

Hydropower potential in Pakistan: Current status and future prospects

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Electrical energy crisis is an important issue in Pakistan. There is a deficit of 7000 megawatt due to which domestic sector faces 10 to 12 hours' load shedding in urban areas and 12 to 14 hours in rural areas daily. In order to overcome this shortfall, Pakistan should look for alternative, low cost, environmentally friendly and sustainable ways to produce electricity. Hydropower is perceived as an environmental-friendly, low-cost source of electricity that relies on proven technologies. The total hydropower potential in Pakistan is about 60,000 MW, currently the country is developing only 7320 MW that accounts for 11% of the total potential. Efforts are underway to develop more hydropower that will increase its proportion in total electricity generation capacity to over 40% by 2030. There are some hydropower projects where construction is underway include Diameer Basha Dam (4,500 MW), Dasu Dam (4,320 MW), Kohala Hydropower project (1,124 MW) Neelum-Jhelum (969 MW), Golen Gol (106 MV), Neelum-Jhelum (969 MV), and Korat hydropower project (720 MW). Spatially, the northern areas, Khyber Pakhtunkhwa (14,000 MW), Gilgit Baltistan (11,700 MW) and Azad Jamu and Kashmir (1,300 MW) have more potential for hydropower. Besides, Punjab also offers a limited potential for hydropower (350 MW) from small hydel projects. To achieve energy sufficiency in the future, it is imperative for Pakistan to intensify its efforts in harnessing its untapped hydropower potential.

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