

A Growing Environmental Mandate

The traditional focus of international river governance has been fair water allocation, often aimed at preventing upstream states from taking more than their share. Maintenance of navigation rights and coordination of hydropower development among governments have also been important priorities. As the environment has become more of a concern, balancing interests has become even more challenging. Modern freshwater governance has begun to shift toward so-called “integrated river basin management”—a holistic approach that combines water and land management to develop and protect river basins as ecosystems. An important part of this approach is the goal of maintaining environmental flows, or water levels sufficient to sustain all the elements of aquatic ecosystems, such as wetlands and fish populations. This involves closer cooperation between upstream and downstream states to protect against basin-wide threats.

In principle, many RBOs acknowledge the need to adopt ecosystem-based approaches to basin management, recognizing that rivers and wetlands provide important ecological services like waste assimilation, floodwater storage, and erosion control. There is also increasing awareness that maintaining these services can provide social and economic benefits as well as environmental ones, including preservation of local livelihoods and alleviation of poverty within river basins (McNally and Tognetti 2002:9). In practice, however, RBOs have rarely succeeded in balancing social, economic, and environmental objectives.

Part of the problem is historical. Some well-established

RBOs, such as the International Commission for the Protection of the Rhine, came into being before wide acceptance of the idea that a river’s ecological services are as valuable as its water, hydropower, and navigation resources. The Rhine Commission was initiated in 1950 by the Netherlands, the Rhine’s most downstream state, which was concerned about the quality of drinking water taken from the river. Since then, the Commission has gradually had to shift its agenda to accommodate wider concerns. Now, the organization’s mandate encompasses “sustainable development of the entire Rhine ecosystem” (ICPR 2003).

The Murray-Darling Basin Commission (MDBC) in Australia has one of the most well-developed environmental mandates of all RBOs. The river basin falls entirely within Australia, but it spans five state boundaries, which makes integrated planning a considerable challenge. In 2001, the Commission adopted a series of objectives to make good on its vision for “a healthy River Murray system, sustaining communities and preserving unique values” (Scanlon 2002:11). These include the goals of reinstating some elements of the river’s natural flow regime; maintaining sufficient flow to preserve fish runs and keep the estuary at the river mouth healthy; and managing salinity and nutrient levels to reduce algal blooms and relieve strain on the aquatic ecosystem. Notably, the Commission adopted social objectives as well, including consulting and ensuring participation from river communities. The goal is to take advantage of local knowledge of river processes, and acknowledge the historical and cultural importance of the river (Scanlon 2002:11–12).

The Mekong River

Commission has also, at least in principle, recognized the importance of ecological concerns and the need to incorporate an environmental flow regime to maintain the river’s enormous productivity. The Mekong basin is one of the most biologically diverse areas in the world and a major source of food and basic livelihood for 65 million people. Unfortunately, weak enforcement mechanisms and incomplete basin-wide membership keep the Commission from meeting its environmental goals (WRI 2000:206–209). River basin organizations also have potential roles in conflict resolution, acting as catalysts for wider cooperation between countries (McNally and Tognetti 2002:16). The International Commission for the Protection of the Danube (ICPDR) has done just that. It has facilitated cooperation among Danube basin countries, lessened the division between Western and Eastern Europe in a post-Cold War political climate, and strengthened democratic institutions in the former communist bloc. The ICPDR sprang from the adoption by basin countries in 1994 of the Danube River Protection Convention, an acknowledgment of the river’s importance to the region and its poor condition (McNally and Tognetti 2002:21).

Elements of RBO Success

Why are the mandates of some river basin organizations implemented more successfully than others? And what is it that keeps some RBOs from being champions of ecosystem-level governance? First, the levels of authority that governments grant to RBOs are obviously critical to their abilities to manage their respective river basins. The most successful RBOs have strong

bases of support among basin governments, and high levels of authority through formal instruments like legislation. The success of the Murray-Darling Basin Commission, for example, can in large part be attributed to its ministerial authority, specific federal legislation supporting its operation, and united political backing. On the other hand, the absence of formal and binding provisions weakens the operational capacity of many international RBOs, such as the Mekong River Commission, which has no enforceable authority. Even the decisions taken by the International Commission for the Protection of the Rhine are not legally binding, though member nations generally act in good faith.

A second critical factor is the level of cooperation among members of the river basin organization. Great political and economic diversity among basin nations can cause mismatches in goals and make basin-wide decision-making difficult. An unequal balance of power between basin nations and disparate political and cultural heritages can also make it harder for an RBO to carry out its mission. For example, the Mekong River Commission (MRC) member states have

diverse political agendas that have divided the basin (WRI 2000:208–209). Experience shows that when divisions among basin countries are likely to be a major obstacle, appointment of a neutral and independent chairperson to the commission can facilitate decision-making, as can the use of a technical advisory group to offer impartial expert advice (Pittock 2003).

Specific and achievable measures to implement basin-wide goals are a third important factor in the success of RBOs. Such specific measures exist in the case of the Murray-Darling Basin Commission, including a cap on water diversions and the establishment of a water market (Scanlon 2002:5). The result has been more efficient public water use as farmers are required to comply with set limits (McNally and Tognetti 2002:19).

Finally, it is becoming increasingly evident that river basin management requires strengthened mechanisms for transparency, public participation, and accountability to ensure that local concerns are incorporated into transboundary decision-making. The absence of such mechanisms may lead to inflexible or unenforceable basin-wide decisions that fail to engender local support or draw

on local knowledge. The Murray-Darling Basin Commission has established channels for public participation, including an 18-month public consultation with river communities on three different plans for ensuring environmental flows in the river. A recent survey found that 95 percent of stakeholders surveyed supported the principle of returning more water to the river for environmental purposes, but that support dropped to less than 40 percent if the community was not actively brought into the decision-making process (Scanlon 2002:12).

Other RBOs have embraced the idea of public participation as well. In North Africa, the Nile Basin Initiative, which involves ten nations in the Nile basin, has incorporated openness and public participation into its discussions of the allocation of the Nile's water, a politically charged topic (Bruch 2001:11392–11393). Unfortunately, while requirements for openness and public participation are increasingly common in the mandates of RBOs, the steps to achieve these goals remain ill-defined, and public participation is still lacking in most cases (Milich and Varady 1998:37).

REFERENCES

Bruch, C. 2001. "Charting New Waters: Public Involvement in the Management of International Watercourses." *Environmental Law Reporter* 31:11389–11416.

International Commission for the Protection of the Rhine (ICPR). 2003. Website. Cited 11 June 2003. On-line at <http://www.iksr.org/icpr/>.

International Network of Basin Organizations (INBO). 2003. *Organismes Membres et Observateurs*. Website. Cited 11 June 2003. On-line at http://www.inbo-news.org/anglais/list_org.htm.

McNally, R., and S. Tognetti. 2002. "Tackling Poverty and Promoting Sustainable Development: Key Lessons for Integrated River Basin Management." A World Wide Fund for Nature Discussion Paper. London, UK:

WWF-UK. Cited 11 June 2003. On-line at: http://www.wwf.org.uk/filelibrary/pdf/irbm_report.pdf.

Milich, L., and R. Varady. 1998. "Managing Transboundary Resources: Lessons From River-Basin Accords." *Environment* 40(8):10–15, 37–41.

Pittock, J. 2003. "Establishing River Basin Organizations for Conservation and Sustainable Development of Rivers." Mimeo. Washington, DC: World Wide Fund for Nature (WWF).

Revenge, C., S. Murray, J. Abramovitz, and A. Hammond, 1998. *Watersheds of the World: Ecological Value and Vulnerability*. Washington, DC: World Resources Institute.

Scanlon, J. 2002. "From Taking, to Capping to Returning: The Story of Restoring Environment Flows in the Murray Darling Basin in Australia." Paper prepared for the Stockholm International Water Institute Seminar 2002: Towards Upstream/Downstream Hydrosolidarity, Stockholm, Sweden, 16 August.

Turton, A., F. Curtin, R. Iyer, E. Mostert, and A. Wolf. 2000. "Transboundary River Basins: Proposed Principles and Discussion Papers." WCD Thematic Review: Institutional Processes, Volume 3. Cape Town, South Africa: Secretariat of the World Commission on Dams. Cited 11 June 2003. On-line at: <http://www.damsreport.org/docs/kbase/contrib/ins224.pdf>.

World Resources Institute (WRI) in collaboration with United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and World Bank. 2000. *World Resources 2000–2001: People and Ecosystems: The Fraying Web of Life* Washington, DC: WRI.

World Resources Institute (WRI) in collaboration with United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and World Bank. 2000. *World Resources 2002–2004: Decisions for the Earth: Balance, Voice, and Power*. Washington, DC: WRI.