

A STUDY OF POLLUTION STATUS OF MACHNA RIVER WATER IN MADHYA PRADESH

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ABSTRACT : In the present study, an attempt has been made to evaluate the water quality of "Machna River" flowing through Betul city (M.P.) for a period of 06 months to assess the suitability of water for irrigation and drinking purposes. The parameters observed for this present study were Sodium Absorption Ratio (SAR), Electrical Conductance (EC) and Sodium Percent (SP). Present observations confirm that the water quality of Machna River water is suitable for irrigation and drinking purposes.

KEYWORDS: Machna River, Water Quality, Irrigation, Sodium Absorption Ratio, Electric Conductance, Sodium Percent, Salinity.

1. INTRODUCTION

An attempt has been made in the present study to evaluate the the quality of "Machna River" water of Betul city (M.P.) with respect to its suitability for irrigation and drinking purposes. Betul, one of the districts of Madhya Pradesh is situated nearly 190 kms. South-west of capital city Bhopal. The need of water for irrigation, industrial and other purposes is not only fulfill from Machna River water but also the life-line of drinking water need of the most part of Betul city. The river originates from village Barsali and ultimately confluence with river Tawa and finally joins the river Narmada.

MATERIAL AND METHODS

Water quality assessment was made during 06 months from Jan. 2018 to Aug. 2018. The samples were collected from different points to cover the complete area of river water flow. The analysis of water samples were performed employing standard methods for examination of water and waste water (APHA 1992) and evaluated for its suitability for irrigation and drinking uses with reference to Sodium Absorption Ratio (SAR), Electrical Conductance (EC) and Sodium Percent (SP).