

WATER POLICY FOR AN ERA OF SCARCITY

The global water crisis is linked to increasing demand and degraded supplies. To assure future supplies, policy and pricing must support innovative strategies.

 by Mohamed El-Ashry



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The way we think about water goes to the heart of the global concern about poverty, hunger, human health, the environment and sustainable development. Of all the natural resources needed for survival and economic development, water is the most crucial. At the beginning of the 21st century, we find ourselves facing formidable challenges: rapid population growth, increasing demands for water to satisfy people's needs both in agriculture and in expanding urban centers, failing water quality and associated health and environmental impacts, groundwater depletion, international conflict over shared water resources, and the uncertainties of climate change. Because of these challenges, the planet faces a 40% shortfall in water supplies by 2030, while climate change presents greater threats of floods and droughts.

Many developing countries are arid or semi-arid and are facing water scarcity. Their supplies are being stretched to their limits and water pollution from domestic and industrial waste as well as agricultural chemicals cause serious risks to human health.

The global water crisis is one of both quality and quantity and is closely linked to the degradation of critical ecosystems. It is a crisis of fragmented institutions, inadequate policies and legal systems, insufficient funding for water



supply and pollution control, and shortage of political will. These trends are not new – they are merely getting worse because of inaction. It is ironic that as the knowledge of the root causes of the water crisis becomes clearer, the political will for action becomes weaker.

Artificially low prices and heavy subsidies to water services are at the root of inefficiency, overuse, excessive pollution, and environmental degradation in many developing countries. Simply put, free water is wasted water. Water pricing is central to increased investment in water supply and management. Governments in many developing countries cannot meet the investment demands for water services now, let alone for the future.

The future can be brighter by adopting strategies for integrated water resource management, rationing water consumption, encouraging water reuse and protecting water supplies from pollution. Science and technology need to be effectively mobilized in support of policy and decision-making. Improving knowledge about groundwater resources, wetlands, lakes, and river basins is a necessary precondition for managing water in a sustainable manner. Various remote-sensing technologies and satellite observations can provide valuable information and better understanding of hydrology and water availability. Assessment studies would address how freshwater ecosystems are changing as a result of human activities and climate change. And research and development would advance new technologies for cheaper and more efficient pollution control and water treatment, for desalination using solar energy and for crop varieties that are drought and salinity tolerant. ■