

ASSIGNMENT ON SDG 6 AND WATER AND SANITATION PROBLEM OF KHULNA CITY

SUSTAINABLE DEVELOPMENT GOAL 6

Sustainable Development Goal 6 (SDG 6) is one of **17 Sustainable Development Goals** established by the United Nations General Assembly in 2015. The establishment of SDG 6, Ensure availability and sustainable management of water and sanitation for all, reflects the increased attention on water and sanitation issues in the global political agenda. It clearly showed the importance of water and sanitation to other elements of sustainable development, and vice versa. The UN has defined **8 Targets** and **11 Indicators** for SDG 6.

The first three targets relate to drinking water supply and sanitation:

1. By 2030, achieve universal and equitable access to safe and affordable drinking water for all
2. By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
3. By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

SDG 6 is not the only SDG to include or directly relate to water and sanitation. SDG6 is closely linked with other Sustainable Development Goals (SDGs). For example, improving sanitation also helps make cities more sustainable (Goal 11). An effort to include these other targets (e.g. SDG target 3.3 (water-borne diseases), SDG target 11.5 (water-related disasters), SDG target 13.2 (climate change adaptation)) would therefore provide a more comprehensive assessment of the water and sanitation-related targets of the 2030 Agenda. Equitable sanitation and hygiene solutions address the needs of women and girls and those in vulnerable situations, such as the elderly or people with disabilities.

WATER AND SANITATION PROBLEM OF KHULNA CITY

Safe water and sanitation contribute to enhance the quality of life through improving general health conditions of the people. Due to lack of safe water and sanitation, incidences of water and excreta related sicknesses result in periodical outbreak of cholera and a high rate of diarrhoeal diseases accounting for over a quarter of a million lives every year (DPHE, 1999). The main problem of water in Khulna city are:

Safe water supply coverage:

water sources have been either broken or partially damaged and become unusable due to submergence. Ponds and other water bodies all have been contaminated by the intrusion of saline water thereby leading to serious crisis of drinking water. Tube wells are not sufficient to cover up the drinking water demand.

Water consumption pattern:

The study has found that rain water collection and storage is the only hope for safe water source and almost all the respondents are using rain water in their drinking and cooking purposes which also depend on availability of rainfall in many village area such as Kacuya upazilla in Bagerhat zilla. Among all, 76% have big or small muddy pot for storage and others have not good facility to store rain water for days. Although most of the ponds are flooded by saline water, people are still using that source as cooking water (77.14%), washing and bathing purpose.

Distance of water sources and collection status:

Due to inundation of safe water sources people have to go adjacent unaffected areas that vary from less than 1 km to more than 1.5 km.

These are the basic problem which is a everyday problem in Khulna city.

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 **centre for industrial development**. Administratively, it is divided into 31 Wards. Over the period, Khulna city experienced continuous population growth accompanied by periodic changes to its territorial area. All these developments will have a far reaching impact on the overall environment of Khulna city. Most of the manufacturing industries are located along the Rupsha River that acts as industrial pollutant sink. At the same time sewage are also **dispose into the**

rivers because of improper management causes a **direct threat** to the **urban environment, human health and ecology.**

On the other hand in the house hold scale , sanitation is necessary to overcome the effects of man's activities on his environment. The increase in population and the movement of population into urban and metropolitan areas have intensified environmental-control difficulties in those areas. The provision of safe water; the collection and disposal of human, domestic and industrial wastes; the prevention of atmospheric pollution are becoming more difficult from year to year. In the 31 wards of Khulna City, 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 (Mahmudur Rahman.2014).

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. There are concentrations of hanging latrines in some areas of the city. 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(Mahmudur Rahman.2014) . 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. Only simple pit latrines are using slum area instead of septic tank. The percentage of direct discharge of sewage and solid wastes from slum area are 76% and 60% respectively (Mahmudur Rahman.2014).Commercial buildings, office building has highest 34% of soak well and residential building had lowest 13% of soak well. In residential building the percentage of soak well was found significantly low. In most of the cases it was observed that old aged(age more than 50 years) residential buildings had soak

well but now they are inactive due to the existence of high water table in rainy season. Another observation was that newly constructed residential building does not have any soak well.

Based on the study:

- About 74% of generated sewage and 57% of solid wastes were discharge direct to the surface drain by residential, commercial/office, dormitory/hostel, primary school and market/bazar.
- 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 during rainy season.

A major challenge faced by the developing countries is that of human waste management and disposal. In developing countries nearly half the urban populations lack adequate waste disposal facilities. Lack of awareness is the main constraint for effective disposal of sewage and solid wastes. It is found that users have lack of technical knowledge about the adverse environmental impact of sewage and solid wastes.

References:

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