

South Asia's Water Resource Systems at the Crossroads

Vishwa Ballabh

Professor(Economics), Centre for Rural Management, XLRI School of Business and Human Resources, Jamshedpur, India; chief.editor@sawasjournal.org

South Asia, comprising Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, is one of the most densely populated regions of the world. Over 1.5 billion people reside in the region. The South Asian economies still largely depend on agricultural production, though urbanization and industrialisation are on the rise. Water is fundamental to economic growth, poverty reduction and public health in the South Asian economies. Almost half of the population in the region suffers from poor access to clean drinking water and inadequate sanitation facilities. It is estimated that South Asia's renewable freshwater resources are about 1,200 cubic meters per capita. Withdrawals of freshwater are very high, and rapid increase in the use of water in agriculture, industries and urban townships is causing acute water shortage and water pollution across the region. South Asia has witnessed rapid urbanisation in the past decades and the growth of the urban population has led to an increased pressure on basic amenities, particularly those related to water, such as drinking water and sanitation. Increasing contamination and lack of proper sewage and effluent treatment further accentuate the shortage of clean water supply. This has led to deterioration of quality of life particularly for urban and rural poor.

The problem is further compounded by the degradation and deterioration of natural resources like forest, land, biodiversity and water bodies. The Remote Sensing Department of the China's Aero Geophysical Survey, warns that "*the Himalayan glaciers could be reduced by nearly a third by 2050 and up to half by 2090 at the current rate of melting. The glacial melt would further deplete Tibet's water resources, which are the lifeline for the people of southern and southeastern Asia and China*"¹ Thus the water crisis is not only aggravated by climate change but also compounded by manmade environmental degradation in the form of shrinking forests and swamps that foster a cycle of chronic flooding and drought resulting from the depletion of nature's water and absorption cover.

Since the poor depend more critically on the activities based on natural resources, and market and public institutions generally by-pass the poor, they become the victims of environmental degradation. The irony of the current system of agricultural practices is that though being one of the most important strategies for poverty reduction, it is inadvertently contributing significantly to the degradation of environment, particularly to the water bodies of the region.

¹ As reported in an editorial of *The Manila Times* internet edition on 25 September 2008, <http://www.manilatimes.net/national/2008/sep/25/yehey/opinion/20080925opi1.html> (accessed on 15 January 2009)_

The investment in canal irrigation, tube-wells, both public and private, contributed substantially to food production and productivity increase. However, the adverse effects of long-term canal irrigation are now surfacing in the form of water logging, salinity and alkalinity besides financial losses. This brings to the fore the issue of sustainable growth and development and the question of 'who gains and who loses' from the current practices. The current literature is replete with examples confirming the fact that it is the select few who benefit to the exclusion of a large majority; the cost is shared and commonised, whereas, benefits are privatized by the powerful few. South Asia's water problem is no exception to this general observation. It is in this context that the issue of South Asia's water resources is at the crossroads. Water is essential for survival, economic development, maintenance, and conservation of the environment, but it is becoming scarcer in the region and remaining a mute spectator to the present system of water management will only lead to catastrophe. If this catastrophe and crisis is to be averted, we need to change radically the way water resources are being used and managed in the region.

There has been considerable improvement in our thinking and the discourses about water resources management in the region. The discourse begins from the questioning of supply side management to a search for a new paradigm based on everyday realities within which people live and sustain their livelihood. When requirement exceeds supply of the available water, it is often found that the existing supply is diverted to already well off people and in the struggle for capture and control over scarce water, the poor and marginal section of our society are further cornered. Thus bringing more of the finite quantum of water available in nature into the usable category through supply side management, large projects and bureaucratic responses and engineering solutions have been questioned on grounds of effectiveness and equity and sustainability of water bodies.

Another solution to mitigate an impending water crisis is to develop property rights and allow trading of water (rights), and build public-private partnerships in developing water infrastructure. It is argued that if market forces are allowed to work freely and the state changes its role from provider to the facilitator and regulator of the resources, water prices will be right, conflict will be resolved and supply will match the demand through market mechanism. This in turn will help scarce water resources to be allocated efficiently and mitigate the water crisis. Both these paradigms have been challenged by NGOs and social activists, civil rights groups and others. The responses of NGOs and social activists have been critical in identifying alternative technical and institutional solutions. But the capacity of NGOs is limited both in terms of their number and scale of operation.

In more recent times, NGOs and their agenda are being adopted in the mainstream policy agenda, for example, involvement of community in water resources management and project implementing agency, without any substantial progress in space for community involvement. Thus, water resources management in South Asian economies is facing challenges that cannot be addressed in the current policy and analytic framework. For example, if the experience of participatory irrigation is any indication, water bureaucracies in South Asian countries remain firmly in control of the decision making process as well as the water resources. The water services department is not accountable to water users or to their organisations and these departments by and large determine the nature and extent of the people's participation.

SAWAS is conceived as an interdisciplinary journal to address these twin concerns, of the acute problem and crisis encountered in water sector on one hand and the inertia within the water bureaucracy on the other, aspiring to provide space for alternative and critical thinking. The

journal aims to be an independent forum for discussion about water related issues that affect South Asia, issues in particular countries and regions within South Asia, and issues related to the global context in which South Asian water issues are situated. SAWAS aims to share knowledge of successful resolutions of water related problems as well as constructive analyses of deadlocks and failures, and promote an intellectual debate on South Asian water. SAWAS welcomes contributions that discuss any dimension of water resources development; technology, management and use, and their relations with society and the environment.

The aim of the journal will not only be to generate 'knowledge for understanding' but also 'knowledge for doing' particularly in the domain of policy and politics. The team of SAWAS shares the view that water problems have often been framed in very narrow and highly disciplinary ways, despite the apparent emphasis on integrated management. It also reckons that the political dimension of water resource development and management at all levels – local, regional, national and global has been underplayed.

It is with these objectives that the journal has been launched and we invite contributions from research scholars, academicians, practitioners and water bureaucrats for not only enhancing our understanding about what needs to be done, but also on how to reorient policies and strategies to mitigate the water crisis in South Asia. The first issue of the first volume is now in the public domain. It has five papers, two book reviews and a short article reported under perspectives. They together cover varied issues such as water rights, problems associated with valuation of water resources and projects, conflicts and the political economy of water resource access, control and management. These articles reflect the complex nature of problems confronted in water resources management in South Asia. The articles also suggest that a blue print approach is unlikely to mitigate the water crisis in South Asia. We invite comments and contributions from the readers to further expand our knowledge horizon of water resources in South Asia.