

عنوان مقاله:

Assessment of Water Quality in Chandpur District of Bangladesh

محل انتشار:

فصلنامه روشهای تصفیه محیط، دوره 1، شماره 2 (سال: 1392)

تعداد صفحات اصل مقاله: 10

نویسندگان:

Md Lokman Hossain - *Institute of Forestry and Environmental Sciences, University of Chittagong, Chittagong-۴۳۳۱, Bangladesh. Corresponding author*

Kazi Shariful Islam - *Institute of Forestry and Environmental Sciences, University of Chittagong, Chittagong-۴۳۳۱, Bangladesh*

خلاصه مقاله:

The study was conducted in Chandpur district of Bangladesh to assess the status of pond, supply and tube-well water quality parameters and identify water collection and distribution system. Twelve water quality parameters namely; pH, TDS, TS, SS, DO, COD, BOD, conductivity, hardness, chloride, arsenic and iron were analyzed according to standard laboratory method. The mean value of pH, TDS, TS, SS, DO, COD, BOD, conductivity, hardness and chloride for pond water of all upazilas were 7.41, 169 mg/l, 193.26 mg/l, 32.85 mg/l, 5.56 mg/l, 79.07 mg/l, 36.28 mg/l, 335.18 $\mu\text{s}/\text{cm}$, 86.15 ppm and 34.57 mg/l respectively. The mean value of pH, TDS, TS, SS, DO, COD, BOD, conductivity, hardness, chloride, iron, and arsenic for tube well water of all upazilas were 8.01, 111.81 mg/l, 122.36 mg/l, 5.58 mg/l, 46.98 mg/l, 14.81 mg/l, 249.17 $\mu\text{s}/\text{cm}$, 131.23 ppm 108.09 mg/l, 0.55mg/l and 0.078 mg/l respectively. The mean value of pH, TDS, TS, SS, DO, COD, BOD, conductivity, hardness, chloride and iron for supply water of all upazilas were 7.8, 133.42 mg/l, 155.03 mg/l, 6.19 mg/l, 66.56 mg/l, 17.13 mg/l, 248.19 $\mu\text{s}/\text{cm}$, 126.07 ppm 167.6 mg/l and 0.65 mg/l respectively. Study revealed that pond water quality was suitable in terms of pH, DO, TDS, TS, SS, chloride and hardness and not suitable in terms of COD, BOD and conductivity for different productive uses. Tube well water quality was in desired level in terms of pH, DO, TDS, TS, SS, chloride, iron and hardness and not suitable in terms of COD, BOD, conductivity, and arsenic for different productive uses. Supply water quality was in acceptable limits in terms of pH, TDS, TS, SS, chloride, iron and hardness and crossed acceptable limit in terms of COD, BOD, conductivity, and DO for different productive uses. It was found that all the parameters vary significantly with the types of water. Water quality management program should be initiated under supervision of government to maintain the acceptable limit and proper water supply scheme should be followed for effective water collection and distribution system.

کلمات کلیدی:

Chemical parameter, collection, distribution, water quality, management

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/281466>



