

STUDY OF GROUNDWATER QUALITY FOR IRRIGATION IN VEERAPANDY BLOCK, SALEM DISTRICT, TAMILNADU.

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Abstract

Hydrogeochemical study was carried out in Veerapandy block located near Salem in Tamil Nadu, India with an objective of understanding the suitability of local groundwater quality for irrigation purposes. Fifteen representative groundwater samples were collected during February, 2013 and analysed for physical and chemical parameters. Groundwater in this area was assessed for irrigation purposes on the basis of Sodium percentage (Na %), Magnesium hazard (MH), Residual Sodium Carbonate (RSC), Sodium Absorption Ratio (SAR), Permeability Index (PI) and WILCOX, GIBBS and USSL classifications. Most of the groundwater samples were suitable for irrigation, except in a few locations (15%) based on Magnesium hazard.

Keywords: Hydrogeology, Irrigation quality, Veerapandy, Thirumanimuttar, USSL, WILCOX, GIBBS