

BRIEF REGARDING SUCCESS STORIES, INNOVATIVE TECHNIQUES AND OTHER INFORMATION ABOUT WATER RELATED ACTIVITIES

Legislative & Institutional Reforms

- Ministry of Water Resources had prepared a National Water Policy after extensive consultation with all stakeholders. The National Water Policy along with a National Water Charter had been approved by the CCI in April 2018.
- In pursuance of para 29.5.1 of the approved NWP, National Water Council (NWC) headed by honorable Prime Minister was notified by Ministry of Water Resources on **June 14, 2018** for implementation of NWP. A Steering Committee was also notified on same day (**June 14, 2018**) to assist NWC through inter-provincial coordination, reviewing public policies and monitoring reports before submission to NWC.

Success Stories:

Following are some of the success stories that Government of Pakistan has achieved in water sector.

- Ministry of Water Resource has prepared a comprehensive plan to address the water scarcity issue by storing flood water during high flow season and utilize the same during lean season through Water and Power Development Authority (WAPDA).
- In last decade, WAPDA has completed Mangla Dam Raising, Gomal Zam Dam, Satpara Dam and Darawat Dam to store water. Three mega hydro power projects i-e Neelum Jehlum Hydropower project, Tarbella 4th extension HP, Golen Gol HP were completed in last three years. While Diamer Basha Dam, Mohmand Dam and Nai Gaj Dam are at implementation stage as well.
- Formulation of Indus River Regime Study.
- Preparation and updating of flood plain inundation maps of rivers Indus, Jhelum, Chenab, Ravi, Sutlej, Kabul and Swat.
- Formulation of National Flood Protection Plan-IV (NFPP-IV) and subsequent proposal of Flood Protection Sector Project-IV
- Formulation of Dams & Barrages Safety Regulatory Framework.
- Updating/Revision of SOPs of Tarbela & Mangla Dams for reservoir operations with enhanced flood peaks absorption.
- Preparation of Comprehensive Environment Improvement and Flood Management Plan for Islamabad-Rawalpindi.
- Lai Nullah Flood Forecasting & Warning System for Islamabad-Rawalpindi.
- Formulation and signing of 1991 Water Apportionment Accord among the federating units.

- Office of Chief Engineering Adviser/ Chairman, Federal Flood Commission is an attached department of the Ministry of Water Resources acts as Secretariat of Pakistan National Commission on Large Dams (PANCOLD). Pakistan is represented by PANCOLD Secretariat at the International Commission on Large Dams (ICOLD). Office of CEA & CFFC also acts as Secretariat of Pakistan National Committee on Irrigation and Drainage (PANCID) as a national chapter of International Commission on Irrigation & Drainage (ICID).
- Ministry of Water Resources through Office of CEA/CFFC conducted following three studies on Sea Water Intrusion downstream Kotri Barrage and Environmental concerns of the Indus Basin Rivers:
 - i) Study to ascertain minimum quantum of water required downstream Kotri Barrage to stop seawater intrusion;
 - ii) Study to address environmental concerns of Sindh on flora, fauna and mangrove growth downstream Kotri Barrage; and
 - iii) Study upstream Kotri Barrage to address the environmental concerns of four provinces with regard to river Indus, Jhelum, Chenab, Ravi and Sutlej.

Initiatives

- WAPDA is also planning to construct Kurram Tangi Dam Stage-II (0.90 MAF), Chiniot Dam (0.85 MAF), Shyok Dam (5.0 MAF), Akhori Dam (6.0 MAF), Dudhnial Dam (1.00 MAF), Skardu Dam (3.20 MAF) and Sindh Barrage (2.00 MAF) to cope with the issues of water shortage in the country.
- Rainwater harvesting is a relatively new and innovative concept being used in the country for water conservation for crops and livestock as well as groundwater recharge. Countrywide data regarding implementation of Rainwater Harvesting Techniques is being gathered. Information received so far in this context has been compiled as under:

Sr. No.	Name of Province	Proposed schemes	Completed schemes	Ongoing schemes	Total number of schemes
1.	Punjab	3,480	180	320	3,980
2.	Sindh	25	60	23	108
3.	Khyber Pakhtunkhwa	9,135	3,606	42	12,790
4.	AJ&K	600	-	-	600

- In pursuance of approved National Water Policy, the Provincial Governments are also working on establishment of Groundwater Regulatory Authorities to regulate groundwater extraction for appropriate water pricing for industrial, agricultural and domestic use.

- Concept Clearance Paper of the following two innovative projects is under process with Ministry of Water Resources for approval by Ministry of Planning, Development and Reforms; 4/4

- Operationalization of National Water Policy (NWP) by Demonstrating Urban Flood Management through Rainwater Harvesting and Downstream Flood Reduction in Islamabad Region, costing Rs. 403.28 million.
- Sino-Pak Smart Water Management Project – Phase-I (SP-SWMP-I), costing Rs 3456 million (Partner Agency: University of Hohai, China).

- Based on inputs (short, medium & long term priority initiative to be completed in future in line with NWP) from stakeholder organizations, work on formulation of initial draft of NWP Implementation Framework is underway in NWP Secretariat.

- NWP-Secretariat with the support of Hashoo Foundation (HF) has organized a workshop on **November 25, 2019** exploring ways and means for involvement of private sector in implementation of NWP.

- Currently, Pakistan Council of Research in Water Resources (PCRWR) has undertaken following water-related projects;

- Irrigation advisory services provided to 21,000 farmers in 41 districts of Pakistan. The service is being up scaled to 100,000 farmers.

- Scientific monitoring of trans-boundary groundwater aquifers along the Eastern Rivers" was being done. The study is expected to be completed by 2021.

- In collaboration with IRSA, PCRWR is planning to install state-of-the-art telemetry system along the main canals and barrages in Pakistan. The system has been piloted on 4 main canals in the provinces.

- IRSA is working on development of real-time river-flow monitoring network initially on 7 key sites followed by the remaining 17 sites along the major rivers.