



Integrated Water Resources Management

Towards Better Basin Management

The need to manage our water resources has become increasingly obvious and urgent. The different but related uses of water—by households, commercial establishments, agriculture, industries, and even for recreational activities—put pressure on our natural water resources to the extent that they threaten the larger environment we and our water resources depend on.

The necessity to manage our water resources has given rise to the idea of “Integrated Water Resources Management,” or IWRM. IWRM seeks to reconcile a country’s demand for water resources with the limitations of what those water resources can accommodate. A body of water can only withstand so much extraction and pollution by competing user groups with ever-growing needs (such as factories versus agriculture, or upstream communities versus downstream communities).

Today, IWRM is recognized by many countries around the world as a model—the paradigm—for establishing good water governance and putting our water resources on the recovery path.

IWRM Principles

The greatest strength of IWRM is the holistic framework that its principles provide

- Efficient water use
- Equitable access
- Balance between competing uses
- Use of appropriate environmentally sound technology
- Collaboration between various government agencies and representatives of all stakeholder groups

IWRM: Two Approaches

A country’s need for IWRM, however, will vary according to its characteristics—its geography, size, political system, and level of development. There is no IWRM blueprint for every country to follow. Each country must chart its own IWRM plans, yet follow the basic principles.

The operative word in IWRM is “integrated.” The Global Water Partnership (GWP), a leading advocate of IWRM, proposes two interrelated approaches a country can use when taking on IWRM: the “natural system” approach and the “human system” approach.

The natural system focuses on integrating different elements of the water resource itself

- Land with water
- Freshwater with coastal zones
- Surface water with groundwater
- Water quantity with water quality
- Upstream with downstream

The human system focuses on integrating the different groups of people and sectors that manage and use a particular water resource. In the human system, a country’s IWRM strategies will focus on helping users coordinate with each other on how they can use and manage a water resource.

This coordination requires genuine and continuous stakeholder participation to decide how water is allocated, how conflicts are resolved, and how negotiations are made.

Clearly, the natural system approach integrates uses while the human system integrates users. A country’s IWRM plan should effectively combine these two approaches.

IWRM: ADB’s Approach

ADB subscribes to the principles of IWRM but advocates that water resource management be rooted in the basins. River basins are the fundamental unit for managing a country’s water resources. When basins are managed well, successful integration of uses and users is possible on many levels.

Good water governance must be supported at both ends of the sector—by government and by users. Government sets the resource management agenda (policies, strategies, plans, etc.) using the IWRM principles. Users implement that agenda and act as the first line of defense against abuse of the water resource. That is why ADB’s work in water resource management focuses on establishing local river basin organizations. Such organizations can bring together government and stakeholder representatives to plan for and implement IWRM principles.

To get this kind of basin management started, ADB’s Water for All Policy proposes that government partners take these three basic actions:

1. establish river basin organizations that practice stakeholder participation;
2. improve coordination systems between national and local authorities for planning, information gathering, monitoring, and advisory services; and
3. prepare and maintain basin plans that reflect trends in water demands and uses, and record the approved planning standards.

IWRM Afoot in Asia

Each country is at a different stage of implementing IWRM principles. The majority of countries are taking their first—yet milestone—steps to incorporate IWRM principles into their national development agenda. Several countries have progressed even further by formulating their own IWRM-based national strategies and plans. A few countries have already fully embraced IWRM principles and begun implementing them in very concrete ways.

ADB has mainstreamed IWRM principles into water projects in several countries in South and Southeast Asia and on a regionwide scale in Central Asia. One goal of ADB’s Water Financing Program 2006–2010 is to introduce IWRM in 25 river basins across Asia.

Toward this end, ADB has developed and is now using several IWRM elements and a generic roadmap that could help practitioners design projects for, and introduce IWRM in, their respective river basins.

ADB also continues to support a capacity-building organization it helped start—the Network of Asian River Basin Organizations, which helps governments and river basin organizations increase their knowledge and implement IWRM principles.

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