Existing Condition of WASH in Khulna city with respect to SDG-6

This article defines the stance of Khulna, Bangladesh as a developing city based on its water, sanitation and hygiene condition in relation with the SDG goal 06. The relative analysis bases on the targets of the Sustainable Development Goal 6 and the existing condition as well as progress of Khulna, Bangladesh being a city under one the UN countries.

Sustainable Development Goal 6 is one of 17 Sustainable Development Goals established by the United Nations General Assembly in 2015. It calls for clean water and sanitation for all people. The official wording is: **"Ensure availability and sustainable management of water and sanitation for all."** (Tobergte & Curtis, 2013) Thus, Goal 6 of Agenda 2030 not only addresses the issues relating to drinking water, sanitation and hygiene, but also the quality and sustainability of water resources worldwide. It also looks forward to ensure availability and sustainable management of water and sanitation for all, reflecting the increased attention on water and sanitation issues in the global agenda. Despite progress, billions of people still lack safe water, sanitation and handwashing facilities. Data up to the surveys till 2019 suggests that achieving universal access to even basic sanitation service by 2030 would require doubling the current annual rate of progress. (UN, 2019)

A global report on health status of 188 countries based in the health-related Sustainability Development Goals (SDG) indicators found Bangladesh to be one of the poorest performing countries in South Asia. This report clearly shows that no country can make sustainable progress on the global health goals without addressing the critical components of water, sanitation and hygiene. However, Bangladesh can create an example to be the next revolution in WASH. The state has made a number of commitments on Sanitation in SACOSAN VI and the 7th Five Year Plan. The WASH condition of Khulna, therefore have been identified and classified on the foundation of the three components i.e. **Water, Sanitation and Hygiene** concomitantly. 1. Water:

Khulna, supporting a population of over 16 lakhs, demands 24 crore liters of water daily, but Khulna Water Supply and Sewerage Authority (KWASA) can only supply 12 crore liters of water every day (The Daily Star,8/3/15). In many cases, water sources have been either broken or partially damaged and become unusable due to submergence. Depleting surface water sources have been seized as ponds and other water bodies all have been contaminated by the intrusion of saline water in the southern coastal area, thereby leading to serious crisis of safe drinking water. Moreover, water consumption pattern of the city is yet to adopt the rainwater harvesting, besides, city dwellers have already fallen in grip of water crisis as groundwater level is gradually dropping.

Khulna obtained its status as a formal town after the establishment of the municipality in 1884 during the British colonial regime. During the late 1950s and 1960s Khulna became an important center for industrial development. Most of the manufacturing industries are located along the Rupsha River that acts as industrial pollutant sink. At the same time sewage are also disposed into the rivers because of improper management causing a direct threat to the urban environment, human health and ecology. The lone Surface Water Treatment Plant could not become operational for the past ten years due to technical faults and stakeholder integration. Hence, water resource management is reflected as quite poor in Khulna. Though, till today the scarcity of safe drinking water has not been so perilous, but it if high time the fact should be concerned and taken care of for the future.

2. Sanitation:

The Sanitation condition of Khulna is even abjecter. Sludge is released randomly ('here and there') or dumped into open drains or water-bodies which contaminate surface water. Only 24.5% collected sludge in Khulna is dumped designated sites and get treated in the FSTP (Faecal Sludge treatment Plant) (Opel, Bashar and Ahmed, 2012). About 25 % of the attached drains connected to homesteads are not paved and 51 % of the drains are paved but open. About 15 % of the houses have no outlet to drain out waste water. Such practice creates public nuisance and a dirty and unpleasant environment. Khulna city does not have a sewer network of

any kind. Lack of affordability forces the large low-income and poorer sections of the people to use unhygienic latrines which are not only a threat to household health but also to the local environment. About 5% of the households have hanging latrines and 3% of households have no latrines.

Khulna is plagued with various challenges that exacerbate many areas of the people's lives. The city, for instance, has a poor drainage system resulting in water-logging in the slums. This puts the lives of the poor in peril. In the past, the storm water of Khulna city had been drained out through some natural drainage (e.g., creek and canals). Due to rapid urbanization and increasing development over the years, these natural drainage and other water retention areas have gradually been converted into built-up areas. Some of them are replaced by narrow surface drains. As a result, some parts of the city are flood regularly during intense rainfall particularly in the late monsoon. Most of the water logged areas are located in Ward No. 30, 10, 14, 27 and 31. In these Wards, percentages of households affected by annual water logging are 94 %, 100 %, 93% and 98% respectively. In Khulna city, 38% of households regularly experience short-term water logging (e.g., 1 day). Victims of longer-term duration water logging live in Ward no. 31, 21, 20 and in 22. it was seen that about 88% of generated sewage from residential building are directly discharged into the surface drain. Besides, it was seen that 64% solid wastes from residential building are directly discharged into the surface drain, 21% into mud hole and 15% carried by KCC van. (Rahman & Islam, 2010) Besides, 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.

3. Hygiene:

However, Hygiene has been a constant obstacle in the way of healthy living. The case of Khulna is not an exception. Lack of Motivation, hygiene promotion is what led it to be a matter of indifference. There is a deficiency of proper family led knowledge from the childhood which makes the citizen unaware about the hygiene issues. On the contrary, there evolves the social constraints i.e. the believes, taboos and practices. Women are affected more by these social constructs. The condition of menstrual hygiene of the women of Khulna, the condition of the women section of the public toilets here are the prominent evidence of this fact. Most of the people in Khulna, in fact have a little or no knowledge about the safe waste disposal, differences between types of wastes, facts of reuse of the resources, rain water harvesting as a profitable means or even their own physical hygiene.

In Khulna city, inefficient and inequitable water & sanitation and environmentally unsafe solid waste management is leading to unhealthy living conditions, unsafe environment, poor quality of life, especially for the disadvantaged people. (SUWAS-Khulna,2018) This inefficient, inequitable, and unsafe management is largely attributed to lack of coordination and integration among concerned agencies, actors, and stakeholders. The collaboration of the managing authorities, absence of financial stability, as well as environmental legislation and enforcement is what making the scenario worse.

This paper is a sustained attempt to identify the WASH condition of Khulna in lens of the SDG 06. The prioritization of the idea on sustainable and integrated WASH system is the core concern here. In a nutshell, the condition of the water, sanitation and hygiene of Khulna neither the worst, nor the best. It has a long way to go and needs a more integrated, people centric approach to meet the targets of SDG 2030.

References:

- Ahmed, M. F. and Rahman, M. M. (2000). Water Supply & Sanitation: Rural and Low Income urban Communities. ITN-Bangladesh, Center for Water Supply and Waste management, ISBN 984-31-0936-8, BUET, Dhaka, Bangladesh.
- 2. <u>https://sustainabledevelopment.un.org/</u>
- Ahmed, M. F. and Rahman, M. M. (2000). Water Supply & Sanitation: Rural and Low Income urban Communities. ITN-Bangladesh, Center for Water Supply and Waste management, ISBN 984-31-0936-8, BUET, Dhaka, Bangladesh.

.

- Ehlers, V.M. and Steel, E.W. (1965). *Municipal and Rural Sanitation*. McGraw-Hill. ISBN 07-0019089-5, USA
- 5. Murtaza, G. (2001). Environmental Problems in Khulna City, Bangladesh: a Spatio-Household Level Study. GBER Vol. 1 No. 2, pp 32-37
- 6. Special edition: progress towards the Sustainable Development Goals
- 7. Report. (2019). Economic and Social Council. 07404(May) E/2019/68.
- 8. S. E. E. Rahman, & & M. Islam (2010). *PROBLEMS OF EXISTING SANITATION* SYSTEM IN KHULNA CITY OF BANGLADESH : A CASE STUDY. (May 2014).
- Tobergte, D. R., & Curtis, S. (2013). Undp Support To the Implementation of Sustainable Development Goal 6. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699. https://doi.org/10.1017/CBO9781107415324.004