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Issue Brief

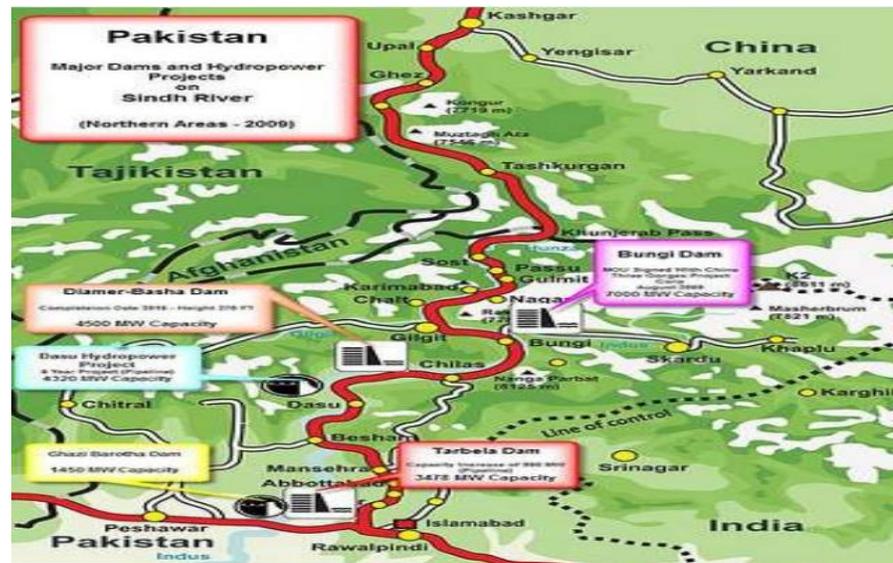
Diemer-Bhasha Dam Gets a New Revival

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On May 13, 2017, China and Pakistan signed a US\$50 billion Memorandum of Understanding (MoU) to develop and complete the North Indus River Cascade which has the



potential of generating 40,000 MW hydroelectric power.¹ The MoU was signed during the Diamer-Bhasha Project Conference hosted by China's National Energy Administration (NEA) in Beijing, China. The conference was part of the Belt and Road Summit held in Beijing during May 14-15, 2017.

This \$50 billion investment is in addition to the \$57 billion projects being committed by China to power and road infrastructure projects in Pakistan under the China-Pakistan Economic Corridor (CPEC). With this agreement, China emerges as the leading financier of infrastructure development in Pakistan

Under this new agreement, initially five huge dams will be built in the region that starts from Skardu in Gilgit-Baltistan and runs through Khyber-Pakhtunkhwa as far as Tarbela, the site of the biggest dam in Pakistan.² Under the MoU, China's National Energy Administration (NEA) would oversee financing and funding of Diamer-Basha Dam, Patan Hydropower Project, Thakot Hydropower Project, Bunji Hydropower Project and Dasu Hydropower Project.³

One of the major developments under this agreement is that China has agreed to finance and construct Diamer-Bhasha dam which has already been delayed due to difficulty in finding funding for this mega project. Given the significance of this mega project, the government officials in Pakistan had proposed to the Chinese government to include Diamer-Bhasha in the next phase of energy projects under CPEC.

¹ <http://www.hydroworld.com/articles/2017/05/china-and-pakistan-sign-mou-for-us-50-billion-earmarked-for-indus-river-cascade.html>

² <https://tribune.com.pk/story/1408444/mega-deal-china-invest-50b-develop-indus-river-cascade/>

³ <http://dailytimes.com.pk/pakistan/14-May-17/china-to-invest-50bn-for-mega-dams-in-pakistan>

With the signing of the new MoU, Pakistan has safely secured the required funding and Chinese officials will soon be conducting a detailed study spanning over a period of three months on a developing a roadmap for financing that will lead to initiation and completion of these mega projects.

While addressing the conference in Beijing, the Prime Minister of Pakistan valued the cooperation of Chinese government in building power projects which would overcome energy crisis in Pakistan. Moreover, he highlighted the critical importance of Diamer-Bhasha dam and said that Pakistan not only require support in energy sector, but also needed mega initiatives to improve its water storage capacity for economic development and long-term prosperity.⁴

Diamer-Bhasha dam is located on the Indus River, about 315 km upstream of Tarbela Dam, 165 km downstream of Gilgit-Baltistan and 40 km downstream of Chilas. It would have a maximum height of 270 m, and a reservoir of about 7,500,000 acre feet (9.25×10^9 m³), with live storage of more than 6,400,000 acre feet (7.89×10^9 m³). Mean annual discharge of Indus River at the site is 50,000,000 acre feet (6.2×10^{10} m³). Thus, the dam will store 15% of the annual river flow.⁵ Upon completion, this dam would have an installed capacity of 4,500MW, with annual power generation of about 19,208 gigawatt hour (Gwh).

It is pertinent to note that the project was originally scheduled for completion in 2016, and then 2019, when the Council of Common Interest (CCI) approved its construction in 2009. The then Prime Minister Yousaf Raza Gillani laid its foundation stones in 2011 but the project could not make headway due to lack of funding. According to an official estimate, about \$14 billion is required for the construction of reservoir for which successive governments have made consistent efforts to convince World Bank and Asian Development Bank to finance the project. However, they declined due to Indian lobbying and refused to provide any sort of financing for the project.

Later on, the present government bifurcated the project in two phases, constructing the dam in the first phase and then installing the machinery for electricity generation. So far, the government has already spent \$400 million on this project, it has acquired 28,247 acres of land against a total requirement of 37,419 acres. About 9,172 acres (25 per cent of the total land) has yet to be acquired.⁶ Moreover, the

⁴ <http://dailytimes.com.pk/pakistan/14-May-17/china-to-invest-50bn-for-mega-dams-in-pakistan>

⁵ <https://www.dawn.com/news/968061>

⁶ Ministry of Water and Power, Pakistan

government has built a residential colony for the workers and is now working on three model villages for those who would be displaced.

The prospects for successful completion of Diamer-Bhasha dam seem to be bright after this new agreement between China and Pakistan. Given the present situation of energy crisis and water shortages, Pakistan attaches utmost importance to the timely completion of Diamer-Bhasha dam. This mega dam along with other dams would meet more than half of the energy needs of Pakistan, providing clean and cheap electricity for the country. This will also reduce Pakistan's dependence on thermal power, thus saving much of its foreign reserves. Moreover, the sizable storage capacity of Diamer-Bhasha dam would serve as a huge water reservoir supplementing irrigation supplies during low flow period. These projects would also bring extraordinary benefits to the local area in the shape of employment during the phase of construction and operation, and thus, would help in alleviating widespread poverty in the area. The provision of clean energy to the local people for domestic usage would also help improve the quality of the lives of millions.