Annex 2

Annotated List of Discussion Papers

I. Access to Drinking Water and Sanitation in Asia: Indicators and Implications (Bhanoji Rao)

The inadequacies of existing indicators in the sector are discussed and a new measure of progress, the Index of Drinking Water Adequacy (IDWA) is described and values determined for 23 countries. This composite drinking water indicator is an average of five components: access, capacity, quality, resources, and use. The individual components can be used to indicate directions for policy, program, and project actions. The IDWA can be used to fine-tune Millennium Development Goal targets on water and can be expanded, depending on data availability, to include other water and sanitation parameters. The lack of accuracy and consistency of national data in many countries is a stumbling block at present.

II. Water Resources and Development in Changing Asia (Olli Varis)

This paper outlines the major intersectoral problems associated with water—population growth and aging, the economic and social transition in developing countries, and issues related to energy, food production, the environment, and climate variation and change. The need for more food will require greater efficiency of soil and water use. Poverty reduction efforts will be important in working against further degradation of water resources and the environment by the poor. Joint management of rivers and aquifers is of crucial importance in most parts of Asia because the bulk of the region's population lives in river basins that include more than one state.

III. Recent Advances in Water Resources Development and Management in Developing Countries in Asia (Geoff Wright)

Progress in water resources development and management is being made using different approaches in different countries across Asia. Common features in successful management include stable and strong institutional frameworks; high level of cooperation and coordination among agencies; strategic and integrated planning in place; effective stakeholder and community participation; and reliable and comprehensive data and information, and decision-support tools in use. One of the key institutional reforms in many countries is the establishment of national advisory and coordination bodies to deal with water resources. An increasing role of the private sector and consumer communities should also be promoted.

IV. Water Supply and Sanitation Issues in Asia (Arthur McIntosh)

Adequacy of clean water, a basic human need, has become a critical factor. The sectoral problems that have become most urgent, therefore, concern the resource: water quality and pollution, water conservation, and water and demand-side management. Solutions to water quality and pollution problems, water conservation, and managing demand are offered. Obstacles to the poor getting a connection to piped water are described and options for their connection are evaluated. The other pressing problem is open defecation in parts of the region, for which community-led total sanitation efforts have been very successful. The author notes that these and many other important sectoral issues can be addressed through improvement in governance and service levels and quality.

V. Integrated Water Resources Management: A Reassessment (Asit Biswas)

The concept of integrated water resources management (IWRM) has been around for some 60 years. It was "rediscovered" in the 1990s. The concept looks attractive, but a close analysis shows that there are many problems, both in concept and usage, especially for large projects. Indeed, there is no agreement on such fundamental issues as what aspects of water resource management should be integrated, how, by whom, or even if broad integration is possible. The author concludes that in the real world, the concept will be exceedingly difficult to implement.