

Environmental Impact of Industrialization on Natural Water Quality in Matsapha; Evaluated Using Water Quality Index

The growing industrial hub of Matsapha, Eswatini, presents a double-edged sword. While it fuels economic progress, concerns loom regarding its impact on the precious natural water resources. This study delves into the environmental consequences of industrialization on the water quality of Matsapha's rivers and streams. Utilizing the Water Quality Index (WQI) as a comprehensive assessment tool, we analyze the presence of various pollutants and their cumulative effect on the overall health of the water bodies. Our findings reveal concerning levels of contamination, particularly from [mention specific pollutants], leading to a decline in the WQI score. This raises significant concerns about the potential risks to aquatic life and human health dependent on these water sources. The study underscores the urgent need for stricter regulations, improved waste management practices, and continuous monitoring to safeguard the vital water resources of Matsapha and ensure sustainable development in the region.

Primary author: Dr MDZINISO, Nhlakanipho (University of Eswatini)

Presenter: Dr MDZINISO, Nhlakanipho (University of Eswatini)

Session Classification: Environmental Measurements