The UNECE Guidance on Water and Adaptation to Climate Change

Sonja Koeppel
United Nations Economic Commission for Europe Water Convention
Double uncertainty: climate change / transboundary cooperation

- Uncertainty regarding climate change impacts: common work on scenarios and models helps to better assess climate change impacts.
- Uncertainty regarding actions of the riparian countries: cooperation and consultation helps to reduce it.
Why transboundary 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

=> Cooperation reduces uncertainty and costs!
The Water Convention

In force since 1996

Objectives:
- Protection of transboundary waters by preventing transboundary impacts
- Ecologically sound and rational management
- Reasonable and equitable use → Conflict prevention
- Conservation and restoration of ecosystems
Ratification of the Convention

37 countries and the European Union

- Parties
- Countries in accession
- Non Parties

In 2003 amended to allow access to non-UNECE countries
Convention's legal basis for adaptation

Parties shall

- Prevent, control and reduce transboundary impacts including those related to adaptation to or mitigation measures
- Use waters in a reasonable and equitable way
- Cooperate on the basis of equality and reciprocity
- Set joint water quality objectives, use best available technology, exchange information, follow the precautionary principle, develop joint monitoring and common research, assist each other...
Background of the Guidance

- Climate change impacts are already visible
- Possible conflict between water users => need for cooperation
- Few countries have developed strategies, none at the transboundary level
  => Decision by Meeting of the Parties in 2006 to develop the guidance for possible adoption in November 2009
- Builds on work carried out at EU level, a survey in EECCA and SEE, several consultations, workshops and expert review
Drafting group

- Netherlands
- Germany
- Italy
- Armenia
- Belarus
- Finland
- Hungary
- Spain
- Switzerland
- Uzbekistan

- UNECE
- WMO
- WHO
- UNESCO
- CPWC
Target group for the Guidance

- Decision makers and water managers
- Officials, managers and stakeholders of other relevant sectors
- Entire UNECE region, focus on countries with economies in transition
Objectives of the guidance

- General roadmap towards adaptation of water management to climate change
- Needs to be tailored to specific local situations.
- Step-wise approach
  - Assess impacts of climate change
  - Develop policy, strategic and operational responses
- Transboundary and health focus
Some of the main messages

- Adaptation to climate change in water management is needed now
- Uncertainty should never be a reason not to act
- Adaptation can be an opportunity for innovation and new technologies
- Water management is a key-factor in adaptation to climate change as many sectors directly depend from water resources availability
- Consider climate change in the context of other pressures on water resources (population growth, agricultural & industrial developments)
- Learning-by-doing and exchange of information and experiences
- Stakeholders participation is crucial for all steps of the development and implementation of adaptation strategies and measures
Logical framework: key steps

Policy, legal and institutional framework

Understand the vulnerability

Information needs

Impact assessment

Vulnerability assessment

Development of measures

Financial arrangements

Evaluate
Cooperation needs in every step of developing an adaptation strategy

Policy, legal and institutional framework

Understand the vulnerability
- Information needs
- Impact assessment
- Vulnerability assessment

Evaluate

Development of measures
- Financial arrangements

Need for flexible agreements, possibly for revision of existing agreements and procedures

sharing of data, joint monitoring of climate change impacts

elaboration of common scenarios

Basin-wide joint vulnerability assessment

agreement on the general adaptation strategy in a basin and on measures, mainly structural ones, likely to have transboundary impacts

sharing benefits and risks in an equitable and reasonable manner
Policy, legislation and institutional framework

- **Policy and governance:** mainstreaming climate change adaptation in all policies
- **Legal aspects:**
  - ensure flexibility of laws and agreements
  - assessment of existing legal framework, also on transboundary level and if needed revision
- **Institutional aspects:**
  - clear definition of roles and responsibilities
  - Entrust joint bodies with adaptation
- Importance of education, capacity-building and communication
Impact and vulnerability assessment

- Joint information systems should be built and exchange of information be ensured
- Design of adaptive monitoring systems
- Joint modelling and scenarios development
- Modelling and scenario outcomes as basis for vulnerability assessment: for the whole basin, for all water uses in the basin
Development of measures

- Measures:
  - planned at the basin level, with stakeholders
  - no/low-regrets first
  - Prioritization based on vulnerability assessment, development objectives, resources available etc.
  - Consider also long-term changes, not only extreme events
  - cross-sectoral/cross boundaries,
  - flexible
- Effective adaptation strategies are a mix of
  - structural and non-structural
  - regulatory and economic instruments
  - education and awareness-raising measures
Financial matters and evaluation

- National budgets and economic incentives
- Insurance and reinsurance
- Involvement of the private sector
- Bilateral and multilateral programmes and international funds
- Financial assistance to countries with economies in transition
- Finally: evaluation
Not only the product....

- First comprehensive Guidance document for water and climate change which describes how to adapt especially in transboundary basins
- More than 80 experts from numerous countries and disciplines contributed
- It contains almost 40 case studies
- It is implemented through pilot projects and platform for sharing experience
Implementation of the Guidance

- Adopted at MOP5 in Nov 2009
- Programme of pilot projects on adaptation in transboundary basins in EECCA and SEE
  - focus mainly on developing adaptation strategy
  - Specific focus to be defined by countries; some focus on water scarcity, others on floods
- Platform for exchanging experiences
  - Regular workshops
  - Internet platform to be created
The pilot projects programme

- Pilot projects on adaptation in transboundary basins
  - Eastern Europe: Dniester basin (Ukraine, Moldova) => flood risk management
  - Neman (Belarus, Lithuania, Russian Federation) => IWRM and adaptation
  - Central Asia: Chu Talas Basin (Kazakhstan, Kyrgyzstan) => water scarcity
  - South-Eastern Europe: Sava River basin (Bosnia-Herzegovina, Croatia, Serbia, Slovenia) => flood risk management
  - Asia: Amur River Basin – Dauria Biosphere (Russia – China - Mongolia) => ecosystems and environmental flows

Convention of the Protection and Use of Transboundary Watercourses and International Lakes
Guidance on Water Supply and Sanitation in Extreme Weather Events

- Under development for adoption at the second MOP (November 2010)
- Addresses:
  - Disaster preparedness and early warning
  - Communication in extreme weather events
  - Water safety plans
  - Adaptation measures for water supply
  - Adaptation measures for sewerage and wastewater treatment
The Guidance is available in English, Russian and soon in French at:

www.unece.org/env/water/publications/pub74.htm

For more information please contact:

Sonja.koeppel@unece.org