

Water resources management has been a complex issue around the globe as their management involves several dimensions, the economic, social, environmental, institutional and political. The 2<sup>nd</sup> NARBO Training Workshop focused on Integrated River Basin approach to address the issue of water resources management in the South Asian countries. The workshop highlighted need for reorienting existing policy and institutional arrangements pertaining to the water resources management to make them more responsive to the changing circumstances, in light of the empirical evidence of efficient water resources management in the countries like Japan and Australia.

The most important outcome of the case studies presented in the workshop was that in the most countries of the South Asia, the failure of water management institutions as largely responsible for inefficient use and mismanagement of the scarce water resources. The workshop also emphasized on the need for managing water demands through market-based instruments, such as, water pricing and inter-basin trading of the water resource to deal with the growing problem of water scarcity in the Asian countries, such as Pakistan.

Although, it is very much essential to promote efficient management of water resources in Pakistan to deal with the growing water scarcity yet, it is very difficult to streamline these market-based mechanisms in policy and decision-making processes. There are several practical difficulties in their implementation due to various institutional, social and environmental complications associated with these. For example, upstream diversion of water from the River Indus for different economic uses has induced several negative impacts on downstream population and ecosystems in terms of sea intrusion in the coastal areas as well as degradation of coastal mangrove and riverine biodiversity. Therefore, environmentalists fear further cut-down in the environmental flows, viz the market based mechanisms are adopted in water sector policy reform. However, at the same time, WWF-Pakistan and other environmental NGOs recognizes that there is a lot of mismanagement and mis-use of scarce water resources which, as also responsible for several negative impacts on the environment (for example, water logging and salinity) as well as the less flows of water downstream. Therefore, they believe that under the current scenario, the lack of awareness and political commitment makes it fearful that the environment will continue to receive low priority in water resources distribution and allocation under the reform process. In addition, traditional bureaucracies also pose a major obstacle in the water sector reforms. For example, there have been initiatives to devolve the management of main canals, in the Sindh province, through creation of “Area Water Boards”, Farmers Organizations and the “water user groups” with the supporting legislative and institutional arrangements. However, this new system has failed to achieve the desired results due to lower commitment to the process by the traditional irrigation bureaucracies who fear reduction in their administrative and managerial powers.

In view of the impediments in the water sector reform process highlighted above, it is entirely essential that an enabling environment is created for the market-based reforms through awareness and continued debate among the different stakeholders and policymakers to induce a change in the existing water resources management system in the country. Certainly, the training workshops like this will continue to contribute towards the gradual process of water sector reforms to make the

management of scarce water resources sustainable and beneficial to the present as well as the future generations.

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