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PTI govt, too, insensitive to water issue?

ISLAMABAD: The incumbent government, like its predecessors, continues to be insensitive to water scarcity in the country as neither new reservoirs are being planned on Indus nor sufficient progress has been witnessed in Diamer Bhasha despite the fact that storage capacity of Tarbela reservoirs has depleted by 38 percent (by 3.6 MAF) - to 6 MAF from 9.6 MAF.

The government allocated Rs 70.348 billion for water sector in the federal budget 2019-20 of which Rs 20 billion has been earmarked for Diamer Bhasha and Rs 15 billion for Mohmand Dam. Of Rs 70 billion, Rs 51 billion has been allocated to Wapda whereas Rs 19 billion will be spent by provinces.

Well-informed sources told Business Recorder that the government has allocated about Rs 20 billion to procure land for Diamer Bhasha Dam, work on which has been painfully slow due to financing constraints. The World Bank, the Asian Development Bank and China have already refused to be part of the project due to the disputed Northern areas.

The cost of Bhasha Dam with gross storage capacity of 8.1 MAF has increased to \$16 billion from \$12 billion. PC-I for Diamer Bhasha Dam's water reservoir was estimated at Rs. 474 billion and was approved by ECNEC on April 17, 2018. Subsequently after the inclusion of 15 MW Tangir HPP, the revised cost of this component of PC-I amounted to Rs. 479.686 billion approved by ECNEC on November 14, 2018.

Around \$ 3.5 billion were required for the construction of Mohmand Dam project, the second mega hydropower project, storage capacity of which was 1.293 MAF. Allocation for Mohmand Dam was just Rs 15 billion. However, storage capacity of Mangla reservoir has been enhanced by 1.9 MAF from 5.4 MAF to 7.3 MAF.

An official told BR that Wapda, in its report submitted to Supreme Court has already stated that contract of Diamer Bhasha will be awarded by December 2019.

He said Wapda has gone for international bidding for the project, adding that 14 or 15 companies have submitted bids which are being evaluated. The project will be awarded in accordance with PPRA Rules.

Three large dams constructed in the 1960s and 1970s - the Tarbela on the Indus, the Mangla on the Jhelum, and the Chashma on the Indus - account for most of the built water storage reservoirs in Pakistan.

Designed primarily to supply water for irrigation, the original combined live storage capacity of these dams was 19.4 billion cubic meters (Tarbela, 12 billion cubic meters; Mangla, 7.3 billion cubic meters; and Chashma, 0.87 billion cubic meters).

According to the World Bank, it is commonly believed that Pakistan has inadequate water storage, and that new reservoirs will dramatically enhance water supply. Planned new reservoirs will provide limited additional supply - and of lower reliability. Reservoirs buffer inflow variations to stabilize supply. Existing reservoirs adequately buffer inflow variations between years, although supply shortfalls in Rabi are common. New reservoirs would improve the reliability of Rabi supply. But given the severe environmental degradation of the lower river and delta, partly caused by high water withdrawals, any increase in withdrawals, especially in drier years, must be carefully assessed in terms of additional environmental degradation.

The volume of sediment accumulated in the reservoir is now too large for practical removal. Construction of Diamer Bhasha Dam upstream of Tarbela will create a sediment trap, thus incrementally reducing Diamer Bhasha live storage but significantly slowing the sedimentation rate of Tarbela.

Mangla Dam was enlarged between 2005 and 2009 (at a cost of around \$1 billion) adding an additional 3.6 billion cubic meters of live storage. Due to continued sedimentation, combined live storage is estimated to be around 16 billion cubic meters. Diamer Bhasha Dam, at preliminary construction stage and with an estimated total cost of around \$16 billion, will add 7.9 billion cubic meters of live storage. At projected completion in 2023, total system storage will be around 21 billion cubic meters. The ongoing loss of storage because of sedimentation costs tens of millions of U.S. dollars per year.

According to Ministry of Water Resource, the impact of climate change in intensification of floods, erratic monsoon rain, and droughts are major concerns for Pakistan. Other likely affects on water resources could include: (i) recession/boom of the Himalyan, Karakoram and Hindukush glaciers, threatening water inflows into Indus River System; (ii) increased siltation of dams and reservoirs caused by more frequent and intense floods; (iii) shorter duration of snowfall and its prolonged melting brining drastic changes in mass balances; (iv) increase in the formation of Glacial Lakes Outburst Flood(GLOF); (iv) increased intrusion of saline sea water in the Indus delta adversely affecting coastal agriculture, mangroves and fisheries; (vi) rising temperatures resulting in enhanced heat and water-stress conditions particularly in arid and semi-arid regions, leading to reduced agriculture productivity; and (vii) with rise in temperature as result of climate change, crops will require more water due to excessive evaporate inspiration, cattle consume more water and human consumption would also increase.

The sources said, out of 112 projects, 61 are ongoing and being executed by Wapda whereas 51 schemes are new and developed by provincial governments. The total estimated cost of 112 water sector projects has been calculated at Rs 1.125 trillion. Ministry of Water Resources argues that allocation for water sector projects should be enhanced to Rs 150-200 billion per annum from Rs 70 billion to complete the projects in accordance with timeframe.