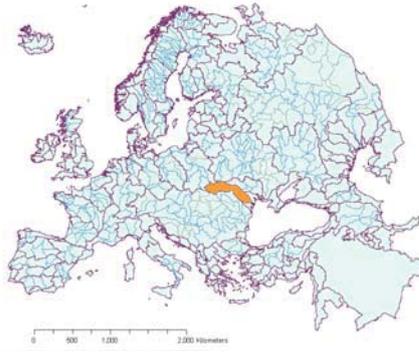
► Prevent negative impacts of unilateral adaptation measures in riparian countries, thereby preventing potential conflict

► 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!

Dniester Basin



Dniester River – 1 352 km
Dniester Basin area – km²
Mean annual discharge – 10 billion m³

“Algorithm” of the process

Step 1. “Where we are?”

Baseline studies

Supported by UNECE and OSCE under ENVSEC initiative funded by Sweden and Finland

Moldova

- Water level regime
- Hydrological monitoring
- Assessment of climatic resources
- Assessment of expected climate change
 - Scenarios for water resources of expected climate change
- Vulnerability of water resources to climate change
- Floods on the Dniester River
- Programs and researches overview
- Practice of flood risk management

Ukraine

- Climate studies in Ukraine
- Brief description of climatic resources and their changes
- Vulnerability of water resources to climate change
- Model calculations of climate change in Ukraine
- Characteristics of flood in the basin of the Dniester
- List of projects on research and management of the Dniester River
- Practices of flood risk management

Step 4. “What to do?”

Strategic Framework for Adaptation to Climate Change in the Dniester River Basin : promotes a common understanding on climate change impact and necessary adaptation measures from the transboundary perspective (supported by OSCE and UNECE under ENVSEC Initiative, funded by EU and Austria).



Main Chapters

Dniester Basin Environment – Status, Perspectives, Cooperation

Climate change in the region and basin:
Tendencies and Uncertainties

Climate change influence on water flow, nature, industrial and agricultural activities and population of Dniester Basin

Adaptation potential to climate change in Dniester Basin

Priority actions on Dniester Basin adaptation to climate change

Where to start?

Step 5. “How to do?”



Strategic Framework Implementation Plan

1. Reducing damage from extreme floods
2. Reducing damage from water deficiency
3. Reducing damage from worsening of water quality
4. Conservation and restoration of water ecosystems and species
5. General adaptation measures and development of cooperation in the basin

Groups of measures:

- Measures on prognosis and risk analysis
- Measures on prevention and risk reduction
- Measures on consequences removal

Lessons learnt

- ▶ Consultations process which include stakeholders from both countries is complex and time consuming.
- ▶ Cooperation between key stakeholders needs to be improved. For example, the involvement of the energy sector.
- ▶ Climate change adaptation is not yet a priority for many agencies. Lack of awareness of public, in particular in rural areas, about climate change. Absence of authorities at local and regional level responsible for CCA.
- ▶ Importance of link between political and experts' level, e.g. through creation of a Moldova-Ukraine working group and regular meetings.
- ▶ Importance of concrete activities (implementation of some CCA measures) and involvement of public
- ▶ Importance of links with national level, need for coordination and mainstreaming
- ▶ Importance of joint scenarios building, modelling and vulnerability assessment

Conclusions

- ▶ Dniester projects promoted transboundary cooperation by providing a platform for Ukraine and Moldova to address issues such as data exchange and monitoring, stakeholder involvement, DRR, etc.
- ▶ Projects supported the development of the Dniester treaty and facilitate completion of its ratification.
- ▶ Current project helps prevent possible tensions due to climate change impacts and supports Moldova and Ukraine in implementing international commitments, such as UNFCCC, EU directives and Water Convention.



Further ideas for OSCE

- ✦ **Strengthening co-operation between stakeholders including governmental institutions, scientific organizations and NGOs where OSCE (and UNECE) can facilitate both taking strategic decisions and implementing practical measures.**
- ✦ **Facilitating implementation of the Dniester Treaty as well as transboundary adaptation to climate change.**
- ✦ **Support improved Dniester reservoirs management to enable more coherent cooperation between sectors such as hydropower, environment, flood mitigation and agriculture in both MD and UA and contribute to regional cooperation and stability.**

