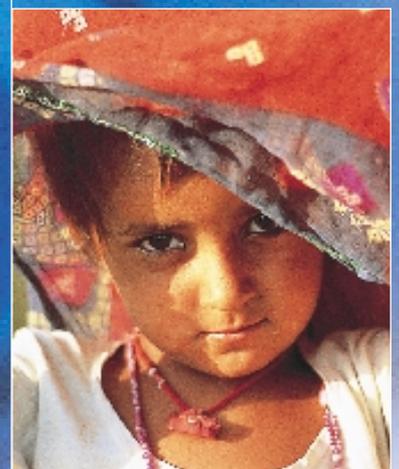


*Sustainable, equitable and
efficient use of water
resources, fostering a*

Our Vision for Water in the **21st Century**

*gender-balanced social,
economic, environmental
and cultural life.*





SOUTH ASIA

Water for the 21st Century: Vision to Action

SUMMARY

The South Asia Regional Water Vision 2025 is based on a series of consultations in Bangladesh, India, Nepal, Pakistan, and Sri Lanka to develop the respective Country Water Visions and the outputs of a Regional Water Vision Workshop in Colombo where the Country Visions were presented and the Regional Vision developed.

Regional Water Vision Statements

- › *Poverty in South Asia will be eradicated and living conditions of all people will be uplifted to sustainable levels of health and well-being, inter alia, through coordinated and integrated development and management of water resources of the region.*
- › *Sustainable, equitable and efficient use of water resources, fostering a gender-balanced social, economic, environmental and cultural life.*

Vision Elements

There are many vision elements under the categories of Food Security and Livelihood Security, Health Security, Ecological and Environmental Security, and Governance, institutions and Regional Cooperation. A few of them are given below:

- › Regional water vision cannot be formulated in isolation: It has to be closely related to the general economic vision of the region.
- › Given the socio-economic conditions, large populations and small size holdings, food security cannot be left to the uncertainties of the global food market.
- › Region can and must be self-sufficient in food.
- › Increase water use efficiency in irrigated agriculture and land productivity in rainfed agriculture.
- › Water cannot be left entirely to market forces. Need for clear demarcation and balance between roles of public and private sectors;
- › Provision of accountable, efficient and effective water and sanitation services enabling access to safe, sustainable and affordable services for better quality of life by 2025.
- › Reduced burden of fetching water for women and children.
- › Zero morbidity due to diseases caused by unsafe and inadequate water supply and sanitation services.
- › Water quality issues to be given utmost importance.
- › Proper allocation of water to meet the demands of ecosystems.
- › There should be appropriate bodies for comprehensive and integrated water resources planning and management at the basin level and flood protection.
- › Good commitment at the political level for achieving the Vision.
- › Multi-disciplinary institutions in respective countries for integrated water resources management (IWRM) on a holistic basis, and participation of all stakeholders at all levels.

The key drivers :

- › Population and population growth rates; poverty eradication measures.
- › Economic growth – higher growth rate;

- › Urbanisation, rural-urban migration, mega-cities.
- › Technology breakthroughs and developments – bio-technologies and genetic engineering; low cost energy; water saving irrigation technologies; water treatment, reuse and recycling technologies; land reclamation, fisheries development, information and communication; and R&D in technologies.
- › Environmental concerns with respect to waterlogging and salinisation; flood management; watershed management; conserving forests, bio-diversity and aquatic resources, including protection of water quality, rapidly falling groundwater levels; quality of surface water and ground water; pollution of water bodies and aquifers.
- › Equity in resource management and service provision.
- › Community participation in decision-making.
- › Sensitivity to gender issues.
- › Realisation of the value of water as an economic and social good.
- › Transparent, accountable and responsive institutions.
- › Government's role as regulator and facilitator and autonomous service providers in private sector.

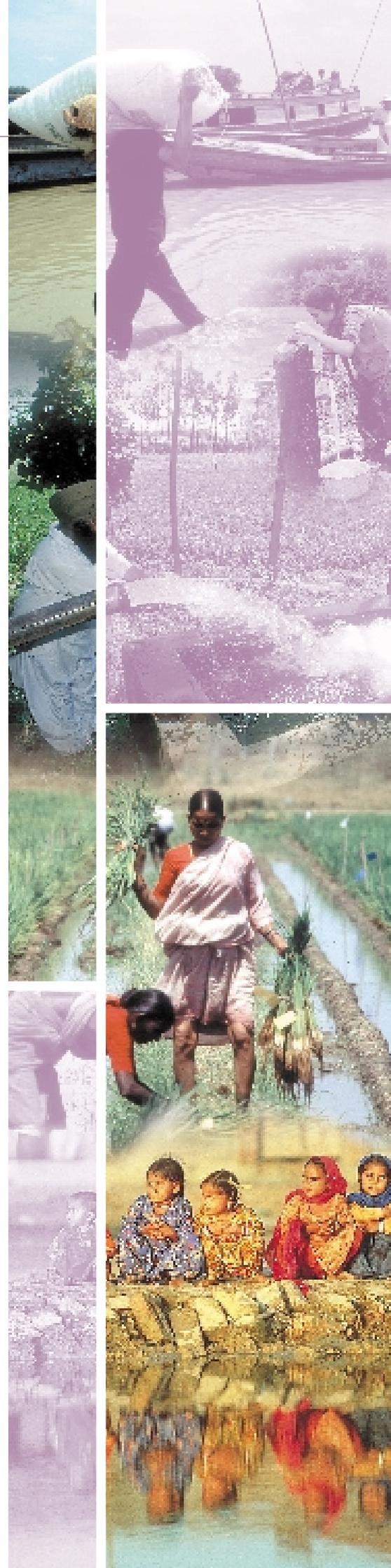
Implications of Alternate Scenarios

Water for food: At present the main cause of food insecurity is the widespread poverty that has denied food security to a significant proportion of the region's population and malnutrition persists. Large sections of the population are unable to purchase food even when it is available. Rapid economic growth in the countries of the region is required to address the issues of food security and livelihood security in the region. Taking the region as a whole, the main limitation to increasing food production is water.

Technological developments in bio-technology, irrigation water use efficiencies, and others will help but the critical factor would be increasing the utilisable quantum of water through building additional storages – large, medium and small.

Water for people: The major challenges are the rate of urbanisation and industrialisation; mega-cities with large slums; problems in supplying good quality drinking water as well as providing treatment for waste water, sewage and industrial effluents; coverage of urban and rural sanitation. High incidence of water-borne and water-related diseases is a consequence of these problems. Directions of tackling these issues are: developing new technologies and using appropriate technologies, decentralisation of responsibilities; community participation; private sector participation; bench-marking of the performance of the utilities.

Water for nature: The requirement is the allocation of water to meet the needs of ecosystems – watershed development and afforestation; protection of aquatic resources and mangroves; protecting the habitats and migratory routes of fish to increase food production; treatment of effluents before discharging into rivers and streams and dilution by low-flow augmentation; cooperation of all countries in the region to have and to enforce uniform and consistent environmental regulations for industries.





Water resources development: In the monsoon climate of the region, the quantum of utilisable water depends on the inter-seasonal transfer of water through surface water storages and groundwater development. There seems to be a broad consensus that regional cooperation is essential to develop large reservoirs in the region like in the Ganges-Brahmaputra-Meghna basin for the benefit of all the countries in the region. Estimates in the Indian Vision suggest that meeting the water demands in 2025 will need to increase the water availability from around 520 BCM in 1997 to more than 1000 BCM in 2025; meeting the additional demands will require investments estimated at about US\$ 116 billion during the next 25 years. Similar will be the case in other countries. It is indeed a big challenge and 25 years is not a long time given the gestation periods involved.

Governance, institutions and regional cooperation: The issues of governance, policy and institutions are so critical that without addressing them in adequate measure in each of the countries, integrated development and management of the water resources for realising a sustainable water vision in 2025 will only be an academic exercise. Many reforms are needed in governance and institutions.

Regional cooperation among governments of the countries and also among non-governmental institutions and civil society in the countries would be necessary for realising the regional vision. The leadership, however, has to come from the highest levels of the government. The Ministerial Meeting at the Second World Water Forum should be a platform for achieving the political commitment

The Framework for Action

The South Asia Regional Framework for Action sets out the overarching structure (the Framework) for developing and implementing actions for achieving the Vision set out in the South Asia Regional Water Vision 2025. The overriding goal of the Vision is to progress towards a secure and sustainable water future in South Asia. The approach to achieve the desirable water future is the integrated water resources management (IWRM); the letter M stands for both development and management of water resources in the region.

The Regional Framework deals with the objectives derived from the vision elements common to all the countries in the region; the corresponding objectives, strategies and actions; and also the vision elements that require, in particular, regional cooperation among the countries in the region for achieving the vision. The focus is on the core challenges and critical priorities for the region in the water sector.

The Regional Framework is developed on the basis of the Frameworks for Action developed in each of the countries that contributed to the development of the Regional Water Vision. These country FFAs are in various stages of development. Some are only in the shape of outline for a framework for action and require further development. As such, at present, the Regional FFA is not exhaustive; it deals with issues and themes that are relevant and are of high priority to all the countries of the region. The contents of the Regional FFA follow the format suggested by the Framework for Action Unit (FAU) of the Global Water

Partnership (GWP). The Regional FFA should be read together with the South Asia Regional Water Vision 2025.

IWRM-based objectives are presented first followed by strategies and actions for realising the objectives. The sector-specific objectives and strategies are then described; targets and milestones are mentioned wherever feasible.

The Key Elements of the Framework for Action

South Asia contained over one-fifth of the population of the world in 1999 and it is projected that by the year 2025, South Asia will contain about one-fourth of the total world population. The per capita GNP in South Asia is lower than that of any other region in the world. Over 500 million people survive below the poverty line. Poverty eradication and uplifting the living conditions of all people to sustainable levels are central to the vision of South Asia.

The issues and challenges in the water sector in South Asia are large in scale, in diversity and in complexity. They are formidable. They require farsighted leadership and dynamic management skills to address them.

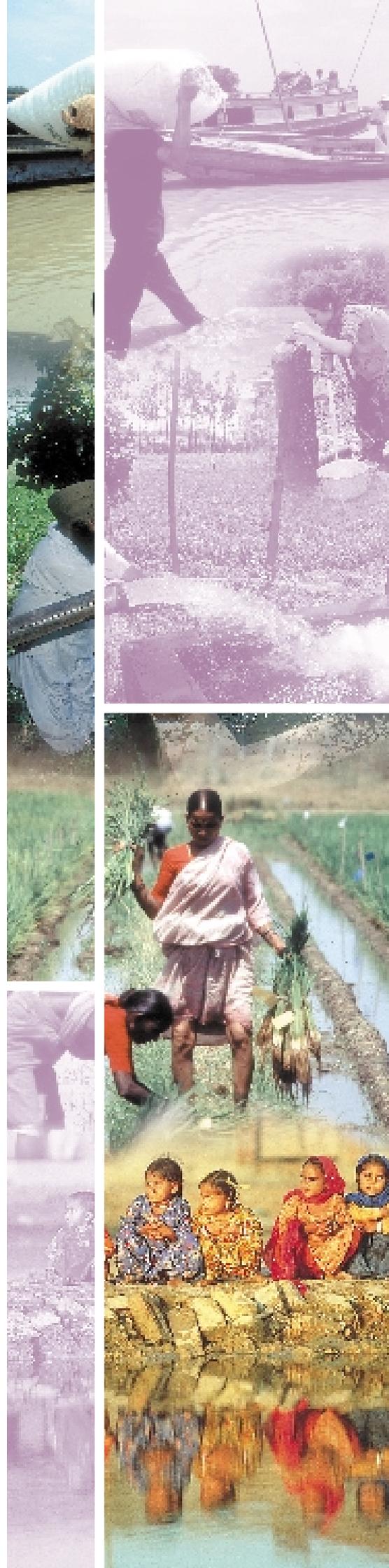
Visionary leadership and political commitment are needed to target the goal of poverty eradication and uplifting the standards of living of all the people by sustainable management of all resources and water in particular, as water is critical to life, development and environment. The political commitment should lead to adopting the IWRM philosophy and approach.

The first step would be creating the enabling environment – right policies, institutional structures, and management systems. Raising public awareness and building public opinion in respect of the impending crisis in the water sector is an important step. The Second World Water Forum and the Ministerial Meeting in the Hague in March 2000 are designed to address the twin issues of public awareness and political commitment.

The key elements that the Framework for Action seeks to address in the South Asian context are the following:

IWRM approach: Effective water sector governance; raising financial resources for investment; cooperation in sharing river waters; choice of appropriate technologies; investments in research and development; mainstreaming gender; and capacity building.

Sectoral elements: Providing food security for all people and feed security for livestock; adequate and safe drinking water for all; hygiene and sanitation – rural and urban – for all; tackling the problems of mega-cities; maintaining water quality and protecting water sources – preventing pollution and treatment of waste water and pollutants – domestic, agricultural, and industrial; reversal of the forces causing environmental degradation, restoring and maintaining the health of the environment and ecology; flood management to mitigate floods and reduce flood damages; hydropower development for economic growth; operation and maintenance of water infrastructure for efficient provision of services.





Water resources development: It should aim at providing water supplies to meet the water demands in the short term, medium term, and the long term. It requires efforts in various directions: demand management to reduce demand; conservation of water by efficient use and adopting water saving technologies and measures; augmentation of supplies by all means i.e. watershed development and creation of storage reservoirs – large, medium, and small. Difficult choices and trade-offs will have to be made between the needs of economic and social development and environmental and social costs of development.

Investments: Very large investments are required in the sector. Locating the sources of finance, raising resources and planning the investments.

Immediate and Short Term Actions

The foundations for the development and management of the sector in the IWRM framework should be laid immediately and in the short term up to 2005. The right direction should be established. The pace of growth and development depends on many factors and especially the initial conditions prevailing in the countries of the region, which are variable.

The early action should be establishing Water Resources Task Forces to prepare country action agendas within a reasonable time frame to advise on: water policy, review of legislation and suggesting amendments or new enactments, setting up River Basin Organisations, upgrading data and analysis for river basin planning and sharing it widely with all stakeholders, and, to undertake public awareness campaigns. Some countries might have already gone through these steps in planning and may be in an advanced stage where they are ready to implement these reform initiatives forthwith.

Long term strategic planning should also commence immediately and be completed in less than an year. 25 years is not a long period given the gestation periods of building reservoirs and hydropower stations or structural measures of flood control and flood mitigation.

Many processes in the IWRM approach – participatory approach to decision making, gender mainstreaming, research and development, capacity building – should also commence in the short term and continue for the duration of 25 years which is the planning horizon for the exercise now.

Medium Term Framework

The medium term, up to 2010 or 2015 as the case may be, will establish the positive results of the development and management up to that point in time. The critical uncertainties in the technology field and in the research and development will unravel to some extent providing opportunities for exploiting them for beneficial results. Continuous monitoring, evaluation and review over the medium term will help applying the midcourse corrections on the path of development.

Strategic Long Term Framework

This framework will essentially depend upon the growth of demands and supplies in the water sector in the intervening period and how management handles them.

The critical questions are: how do we manage to store the water available during the monsoons to meet the demands during the rest of the year for meeting the basic needs of drinking water, sanitation, food and fibre; the economic needs; and the environmental and ecological needs? How do we make the tradeoffs between the needs of development and environment? What strategies do we pursue? This framework will evolve over time, but the action of strategic planning will start now and continue all the way.

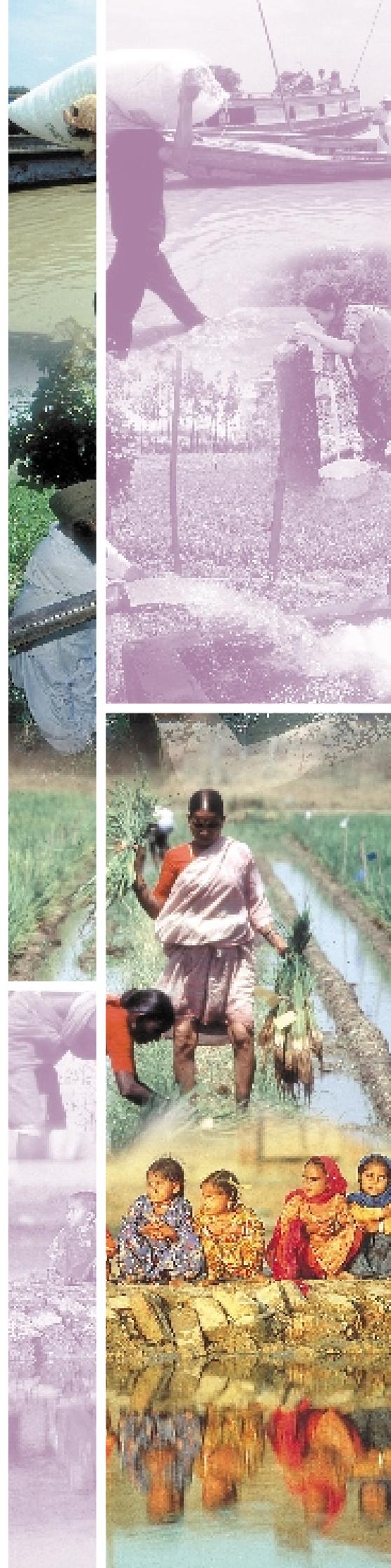
Vision to Action

Water is widely mismanaged and unless we change our ways of managing this resource, we will face a serious crisis in the near future. The actions detailed above to redress this situation in South Asia are derived from the document, **Water for the 21st Century: Vision to Action – South Asia**, which was prepared for presentation at the Second World Water Forum and Ministerial Conference at The Hague, the Netherlands, March 17-22, 2000. The consultations resulting in this document were coordinated by the South Asia Technical Advisory Committee of the Global Water Partnership.

The Vision was prepared under the guidance of the World Water Commission on Water for the 21st Century – an initiative of the World Water Council. Development of the corresponding Action plans was executed by the Global Water Partnership (GWP).

The Vision to Action process was designed to be as broad-based as possible. Consequently, the building blocks for the development of the Vision and Action documents were constructed through consultations over the last 18 months with the principal stakeholders in the major regions of the world.

Through regional meetings and workshops this consultation process brought many experts together – government agencies, key water practitioners, UN agencies, donors, the private sector, and others – to establish a shared view of appropriate strategies, mechanisms for implementation, and priorities for immediate action and investment. The participatory nature of the whole process will deliver new hope for sustainable water management in the new millennium.





The Global Water Partnership (GWP) facilitates the exchange of knowledge and experience and the practice of integrated water resources management. Through a worldwide network of partners, GWP identifies critical knowledge needs at both global and regional levels, helps design programmes for meeting these needs, and serves as a marketplace for providers and financiers of the required knowledge services.

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