

## Quality assessment of water samples from the river Tamiraparani: a physico-chemical parameter analysis

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**ABSTRACT:**

Water is an essential natural resource on earth that plays a vital role in our life. Surface water and ground water are the major sources of water. Quality of the water samples collected from the Tamiraparani basin were analyzed for its physico-chemical properties. The water samples were collected from the randomly selected 13 sampling stations. Water analysis for physico-chemical parameters such as temperature, pH, Total Dissolved solids (TDS), Electrical Conductivity (EC), salinity and turbidity were performed to ascertain its quality. Some sites showed significantly increased levels of Temperature (22-39°C), TDS (22.6-286 mg/L), EC (24.8-318  $\mu$ mhos/cm), pH (6.8-8.5), Salinity (23.4-319 mg/L) and turbidity (1.02-3.45NTUs) than the standard IS 10500: 2012 limits.

**Keywords:**

Tamiraparani river, physicochemical characteristics, water quality