First International Environment Forum for Basin Organizations

Issue Paper No. 4

Theme 4: Institutional Challenges

Background:

The challenges for basin organizations are growing amid calls to strengthen and improve these vital institutions. Established as institutional frameworks for cooperation in the sustainable and equitable development, utilization, management and conservation of water and related basin resources, basin organizations are crucial bodies in developing and safeguarding the world's freshwater resources for the benefit of all. Transboundary basins are increasingly under stress, destroyed by overuse, pollution and other human activities. Transboundary waters are subject to competing demands from different sectors not only at the national level, but also at the international level. National priorities can lead basin countries to maximize their use of shared water resources without taking into consideration the needs of neighboring countries. Moreover, disparities between riparian states, such as varying levels of economic development, infrastructure capacity, or political orientation, can exacerbate the already formidable task of understanding and managing complex natural systems.

All this takes on extra significance in the context of climate change. Water resource 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.

Strengthening interstate cooperation and the establishment of an institutional framework for the joint management of shared water resources combine a twofold purpose of environmental protection and peaceful management and allocation of freshwater resources. Rationalizing the exploitation of resources and guaranteeing equitable benefits for riparian States are crucial for conflict prevention and sustainable use of the shared waters. The core challenge is to realign availability of water with demand at levels that maintain ecosystem integrity, biodiversity and environmental sustainability.

Only well established, well functioning institutions are likely to deliver the intended results and improve the governance of transboundary freshwater resources overall. Essentially, the institutional capacity needs to be sufficiently robust to be able to respond effectively to climatic, demographic, economic, political as well as environmental changes in the basin states.

Main Issues:

The Greening of Water Governance

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 and regional levels are critical for efficient, equitable and sustainable use of these shared resources, particularly in light of climate change.[1]

While national governance structures in many instances exist, the corresponding cross-border mechanisms are in many instances still lacking and/or are not afforded the solid institutional basis they need to implement and promote an integrated management of water resources throughout the basin and across boundaries. Notably, 158 of the world's 263 international river basins lack any type of cooperative framework. It remains challenging to share strategies at the transboundary level and to agree on common and equitable standards for freshwater resources use - including and in particular regarding groundwater resources.

Fundamental principles of hydro-solidarity, equitability and transparency can promote the building of trust leading to sustainable cooperation among countries in transboundary river basins and solid institutions governing freshwater resources. These principles also play a crucial role in maintaining the political and financial commitment by riparian Governments to the basin institutions they have created.

Enabling Implementation:

Basin Organizations are key pillars in the environmental governance architecture. Yet many basin organizations continue to lack the international and national recognition as well as the tool-set necessary to promote sustainable transboundary freshwater governance. Existing governance structures 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 protection and sustainable use of the actual freshwater resources and their related ecosystem services.

The basis for effective implementation of a regime is a strong legal and political foundation, a foundation which fully accounts for the varying water needs and demands, including environmental considerations, and links them to enforceable rules and guidelines as well as strong institutions.

Basin organizations range from institutions with a strong executive mandate – responsible for the direct management of the basin and development and possible operation of infrastructure (Box 1); to advisory or coordinating commissions with a more limited mandate. No matter what type of organization, it is possible for it to play a proactive role in environmental protection – whether through advising member states on actions or implementing policies themselves.

Contributions to intergovernmental processes, public participation, the involvement of civil society groups and outreach to the private sector can help efforts to implement good basin governance and broaden the network of stakeholders which in turn may result in more dynamic discourses at the basin level, added awareness of policies adopted and wider recognition for results achieved.

Funding Basin Institutions:

Sustainable funding remains a challenge for basin organizations worldwide. A situation exacerbated by increasing demands placed on these institutions to accommodate environmental uncertainties as described above. Some governments have experiences with payments for ecosystem services or water rights trading schemes. (Box 2) The application of these models to fund transboundary basins institutions, however, is still very limited, if it exists at all.

Box 1: International Commission for the Protection of the Rhine

The International Commission for the Protection of the Rhine (ICPR) is an example of an institution with power to directly influence state action through making binding decisions and coordinating the implementation of such decisions.

The ICPR consists of Switzerland, France, Germany, Luxemburg, Netherlands, and the European Commission. Each delegation has one vote, and decisions are made unanimously. Parties are obligated to report to the ICPR on the measures they have taken to implement the decisions, and the results of these measures. If a Party cannot implement a decision, it must report this to the Commission, which in consultation with the Party may decide on measures to assist implementation.

The ICPR is also involved in implementation of European Union Water Legislation. The Coordination Committee Rhine was set up under the framework of the ICPR to coordinate the implementation of the EU Water Framework Directive. The Coordination Committee includes Austria, Belgium and Liechtenstein, in addition to the ICPR countries.

Source: UNECE, River Basin Commissions and Other Institutions for Transboundary Water Cooperation (2009).

In addition to market based mechanisms, improved funding opportunities designed solely to support basin organizations in addressing - and alleviating - some of the very specific environment related challenges often not catered for in the primary agreements could provide added institutional capacity.

Creating and Maintaining Capacity:

The creation and maintenance of capacity of basin organizations to implement effectively the primary agreements and basin plans remains a considerable challenge at all levels of basin management. In addition, the need for capacity building is increasing in light of ever more challenging agendas entrusted to basin organizations. Continued and enhanced assistance in the formulation of policy, and implementation of agreements could accelerate the path to a sustainable future for the world's freshwater resources and allow basin organizations to play their role as vital players in the field of international environmental governance.

Forums like this one can play a catalytic role in developing/testing environmental management instruments and to promote a framework for capacity-building in collaboration with governmental and non-governmental partners, United Nations entities and major groups, taking into account international agreements and based on basin-wide priorities and needs.

Linking Action to Reality:

In a fast paced environment many institutions continue to struggle to base their actions and objectives on solid scientific information; information that can determine the success or failure of the sustainable development of a particular basin. It is therefore vital that Basin Organizations and national stakeholders have direct access to a reliable science/knowledge base for the development, implementation and evaluation of management measures that takes full account of environmental and societal needs.

This includes efficient monitoring systems equipped to gather real time data on environmental and other changes affecting the resource to enable effective decision making and assessment of past actions, policies and development plans, including data on implementation.

Possible Responses:[2]

Basin organizations as key constituents of international environmental governance:

Basin Organizations are key constituents of the international environmental governance system, and should be recognized as such. This includes increased visibility and involvement in multilateral processes (such as those related to climate change or biodiversity conservation) or even those processes with a broader agenda, such as the Rio +20 process. Basin Organizations must make their voice heard for they are in a unique position to coordinate the work of riparian countries, international development partners, private companies and other stakeholders at the basin level to strengthen coherent action for the achievement of shared environmental targets (e.g. MEAs and MDGs) and to promote sustainable use of the world's freshwater.

Coordinating institutions:

Conflicting and overlapping roles and responsibilities at the basin level can obstruct and complicate basin resources management. It is therefore important to harmonize and streamline institutions and their objectives at the basin level. Areas of responsibility should

Box 2: Payments for Ecosystem Services

In New York City, water users pay the costs of the watershed management program that safeguards the quality of their water supply, through a tax included in their water bills. The program arose in the 1990s, in response to new standards for drinking water promulgated by the US Environmental Protection Agency. Rather than construct an expensive artificial filtration system, New York City invested in protection of water quality through protection of the ecosystem. The program involves subsidies and property transfer to farmers and forest landowners in exchange for agreements to improve their practices to reduce pollution, purchase of conservation easements from private landowners, and development of markets for products and timber product certification.

Costa Rica has also implemented a system of payment for freshwater ecosystem services, in the form of a water tariff structure which highlights the economic, social and environmental importance of water. The proceeds are split between national water management projects and conservation and restoration of the basin ecosystem, including to pay private property owners for conservation activities, and to purchase private land for protection of groundwater recharge areas and water sources of local significance.

Sources: www.nysefc.org; UNEP, Greening of Water Law (2011).

be clearly defined and incentives for effective coordination created. Basin organizations should have clear and explicit operational guidelines, with institutional roles, rights and responsibilities mapped out to allow the various entities which comprise the institutional architecture of a given basin to contribute efficiently to its sustainable development.

Harmonizing Environmental Impact Assessment Standards:

Most states have EIA mechanisms in place, but these differ in scope, approach and implementation. A basin organisation can contribute to harmonising national approaches to EIA within the basin, allowing migratory measures for planned developments to be identified at the basin-wide scale. The Mekong River Commission has initiated such a process in that basin, and is now in the advanced stages of getting agreement on a common EIA framework for the member states.

Funding:

An environment fund for Basin Organizations in cooperation with UN entities, private companies, NGOs and other international partners could enable basin organizations to access the necessary resources for reform, capacity building and access to innovative approaches/techniques to address specifically environment related challenges. The basin organization should be in a position to make the case for investments in ecosystem protection – demonstrating the direct benefits to a range of stakeholders.

Private and civil sector participation:

Institutional and policy reforms at the basin level can create enabling conditions to open the way for the engagement of community-level organizations and private sector investment. Local communities can play a key role in identifying emergent environmental problems – specifically those emanating from non-point sources and those of a cumulative nature where changes over time are noticed by the people reliant on the watercourse.

Data collection and analysis:

Transforming collected data into usable information products and coordinating hydrological and meteorological data collection and collation at the basin level can facilitate access and dissemination of information. Hydro-meteorological data is a critical prerequisite for major investments in the water sector, and is vital to emergency response strategies. Protocols and guidelines on data collection and sharing can help encourage and harmonize such research throughout the basin. For example, in the Okavango River basin, OKACOM facilitated the development of a protocol on the sharing of hydrological data between the three basin states, going into detail on the type of data covered, parameters for testing water quality, methodologies and precise exchange mechanisms.

Building on expertise:

While there are highly experienced and competent water experts throughout existing basin authorities and national agencies, their individual skills and knowledge are often insufficiently institutionalized. A common strategy for shared water resources management could include a framework for development of such expertise through knowledge sharing and continued and enhanced capacity building. Technical assistance and training programmes supported by development partners can play an important role.

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[1] Integration of environmental considerations in water governance is an essential component of a sustainable and resilient economy. UNEP, Green Economy Report (2011).

[2] This list is not exhaustive. It is merely intended to guide the discussions and point towards possible avenues for action which, if implemented, could assist and benefit basin organizations around the world in their work and strengthen freshwater governance overall.