**Abstract**

This study targeted to estimate the suitability of groundwater for drinking in a district undergoing rapid urbanization and industrialization. Gazipur District has an area of 1,713 km², located in between 23°53' and 24°21' north latitudes and in between 90°09' and 92°39' east longitudes. From six Upazilas in Gazipur District around 140 samples were collected, which were Gazipur Sadar Upazila, Sreepur Upazila, Kaliakoir Upazila, Kapasia Upazila and Kaligonj Upazila. A recent review of industrial sludge found that heavy metal concentrations were, Gazipur Sadar Upazila, Sreepur Upazila, Kaliakoir Upazila, Kapasia Upazila and Kaligonj Upazila. This study targeted to estimate the suitability of groundwater for drinking in a district undergoing rapid urbanization and industrialization. Gazipur District has an area of 1,713 km², located in between 23°53' and 24°21' north latitudes and in between 90°09' and 92°39' east longitudes. From six Upazilas in Gazipur District around 140 samples were collected, which were Gazipur Sadar Upazila, Sreepur Upazila, Kaliakoir Upazila, Kapasia Upazila and Kaligonj Upazila. A recent review of industrial sludge found that heavy metal concentrations were.

Moreover, the study targeted to estimate the suitability of groundwater for drinking in a district undergoing rapid urbanization and industrialization. Gazipur District has an area of 1,713 km², located in between 23°53' and 24°21' north latitudes and in between 90°09' and 92°39' east longitudes. From six Upazilas in Gazipur District around 140 samples were collected, which were Gazipur Sadar Upazila, Sreepur Upazila, Kaliakoir Upazila, Kapasia Upazila and Kaligonj Upazila. A recent review of industrial sludge found that heavy metal concentrations were.

**USING WATER QUALITY INDEX TO ASSESS GROUNDWATER SUITABILITY AT GAZIPUR DISTRICT, BANGLADESH**

**Poster Booth No. 61: Session No. 26: Sunday, 22 September 2019: T193. Importance of Involving Local Communities in Groundwater Management in Bangladesh**

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**Gazipur District** is a chartered town in Bangladesh. It is a part of the Dhaka Division and is located in the northern part of the country. The district has a humid subtropical climate with significant variations between summer and winter seasons. The climate is characterized by hot summers and cold winters. The average temperature ranges from 25°C to 30°C during summer and from 5°C to 10°C during winter. The rainfall is characterized by a single monsoon season, with most of the rainfall occurring during the months of July and August. The average annual rainfall is around 1,500 mm.

The study area is characterized by a landscape with low relief, with small hills and valleys. The district is drained by the Meghna River, which flows in the north-south direction. The river provides a significant water source for the local population, as well as for irrigation and industrial purposes.

**Conclusion**

In Bangladesh, more than 80% of the population rely on groundwater for drinking purposes. However, the quality of groundwater is often compromised due to various factors, including contamination and over-exploitation. In this study, the suitability of groundwater for drinking in Gazipur District was assessed using the Water Quality Index (WQI). Gazipur District has an area of 1,713 km², located in between 23°53' and 24°21' north latitudes and in between 90°09' and 92°39' east longitudes. From six Upazilas in Gazipur District around 140 samples were collected, which were Gazipur Sadar Upazila, Sreepur Upazila, Kaliakoir Upazila, Kapasia Upazila and Kaligonj Upazila. A recent review of industrial sludge found that heavy metal concentrations were.

**References**


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