

UNEP Workshop on Rapid and Integrated Assessment Methodologies for River Basin Management

Conference Report by Lars T. Soeftestad (ENVSP)

The workshop was co-sponsored by UNEP and the Texas A&M University System (TAMUS), a UNEP Collaborating Centre for Global Environmental Assessment Strategies. More specifically, the Texas Institute for Applied Environmental Research (TIAER), hosted the workshop. It took place at Tarleton State University in Stephenville, Texas, February 20-22, 1996.

This brief report will present the background for the workshop, highlight key issues and outcomes, and report briefly on the plans for follow-up. Ideas on increased collaboration within the World Bank, emphasizing inter-disciplinary approaches to water resources management, will also be discussed.

Background

As part of its mandate to support global environmental protection and environmentally sound economic and social development, UNEP desires to harmonize methodologies for conducting assessments of river basins. Such an integrated assessment methodology for river basin assessment is referred to as a Rapid Integrated River Basin Assessment (RIRBA). RIRBA aims to:

- help guide the formulation of economic and environmental policies for each basin;
- provide a periodic assessment of global water resources based upon individual river basins; and,
- support capacity and institution building of local governments and NGOs in order to sustain the assessment process for the future.

Thus, RIRBA will bolster UNEP's comprehensive program on Environmentally Sound Management of Inland Waters (EMINWA).

In line with this objective, UNEP sponsored this workshop. The focus was to be on harmonizing the existing methodologies for rapid integrated assessment of river basin resources, including identification of management related policy options and actions. Each of the specially invited presenters were asked to focus on the following issues: (i) an overview of the presenter's general methodology; (ii) associated data requirements; (iii) the time scale for execution; (iv) the reason the methodology should be characterized as a rapid assessment methodology; (v) what the methodology predicts; and, (vi) the reasons UNEP and others should consider using the presenter's approach.

The study area of a RIRBA is determined to be the entire river basin including the waters and the contributing land area, and also includes coastal areas and waters. RIRBA should also consider the forces outside the basin which impact natural, socio-economic, institutional and legal conditions in the basin or may do so in the future.

Preliminary discussions suggest to UNEP that 'rapid' in this context would refer to not more than six months, and that budget estimates for each assessment would fall within the \$ 300,000-500,000 range.

A RIRBA is expected to accomplish the following:

- It should illustrate the status and future trends regarding water in the basin, including an examination of hydrology and water quality. Related topics, such as land quality, ecology, economic stresses, social, cultural, and human impacts, and legal and institutional conditions, will also influence the assessment. Sufficient detail should be possible, so that researchers can make broad determinations of flow and water quality stress. In addition, researchers should be able to estimate water pollution loads for sub-areas of a basin.
- It should illustrate the identification of stakeholder objectives, and the introduction of local perspectives in assessment activities.
- It should provide a means for generating options regarding policy decisions at the local level. This will allow decision makers to choose among a variety of possibilities, with an eye toward achieving sustainable development; and,
- It should build momentum among stakeholders for achieving implementation of policy decisions.

The Workshop

The organizers invited a small group of people to address the issues under consideration. In addition to the participants representing the organizers, the following institutions were represented: CGIAR (Nairobi, Kenya), FAO, Iowa State University, National Institute of Public Health and Environmental Protection (RIVM) (Bilthoven, The Netherlands), NRCS (Temple, TX), Stockholm Environmental Institute (SEI) (Boston, MA), University of Georgia, USAID, USEPA, World Bank and WMO.

Presentations were made on: The UNEP Framework, The Step Method developed by RIVM, SEI's Methodology, The TAMUS Approach, Hydrology, Rapid Rural Assessments and Social Appraisals, and Social Assessment in River Basin Management. My presentation on social assessment (SA), based on a series of overhead slides, explained the rationale for and structure of SA. I emphasized that it is an approach and a process more than a set of tools – one of the tools in SA is RRA, presented by another participant (for more information on SA, please consult *ENV Dissemination Note* No. 36, September 1995).

During the discussions, I provided the group with a first draft of the stepwise approach for RIRBA, based on the design principles for SA, and we agreed on an integrated approach for how to do RIRBA. The document is currently being worked out in detail with input from some of us.

Conclusions

The initial conceptualization of the content and structure of RIRBA, and accordingly of the workshop, was heavily biased towards natural sciences and technology, as reflected, for example, by the backgrounds of the participants (there was one economist among the participants, and I was the only social scientist). The report of the workshop, as well as the agreed upon RIRBA, will, nonetheless, present a much more balanced view of the interrelation between culture, social organization and social life on the one hand, and the environment on the other hand.

As an experiment in inter-disciplinary work, the workshop was successful. The resulting matrix for a RIRBA is an especially interesting document given that it is an outcome of a UNEP-sponsored meeting.

UNEP is very interested in inter-agency collaboration on river basin management, and Walter Rast (Chief, Freshwater Unit, UNEP) more than once pointed out that he considers the World Bank a primary partner in this. UNEP is interested in learning about ongoing work within AGR on water resources management with a view to optimizing the synergy from increased collaboration.

Follow-up

The organizers of the workshop are currently:

- Writing up the proceedings of the workshop as well as the RIRBA document.
- Planning for a pilot of a RIRBA in a suitable river basin, hopefully sometime this year.
- Planning for implementing RIRBA in perhaps 50 different river basins across the world over the next several years, with a strong emphasis on inter-agency collaboration.
- Planning a small follow-up meeting to discuss the Stephenville workshop and bring the process forward. Important participants would be UN agencies and the World Bank.

The Bank and Water Resources Management

The UNEP workshop, and the inter-disciplinary approach to river basin management adopted, would seem to have some important implications for the World Bank.

First, UNEP appears, more than ever before, to be a crucial partner in collaborative work on water resources management. The factor of comparative advantages is important in this connection.

Second, there is a clear connection between the UNEP process that this workshop is part of, and the current discussions within the Bank on broadening the scope of work on water resources management.

Third, the recently initiated dialogue between AGR and ENVSP aimed at collaborating on work in river basins is important. This is based upon the realization that both economic, technical and social expertise must be closely integrated in order to arrive at feasible and effective solutions to managing water resources, be they in river basins or coastal areas, in order to achieve long-term sustainability.