Why water conservation strategy is needed?

Pakistan's water crisis is explicated mainly by rapid population growth followed by climate change, poor water management, inefficient infrastructure and water pollution. With declining water availability and continuously increasing demand for food production, Pakistan is facing serious threats regarding its water and future food security. To combat these, Pakistan’s National Water Policy (NWP) was approved in 2018 covering all required aspects of water resources development, management and governance. However, there was no instrument existing for the implementation of the NWP and therefore, a water conservation strategy was required. The NWP provides the policy directions for water management challenges in the three key areas of agriculture, domestic and industries. Accordingly, National Water Conservation Strategy (NWCS) is developed which defines the set of doable activities to create a balance between demand and supply in three sectors, ensure conservation of water, minimize wastage and secure its equitable distribution both across and within provinces.

Aim and Objectives of the Strategy

The aim of formulating NWCS is to support the delivery on the NWP for sustainable water resources management through policy guidelines, water conservation strategies, activities and technologies. The overall objectives are:

- Ensure conservation of water, minimizing wastage and securing equitable distribution.
- Support service providers to develop best management practices for water conservation minimizing financial dependence on government.
- Provide actionable information around water conservation ensuring water security under changing climate.
Key Features of the Conservation Strategy

There are many initiatives to be taken for water resources management and conservation as outlined in the NWP and/or Provincial Water Policies. However, this document of national water conservation includes key strategies of high priority which would have greater impacts on society, economy and the sector itself. The salient features of the strategy are reflected as:

- It is based on issues and actions outlined in the NWP
- It is developed following a holistic & cross-cutting approach
- It outlines activities with responsibilities of institutes
- Conservation focus on three areas of consumption: Agriculture, Domestic and Industrial sectors
- Key activities are “low hanging fruits”
- It has potential to improve institutional efficiency

The strategy document is the outcome of intensive consultative and participatory process involving water sector stakeholders such as federal and provincial government institutions, international development agencies, research institutes, academia, private sector, and civil society organizations. Their feedback is well incorporated in the strategy document.

What does this strategy offer?

The NWCS comprise of 14 strategic objectives each comprising multiple activities with clear roles and responsibilities of stakeholders. These activities can be considered as “low hanging fruits” and would have greater impacts on society, economy and the sector itself. An outline of key activities in three sectors is depicted below:

### Agriculture Sector
- More crop per drop
- Water-efficient technologies
- Aquifers recharge
- Non-Conventional Water sources for agriculture
- Modern IT tools for water resource management

### Domestic Sector
- Improved service delivery
- Water metering and pricing
- Controlled groundwater abstraction
- Water audits of municipal and commercial settings
- Water saving technologies and fixtures
- Water education program
- Zero liquid discharge from large residential & commercial settings

### Industrial Sector
- Zero liquid discharge
- Water metering and pricing
- Abstraction licenses
- Water audits
- Water awareness
Mass awareness on water conservation aims to raise awareness in all sectors and levels of society about the importance of conserving water to cope with its scarcity and ensure sustainability. Purpose is to change citizen’s attitudes and behaviour to improve water use efficiency through education and awareness campaigns on the socioeconomic and environmental benefits of water conservation and different conservation methods.

- Ministry of Water Resources
- Ministry of Federal Education and Professional Training
- Ministry of Religious Affairs
- Ministry of Information and Broadcasting
- Ministry of Industries and Production
- Ministry of Communication
- Provincial Governments
Possible Areas of Cooperation

An implementation of NWCS would require cooperation and collaboration of all lead and supportive agencies as identified in the strategy. Therefore, the support of international development partners would be highly effective for successful implementation of the NWCS. Extracting from the NWCS, the possible areas of cooperation between Ministry of Water Resources and International Development Partners could be as below:

- Provincial Water Conservation Plans
- Sustainable Groundwater Governance
- Nature based water conservation infrastructure and activities
- Watershed management in flood prone areas
- Climate Resilient WASH interventions
- Water conservation education & awareness
- Research to assess pricing for irrigation and domestic water supply
- Climate Smart Agriculture & Salinity management
- Wastewater management through Public-Private Partnerships

Collective Actions for Improving Conservation Effort

Best Conservation Practices

The strategy also includes convincing examples of the best conservation practices from Pakistan and other developing and developed countries elucidating that the strategies included in this document are realistic and doable.

An intensive review of best conservation practices would be helpful if undertaken to make an inventory of practices which may possibly be adopted in Pakistan.

Coordination and Review

Provinces in Pakistan have their own regulatory system, policy framework, specific management requirements, institutional challenges and capacity and budgetary challenges viz-a-viz the administration of its water resources. To achieve the objectives of NWCS in this diverse situation, key water conservation strategies are developed for the three sectors listing main activities, responsibility and timeline. Following this guiding document of NWCS, provinces will develop their own water conservation strategies across all sectors. Review of implementation of strategies in three sectors is suggested to be undertaken on annual basis.