

Sustainable Water Supply in Dhaka City: Present & Future

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Abstract

Today, there are many cities worldwide facing an acute shortage of water. Dhaka City (the Capital of Bangladesh) is one such city labelled as a mega city (i.e., cities with population exceeding 10 million) of the world (Haigh, 2004; Karn and Harada, 2001). Dhaka is facing an estimated water shortage of about 500 million liters per day (mld)-over 25% of the existing demand. Currently, about 83% of the water supplied by DWASA comes from groundwater through 390 deep tubewells and 17% from surface water sources. For severe extraction of Groundwater for meeting the increasing demand water levels in monitoring wells indicate that the groundwater level has fallen by more than 20 m in the last decade alone. Moreover, DWASA recently found high concentrations of E. coli in the ground water of old town of Dhaka. The city is surrounded by rivers which are severely polluted. That means no sustainable water source is available in Dhaka city. For that we have to go for alternate sources which are rainwater harvesting, sustainable surface water that is diversion of water from major river Padma, Meghna and Jamuna. We also need to encourage water conservation to manage long term investment requirements, increase overall efficiency of authority and supply network.