# **Promoting Water Cooperation**

# Information sharing and joint assessments



Information brief

Accurate data and information on water and related natural resources obtained through monitoring and assessment activities are essential for **informed decision-making and policy-formulation** at the local, national and transboundary levels. (Source: UN-Water 2008)

Monitoring and assessing water resources requires **cooperation between different actors and states**, as river basins usually stretch over different administrative and geographical units and state borders. (Source: UNECE 2006)

Exchange of information – including on pollution, infrastructure projects, extreme events and hydropower, navigation and irrigation activities – is also vital to **building trust and a shared vision** among the actors and states involved. (Source: UN-Water 2008)

## Supporting joint monitoring and assessments

Examples of UN programmes and initiatives:

- UN World Water Assessment Programme
- WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation
- Water governance monitoring and assessments by UNDP Water Governance Facility at SIWI

### Examples of UN-Water members and guidelines:

- International Glossary of Hydrology (UNESCO, WMO 1996)
- Guidelines on Monitoring and Assessments of Transboundary and International Lakes (UNECE 2002)
- Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters (UNECE 2006)
- System of Environmental-Economic Accounting for Water (UNSD)
- Transboundary Water Assessment programme (GEF, UNEP)

# **Basin level**

**Joint institutions** such as river, lake and aquifer commissions can help develop assessment reports and management plans which, which identify the major water users, key issues, and prioritize where improvements can be made.

In order to manage **transboundary basins effectively**, joint institutions and government agencies should have **comparable information**. This requires standardized or harmonized assessment methods, data management systems and uniform reporting procedures. Lack of technological capacity and knowledge can inhibit the effective exchange of data and information.

# **Quick fact**

The cost of a single river gauging station for a medium-size river can easily exceed US\$1 million.

(UNESCO-WWAP 2012)





Working towards specific common goals requires a basic **agreement** on the conditions of the resource with regards to quantity, quality and availability according to climatic conditions as well as overall needs for the population and economic activities..

Without sharing data on stream flow and water quality, each country has to **address critical situations**, such as floods and droughts, without the crucial information available for the whole basin.

**International agencies**, with representatives from each country involved, can help facilitate information exchange and joint monitoring and assessment activities.

# UNECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention): regular assessments

The Water Convention's Working Group on Monitoring and Assessment carries out **regional assessments** in order to monitor the status of transboundary waters in the UNECE region, to benchmark progress and to provide the basis for continuous bilateral and multilateral work under the Water Convention. The First Assessment of Transboundary Rivers, Lakes and Groundwaters in the UNECE region was released in 2006, the second in 2011. The Riparian Parties to the Convention have the obligation to **exchange information** on surface water and groundwater quality and quantity. They also have the obligation to establish and implement **joint programmes for monitoring** the conditions of transboundary waters and carry out **joint or coordinated assessments** of the condition of transboundary waters. (UNECE 2011 II)

# **Cities**

In **cities**, analytical frameworks such as the Resources, Infrastructure and Demand/Access (RIDA) framework can help stakeholders to jointly structure information relating to water services in a logical and transparent way. The framework can provide structure in monitoring systems, data analysis and stakeholder dialogue. (Source: Butterworth et al 2011).

# Sharing information and joint assessments: conditions for success

- Sustainability of monitoring and assessment activities through long-term funding and support
- Quality systems to ensure the reliability of information obtained by monitoring
- Institutional arrangements at the transboundary, national and local level for organization of joint monitoring and assessment.
- Integration of transboundary monitoring and assessment programmes in national monitoring programmes of the riparian countries.

(Source: UNECE 2006)

**Instruments** for joint monitoring and assessments include: water meters, meteorological stations, joint fact-finding exercises, watershed management plans, assessment reports, water scorecards.



# **Highlighting practice**

The **Columbia River Treaty** (CRT) is an agreement between the United States and Canada focused on flood control and power generation in the Columbia River basin. Information sharing within the context of the CRT is one of the key elements of its success. During the negotiation of the CRT there was continual information exchange through an International Joint Commission that acted as a neutral third party and undertook engineering studies on behalf of both parties. The Treaty obligates Canada and the United States to coordinate plans, exchange information and establish and maintain a hydrometerological system. The countries closely cooperate in monitoring and evaluating the system. Weekly flow agreements detail the exact flows to be released during the following seven days. (GEF 2012)

# References

- Butterworth, John, Peter McIntyre and Carmen da Silva Wells (eds.), 2011. SWITCH in the city putting urban water management to the test, IRC International Water and Sanitation Centre. www.irc.nl/page/66812
- Global Environment Facility (GEF), 2012. From Community to Cabinet: Two Decades of GEF Action to Secure Transboundary River Basins and Aquifers.
- Global Environment Facility (GEF), UN Environment Programme (UNEP), 2011. Transboundary Water Assessment project. http://twap.iwlearn.org/
- UN Development Programme Water Governance Facility at Stockholm Water Institute.
  www.watergovernance.org/monitoring\_assessment
- UN Economic Commission for Europe (UNECE), 2011. Strengthening Water Management and Transboundary Water Cooperation in Central Asia: The Role of UNECE Environmental Conventions.
   www.unece.org/fileadmin/DAM/env/water/publications/documents/Water Management En.pdf
- UN Economic Commission for Europe (UNECE), 2011 II. Second Assessment of Transboundary Rivers, Lakes and Groundwaters. www.unece.org/env/water/publications/pub/second\_assessment.html
- UN Economic Commission for Europe (UNECE), 2002. Guidelines on Monitoring and Assessments of Transboundary and International Lakes. www.unece.org/index.php?id=20166
- UN Economic Commission for Europe (UNECE), 2006. Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters.
   www.unece.org/fileadmin/DAM/env/water/publications/documents/StrategiesM&A.pdf
- UN Statistics Division (UNSD), 2007. System of Environmental-Economic Accounting for Water http://unstats.un.org/unsd/envaccounting/water.asp
- UN-Water, 2008. Transboundary Waters: Sharing Benefits, Sharing Responsibilities, Thematic paper. www.unwater.org/downloads/UNW\_TRANSBOUNDARY.pdf
- UNESCO World Water Assessment Programme (UNESCO-WWAP), UN Statistics Division (UNSD), 2011. Monitoring Framework for Water Briefing Note. http://unstats.un.org/unsd/envaccounting/WWAP\_UNSD\_WaterMF.pdf
- UNESCO and World Meteorological Organization (WMO), 1996. International Glossary of Hydrology http://webworld.unesco.org/water/ihp/db/glossary/glu/aglo.htm
- WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation www.wssinfo.org/