

## **Status of Ground Water Quality in Masuda Tehsil of Ajmer District, Rajasthan**

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### **ABSTRACT**

Water is one of the most important blessings we have received from nature. It acts as a limiting factor for survival of human being. As it is required to meet the increasing demand of power, economic growth and industrialization, many countries throughout the world are suffering from the shortage of water. In our country the rainfall distribution is highly uneven and variable in space and time domain. It is highly erratic especially in Rajasthan state where water resources are in delicate equilibrium; the people even do not have an access to safe water required for drinking. And as water is a good solvent, it dissolves various impurities easily, thus many people suffer from diseases caused due to polluted water. In this work an attempt has been made to access the ground water quality in the Masuda Tehsil situated south-west of Ajmer city and covers an area of 87,898 hectare and the population of 1,87,295 in the year 2001. It consists of 147 villages, nearby all facing an acute shortage of water and thus creating a tremendous pressure on the fragile water resources due to high population growth and over consumption, finally leading to the deterioration of the quality and quantity of water. The present investigation is carried out by collecting the ground water samples during the Pre-monsoon and Post-monsoon 2006 from 25 different sites in the Masuda Tehsil. The physico chemical parameters that were analyzed are pH, electrical conductivity, TDS, total hardness, calcium hardness, magnesium hardness, total alkalinity, sodium, potassium, fluoride, sulphate and nitrate and the value obtained are compared with standards prescribed by WHO and BIS. The analysis indicated that water at most of the places like Masuda, Lordi, Lodiya, Jalia, Hanutiya etc. have high fluoride content present in them, thus leading to adverse effects on the people residing in the study area. As it is never the late to realize that water is the most critical factor, so we need to take proper remedial measures to maintain its quality and conserve it as we do not have it on any other planet except Earth making it the only place where man can survive.