

## **Riposte of the Lower Dupi Tila Aquifer to Overexploration in Dhaka, Bangladesh**

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Dhaka Water Supply and Sewerage Authority (DWASA) has recently started abstracting water from lower Dupi Tila aquifer, the least explored one to meet the ever increasing demand of the city dwellers. The study is aimed to understand the hydrogeology, aquifer hydraulics and productivity of the lower Dupi Tila aquifer for sustainable development. The lower Dupi Tila aquifer is lying at 150 to 230m below the ground surface in Dhaka City. Thickness of the lower Dupi Tila aquifer ranges between 80-120m with an average thickness of about 100m. The value of Transmissivity (T) and storage coefficient (S) of the aquifer are 3000m<sup>2</sup>/day and 4.95E-4 respectively. The average Hydraulic conductivity is about 30m/day for the aquifer. The study from the static and pumping water level data and specific capacity data on lower Dupi Tila aquifer reveals that the productivity of the aquifer has been declining since installation of wells in the aquifer.