



## Impact of Environmental Pollution on the Residents

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### INTRODUCTION

The global issue of environmental contamination is a result of industrialization and human activity. In developing nations like Nigeria, industrial effluents pose a growing threat to human health and the environment. These issues are more complicated and urgent than ever. This study measured the concentrations of Heavy Metals (HMs) in the tannery industry's effluents in Sharada phases I and II and evaluated the effects of environmental pollution. The information utilized includes the findings of laboratory tests to identify the Total Dissolved Solid (TDS), Electrical Conductivity (EC) and heavy metals (Cd, Cr, Cu, Pb, Zn, Ni, Mn and Fe) in industrial effluents. To determine the noticeable effects of the pollution on the environment, interviews and methodical field observation were used. The results show that while the EC and TDS are over the allowable limits set by the Federal Environmental Protection Agency (FEPA), the concentrations of the physicochemical parameters are within those limits. The effluents have a neutral pH value.

The surroundings are now harmful to onlookers' and people's health. Therefore, in order to reduce the environmental challenges in the area and ensure a sustainable, hygienic environment, as well as to make the environment conducive to living, industries should build closed drainage systems and Environmental Impact Assessments (EIAs) should be conducted frequently. An actual One of the main environmental issues endangering countless lives worldwide is pollution. The detrimental change of an environment's condition or quality that has an adverse effect on the health of people, animals, plants and soil is known as environmental pollution.

### DESCRIPTION

Despite government efforts to contain the threat and guarantee that Nigerians live in a clean, disease-free environment, industrial pollution remains a major issue in the country. The number of Nigerian sectors, including

tanneries, textiles, petroleum refineries, chemicals and plastics, food and drink, breweries, soaps and detergents, are established sources of pollution. The two main sources of pollution are natural and human induced. Industries are now the main causes of pollution in the environment. The rate at which industries grow, products are produced and the amount of harm that industrial pollutants do to the environment and human health are all intimately correlated.

The manufacture of textiles, cellulose and other chemicals is frequently linked to the use of synthetic dyes that include other harmful metals and the release of their effluents into the environment poses a significant risk to public health. In order to safeguard the environment and human lives, it is imperative that the government and other relevant organizations move swiftly to stop environmental pollution and deterioration in all areas of Nigeria. Man must refrain from environmental contamination in order to maintain a favorable and sustainable productive environment. Nigerian cities have struggled for decades with excessive pollution, which poses a number of health risks to people.

This necessitates a thorough evaluation of water contamination and the measurement of heavy metal concentrations in effluents released into the environment. Given that this threat is currently spreading at an alarming rate and requires immediate attention, responsible institutions and environmental agencies are quite concerned about it. Consequently, the purpose of this study was to determine the concentrations of heavy metals in the wastewater that the tannery businesses in Sharada phases I and II released into the environment.

Electrical conductivity is a limiting factor and provides information about the concentration of electrolytes in water. Both the humans who eat the crops and the production of crops in the research area are negatively impacted by the high concentration of EC found in this study.

According to Tanko, the salinity of the soil affects plant development, crop production and produce quality, all of which are frequently influenced by the salinity of irrigation water. The ideal EC level for irrigation water is 2 millimho/cm; any value beyond this threshold will result in a decrease in the rate of water entry into the crops or the water's osmotic potential. The pH scale, which goes from 0 to 14, is used to measure the acidity and alkalinity of water.

A pH of seven is considered neutral; a pH of less than seven denotes acidity and a pH of more than seven indicates alkalinity. Rarely is an uneven pH level in water a cause for concern. As a result, a sample's typical levels should fall between 6.5 and 8, but readings outside of this range signify serious anomalies in the water quality. The average pH of the effluent samples used in this investigation is 7.0 or neutral, while the FEPA permitted limit is between 6 and 9.

This shows that the concentration of pH in the effluents is within the Permissible value set by FEPA. The high pH value in water can destroy bacterial and other microorganisms as well as inhibit self-purification of a stream.

## **CONCLUSION**

The Sharada industrial region has become a hotspot for environmental contamination because of standing water and heavy metals in the effluents that are routinely released into the environment. In the research areas, where environmental contamination is severe and the living conditions are unbearable, this threat has now escalated to alarming proportions.