



High-Level Ministerial Conference on
Strengthening Transboundary Freshwater Governance
- *the Environmental Sustainability Challenge*
Bangkok, Thailand
20 – 22 May 2009

Chair's Summary of the Technical Segment

1. Experts, Government Representatives and Heads of River and Lake Basin organizations attended the Technical Segment of the Conference on Strengthening Transboundary Freshwater Governance organized by the United Nations Environment Programme (UNEP) in Cooperation with the Government of the Kingdom of Thailand in Bangkok from 20 – 21 May 2009 and met to discuss the environmental sustainability challenge underpinning effective governance of transboundary freshwater resources and to put forward recommendations for action to the High-Level Ministerial Segment of the Conference taking place on 22 May 2009.
2. These discussions were carried out under the chairmanship of the Government of the Kingdom of Thailand and focused on the following themes: i) Transboundary Freshwater Governance and the Environment in the Context of Sustainable Development, ii) Key Aspects of the Environmental Dimension of Transboundary Freshwater Governance, iii) Improving Transboundary Freshwater Governance Through Application of Integrated Resources Water Management and iv) Impacts of Climate Change on Transboundary Freshwater Governance and Reform Needs.
3. Following presentations by distinguished speakers including Dr. Migai Akech, University of Nairobi, Dr. Jackie King, University of Cape Town, Dr. Owen McIntyre, National University of Ireland, Mr. Ganesh Pangare, IUCN, and panel discussions with the participation of Mr. Benjamin Ndala, International Commission of the Congo-Oubangui-Sangha Basin (CICOS), Dr. Stefano Burchi, International Association for Water Law (AIDA), Mr. Shammy Puri, International Association of Hydrogeologists, Mr. Geoffrey Khwarae, Bio-Okavango Project, Ing. Julian Catacora, Bi-National Autonomous Authority of Lake Titicaca (ALT), Dr. Tom Okurut, Lake Victoria Commission, Dr. Bruce Hooper, UNEP-DHI, Mr. Jeremy Bird, CEO of Mekong River Commission, Dr. Sucharit Koontanakulvong, Chulalongkorn University, Mr. Miguel Angel López Arzamendia, La Plata Coordination Committee (CIC), Mr. Tamsir Ndiaye, Senegal River Basin



Organization (OMVS) and Prof. Torkil Jønch Clausen, Global Water Partnership participants discussed the environmental dimension of transboundary freshwater resources in all its aspects and considered suggestions for strengthening the overall governance of these vital resources to better reflect this dimension and ensure environmental sustainability.

4. A rich, wide-ranging and interactive debate took place underscoring the conviction of all distinguished participants that greater attention ought to be given to the environmental dimension of transboundary freshwater governance.
5. In this conviction participants formulated recommendations for action and requested the Government of the Kingdom of Thailand, as Chair of the Technical Segment, to convey them to the High-Level Ministerial Segment of the Conference.
6. Water is perhaps the most fundamental of all environmental resources and key to the viability and long-term sustainability of humanity and the world's ecosystems. Rivers and lakes ecosystems are finite resources. The equitable utilization and sustainable management of transboundary freshwater is a major global challenge. Several threats to overall ecosystem health, and consequently to the ability of ecosystems to provide the services upon which human life depends, are particularly relevant to water resources, among them climate change, deforestation, or desertification and land use change. Environmental degradation, from deforestation to the draining and degradation of wetlands is aggravating scarcity as are inefficient forms of irrigation, over-exploitation of underground aquifers and pollution to rivers, lakes and streams. These threats are at present inadequately reflected in existing cooperative and legal frameworks for transboundary freshwater governance and affect the quality and quantity of global freshwater resources.
7. Ensuring the environmental sustainability of transboundary freshwater resources requires efficient and strong policy, legal, institutional mechanisms and management tools, including strong policies for information sharing among countries to deal with the multiple challenges. At the global level the 1997 UN Convention on the Non-Navigational Uses as well as the Draft Articles on the Law of Transboundary Aquifers provide some useful guidance to Governments and Regions world-wide in the area of governance of transboundary freshwater resources. Even though these instruments have not yet binding status under international law, key principles enshrined in them have the status of customary international law, such as the principles of equitable utilization and the obligation not to cause significant harm. Basin organizations have also adopted innovative



and forward-looking approaches which provide avenues for improving existing frameworks for governance.

8. However, 158 of the world's 263 international river basins lack any type of cooperative framework, and only 20% of them include all riparian countries, and of those with such frameworks most continue to lack the tools necessary to promote long-term integrated transboundary freshwater governance in recognition of the environmental considerations. Moreover, existing governance structures at all levels are, in most cases, primarily geared towards providing policy, legal and institutional frameworks for satisfying human water demand. Often these frameworks insufficiently, if at all, address the environmental dimension of the actual freshwater resources and their related ecosystem services.

9. In addition, there is a growing appreciation of the incongruence between the transboundary nature of many freshwater resources and the traditional national approaches to managing these resources. Appropriate and adequate legal instruments, institutions and management tools at the river basin, sub-regional, regional and at the corresponding national levels are critical for efficient, equitable and sustainable use of transboundary freshwater resources.

10. Transboundary aquifers are a crucial source of freshwater in many parts of the world. The global inventory developed by UNESCO-IHP of transboundary aquifers is well advanced and offers valuable guidance in the management of these waters. The increased promotion of the conjunctive management of surface – groundwater wherever possible and the development of guidelines establishing environmental flows would, however, advance transboundary freshwater governance notably.

11. Integrated Water Resources Management (IWRM) offers a viable and useful approach to tackle the manifold challenges in ensuring environmental sustainability of transboundary freshwater resources if carried out with an environmentally focused approach at the national, subregional, regional and global levels. When decision makers take further steps with the aim to satisfy basic human needs, it is important to ensure that it is done in ways that guarantees sustainable water use and respects the ecosystems and the services they provide, particularly noted in case of transboundary groundwater resources.

12. Different water users have different needs, interests and knowledge. The diversity of people as well as their vulnerability in particular the specific role of women in water issues has to be taken into account in decision-making and planning. UNEP has an important role



in promoting traditional and indigenous knowledge in terms of transboundary freshwater management and climate change adaptation.

13. There is a need to develop the environmental dimension of sustainable development and share strategies at the transboundary level to agree on common and equitable standards for freshwater resources use. Fundamental principles of hydrosolidarity, equitability and transparency are key success factors for building trust leading to cooperation among countries in transboundary river basins.

14. All this takes on extra significance in the context of climate change. Water resources management – at all levels – will be increasingly challenged and less reliable in view of the predicted effects of climate change. The reality of climate change compels the world to pay even greater attention to water scarcity given the predicted variability and more extreme weather events likely over the coming years and decades. Observational records and climate projections provide abundant evidence that freshwater resources are vulnerable and increasingly impacted by climate change variability, with wide-ranging consequences for human societies and ecosystems.

15. In light of the above, Governments and decision makers are increasingly under pressure to institute new and innovative policies and strategies to improve the governance of transboundary freshwater resources but still more awareness and education is needed – particularly to highlight the environmental dimension. The core challenge is to realign availability of water with demand at levels that maintain ecosystem integrity, biodiversity and environment sustainability.

16. Recommendations for action to High-Level Ministerial Segment:

- I. Governments should be urged to recognize the environment as a natural infrastructure for climate change adaptation and take this into account when formulating further transboundary water governance policies.
- II. Governments should be urged to increase the political profile of the environmental dimension of freshwater governance, particularly at the transboundary level.
- III. Governments and all other stakeholders in transboundary freshwater governance should be urged to engage in stronger dialogue among them.
- IV. Governments, UN Agencies and other relevant bodies should be urged to promote IWRM more effectively as a bridge between sustainable national water management policies and water resources cooperation at the transboundary level.



- V. Governments should be urged to strengthen and improve legal and institutional frameworks, mandates and functions for transboundary freshwater governance to fully reflect environmental changes, pressures and threats.
- VI. Furthermore, Governments should be encouraged to more adequately reflect the environmental dimension of freshwater governance at the national level and national regulatory frameworks and laws should be in support of the principles adopted on a transboundary level.
- VII. UNEP should be called upon, building on existing initiatives, to provide a regular forum and global inventory of transboundary basins as well as general assistance to basin organizations in order to help improve the recognition of environmental considerations in the governance of these basins and the sharing of lessons learned and information by and among basin organizations.
- VIII. UNEP should be requested to support, in particular, the integration of the climate change dimension in strategic plans and their implementation.
- IX. UNEP should be requested to advocate the role of freshwater governance in climate change adaptation in relevant UN and other fora.
- X. UNEP should be encouraged to help build political will and facilitate broader recognition as well as awareness raising for environmental considerations and education, including in support of existing efforts by the International Law Commission, UNESCO and others with regard to transboundary aquifers.
- XI. UNEP should be requested to develop guidelines for establishing environmental flows in a transboundary context employing a participatory approach to define acceptable/unacceptable levels of changes and scenarios for development.
- XII. UNEP-UNESCO-IHP should be encouraged to provide technical and administrative support to AMCOW's African Groundwater Commission as well as facilitate international donor support for the Commission.
- XIII. Furthermore, UNEP-UNESCO-IHP should be encouraged to promote the conjunctive management of surface – groundwater in priority areas.
- XIV. UNESCO-IHP-ISARM should be encouraged to complete and consolidate the global inventory of transboundary aquifers and disseminate the results widely through various fora.
- XV. ESCAP should be requested to provide support to cooperation on transboundary aquifers in the Asian region.



- XVI. Funding institutions and other development partners should be urged to increase their support to basin organizations, in recognition of the long-term nature of related processes.
- XVII. Basin organizations and other relevant bodies should be urged to seek to strengthen their technological, political and financial capacity to better adapt to the impacts of a changing environment and climate.
