

- (c) Protection of Water Resources, Water Quality and Aquatic Ecosystems
- (d) Drinking Water Supply and Sanitation
- (e) Water and Sustainable Urban Development
- (f) Water for Sustainable Food Production and Rural Development
- (g) [Impacts of Climate Change on Water Resources]

16. Each component is presented in this document in a format which covers the basis for action, objectives, activities (and means of implementation which will include, *inter alia*, the issues of financing and cost evaluation, scientific and technological means, human resources development and building capacity of developing countries for preventive and corrective action in the field of environmental protection and promotion of development).

A. INTEGRATED WATER RESOURCES [MOBILIZATION AND] MANAGEMENT

Basis for action

17. The extent to which water resources development contributes to economic productivity and social well being is not usually appreciated although all social and economic activities rely heavily on the supply and quality of fresh water. As populations and economic activities grow many countries are rapidly reaching conditions of water scarcity or face limits to economic development. Water demands are increasing rapidly, with 70-80% for irrigation, less than 20% for industry and a mere 6% for domestic consumption. The holistic management of water as a finite and vulnerable resource, and the integration of sectoral water plans and programmes within the framework of national economic and social policy is of paramount importance for action in the 1990s and beyond. The fragmentation of responsibilities for water resources development among sectoral agencies is proving, however, to be an even greater impediment to promoting integrated water management than had been anticipated. Effective implementation and coordination mechanisms are required not only at the national level but also at the inter-country and international levels.

Objectives

18. The overall objective is to satisfy the freshwater needs of countries for their economic and social development.

19. Integrated water resources management is based on water as an integral part of the ecosystem, a natural resource and an economic good, the quantity and quality of which determines its utilization. To this end, the availability and quality of water resources have to be protected, taking into account the functioning of aquatic ecosystems and the perennity of the resource in order to satisfy or reconcile water needs for human activities. In developing and using water resources, priority has to be given to the satisfaction of basic needs and the safeguarding of ecosystems. Beyond these requirements, however, water users should be charged its true marginal costs.

20. Integrated water resources management should be carried out at the catchment basin or sub-basin level, taking into account existing interlinkages between surface and ground waters. Four principal goals should be pursued as follows:

- a. to promote a dynamic, interactive, iterative and multisectoral approach to water resources management, including the identification and protection of potential sources of freshwater supply, which integrates technological, socio-economic, environmental and human health considerations