
Groundwater Quality Mapping in Man River Basin of Akola and Buldhana Districts, Maharashtra

S.F.R. Khadri* and Kanak Moharir

Department of Geology, SGB Amravati University, Amravati- 444 602, India

**E-mail:syedkhadri_62@yahoo.com*

Abstract

Groundwater has become a necessary resource over the past decades due to the increase in its usage for drinking, water supply, irrigation and industrial uses. Groundwater quality is equally important as that of quantity. Mapping of spatial variability of water quality is of vital importance and particularly significant where groundwater is primary source of potable water. The aim of present study is to evaluate groundwater quality in the Man river basin of Akola and Buldhana districts of Maharashtra, India. The chemical composition of groundwater has been qualitatively evaluated using observations over a period of pre-monsoon (June) season of 2013. Samples were analysed for various physico-chemical parameters such as total hardness (TH), K, Na, Mg and Cl. Geographical Information System (GIS) is used for the spatial analysis, which is a powerful tool for representation and analysis of spatial information related to water resources. The spatial variation maps of these groundwater quality parameters were derived and integrated through GIS.

Keywords: GIS, Groundwater, Physicochemical parameters, spatial interpolation