

Submitted to :

Course Teacher

Course Title: Arch 6629: Sustainable Urban Water and Sanitation

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Khulna

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Urban water and sanitation condition in Khulna City , Bangladesh:with reference to SDG Goal 6:

SGD goal 6 aims to tackle challenges related to drinking water , sanitation and hygiene for populations, as well as to water related ecosystems.

Goal 6 says:

1. Access to safe and affordable drinking water for all equally.
2. By 2030 ensure to access sanitation and healthy life and to end open space defecation.
3. By 2030 the quality of water has to be enriched.
4. The proper usages of water have to be ensured by 2030.
5. Implementation of water resource management by 2030.
6. Preservation and revival of ecology of all water bodies.

Khulna, supporting a population of over 16 lakh, demands 24 crore litres of water daily, but Khulna Water Supply and Sewerage Authority can only supply 12 crore litres of water every day(The Daily Star,8/3/15).

- Depleting surface water sources.
- KWASA supplies water that is really dirty and not useable. According to SGD goal safe and affordable water is not ensured for all in Khulna area.
- City dwellers have already fallen in grip of water crisis as groundwater level is gradually dropping. Hand-driven tube wells are of no use if groundwater level drops below 26 feet and motor pumps do not function if the level drops below 30 feet. Water shortage is caused by a large number of illegal water connections in the city. If it is continued , the proper usages of water for all would not be ensured by 2030.
- The low-income group living along the banks of the rivers Rupsha and Bhairab used to utilize the river water for their domestic purposes. But, since the water of the rivers has

become extremely saline, the residents have been using the KWASA supply water, putting more pressure on the supply. The ecology of river system should be preserved. Otherwise , it is rally alarming for the inhabitants of Khulna.

- The lone Surface Water Treatment Plant could not become operational for the past ten years due to technical faults. Water resource management is poor in Khulna .
- People of many areas have been suffering from skin diseases and intestinal disorders by using contaminated water being supplied through the defective pipelines. Day by the water quality is deteriorated in Khulna. SDG goal 6 aspires the enhancement of water quality by 2030. Therefore, the water condition of Khulna is not in supportive condition to meet the challenge of SDG goal 6.
- About 74% of generated sewage and 57% of solid wastes were discharged direct to the surface drain by residential, commercial/office, dormitory/hostel, primary school and market/ bazar. It is also harmful like open space defection .
- In the slum area about 76% of sewage and 60% of solid wastes are discharged direct to the drain.
- Septic tank users are not interested to provide soak well due to existence of high water table during rainy season.
- Lack of appropriate training among the septic tank users also responsible for improper management. (Islam , 2010).
