

BANGLADESH

Construction of the Gandharbpur Water Treatment Plant



The construction of the Gandharbpur water treatment plan will participate in promoting a more sustainable and environmentally-friendly water supply model for Dhaka. A climate change adaptation project.

CONTEXT

Water is at the core of Dhaka's fabric. Historically, the city has burgeoned from the flow of the Buriganga River. Topographically, it is surrounded by no less than five mighty rivers. Visually, its very identity has always been forged by ponds, canals and other nuggets of water constituting the soul of the city. Yet, despite this apparent aquatic abundance, the water supplied to Dhaka-dwellers does not come from these obvious natural sources, but from reserves deep under the earth.

This water supply system is not sustainable. Beyond the fact that the 640 wells extracting underground water run with polluting fuel, the groundwater tables are dangerously shrinking. While potable water production will need to double by 2030 to meet the metropolitan demand, the level of the aquifers falls by 2 to 3 meters every year. Given this gigantic environmental challenge, Dhaka needs to change immediately its water supply paradigm.

DESCRIPTION

In this context, the public body responsible for water supply in the city - Dhaka WASA - has been nurturing an ambition: extracting water directly from the rivers ringing the city. It is precisely this purpose that attempts to serve the Dhaka Environmentally Sustainable Water Supply Project (DESWSP), funded by AFD, the Asian Development Bank and the European Investment Bank.

This project will principally consist in the construction a water treatment plant in Gandharbpur. The capacity of the plant will reach 500,000m³/day, and could be later double during a second phase. Given the fact that the rivers flowing at the vicinity of Dhaka - such as the Buriganga, the Shitalakha, the Dhaleswari, etc. - are all highly polluted, the plant will extract raw water from the Meghna River, situated some 30km off Dhaka. This arrangement will require a high technical expertise.

IMPACTS

- The Gandharbpur water treatment plant will have the capacity to meet the needs of 4.3 million people. The 500,000m³ of water extracted every day from the Meghna River will be equivalent of reducing groundwater pumping by more than half for Dhaka.
- In parallel, the Dhaka Water Supply Sector Development Program will reinforce the distribution network linked to the Gandharbpur plant.
- Up to 376km of pipes should be rehabilitated, which will cut down by half the losses in one of the eleven zones of Dhaka, and which will provide the opportunity of installing 6,000 new water connections.

29/01/2015

Project start date

 Dhaka
Location

 Climate , Water and Sanitation
sector(s)

 Sovereign Concessional Loan
financing tool(s)

 177 000 000 EUR
Financing amount

ONGOING
Status

DWASA (Dhaka Water and Sewerage Authority)
Beneficiaries

