

"Not too late to save water's fate"

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With the population of nearly three million people, the demand for the water of Quetta is increasing, due to increasing growth rate of. Quetta has been getting 28 million gallons of water per day, while the city has been facing a shortfall of 17 million gallons of water per day.

By 2026, the demand for water in Quetta will increase to 75 million gallons per day due to the rapid increase of urbanization. Presently, water is being supplied to the city by extracting fossil water by tube-wells. The underground water level in Quetta has dropped down to 2000 feet deep.

It is estimated that water table in Quetta valley is declining at an average rate of 4-5 feet per year. The only source of water for the residents of Quetta is the groundwater reservoirs. Precipitation is the only source of recharge to the aquifer. The problem of water scarcity in the provincial capital is becoming acute which enhances the need for a better water storage system.

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needed and required. Geographic Information System has become an essential tool for studies, where real-world application is required using real-time data.

Real-time data have been used for assessing the qualitative and quantitative changes in water tables with respect to time and space.

Different conducted researches have shown that the water table has been declined in more than 80% of Quetta land, and in places it has dropped more than 100 ft which is alarming situation for the Quetta inhabitants. A continuous overdraft has resulted in excessive groundwater abstraction and presently only 20-30% of the farmers have access to the groundwater.

Hydrological application in the field of GIS is very useful to get to know about "what is happening where and what we can do to solve problem?" By this, government could formulate better policy and design planning for the better and sustainable future of inhabitants of Quetta.