

# ABSTRACT

A study was conducted to assess the physico-chemical analysis, level of heavy metals and Primary productivity of various water samples of river Ravi, taken from different locations. The velocity of water at sampling sites was measured in addition of temperature ( $^{\circ}\text{C}$ ), pH, dissolved Oxygen (mg/l), Free  $\text{CO}_2$  (mg/l), total hardness (mg/l), calcium hardness (mg/l), total alkalinity (mg/l), chloride (mg/l), total dissolved solids (mg/l), electrical conductivity ( $\mu\text{mhos/cm}$ ), cadmium (mg/l), chromium (mg/l), nickel (mg/l) and zinc (mg/l) concentrations, were also determined. Biological studies included counting of planktons for the water samples collected from the river. The samples had members of chlorophyceae, chrysophyceae, cyanophyceae, Bacillariophyceae and some species of zooplanktons belonged to Rotifers, and crustacean groups.

The study concluded that the water of this river is nonpolluted at Upstream area from Shadbagh drain and is highly polluted at downstream from the drain. The water from downstream is not only unfit for drinking purposes but also unsuitable for aquatic life, freshwater fisheries and irrigation purposes.