



ChemTech

International Journal of ChemTech Research

CODEN (USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555
Vol.12 No.03, pp 146-158, 2019

Evaluation of Mine Water Quality for Irrigation by Using Iwqi in Walajah Tank, Tamil Nadu State

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Abstract : The objective of present study is to assess the suitability of mine water quality for irrigation purposes flowing in walajah tankcuddalore district, TamilNadu through a single parameter called an Irrigation Water Quality Index(IWQI). There are several ways to assess the quality of water as deemed fit for drinking and irrigation use. Irrigation Water Quality Index (IWQI) is an effective tool for rating water quality interms of spatial and temporal changes. Water samples were collected from 8 supply channels of walajah tank at Head, Middle and Tail reaches. Collected samples were tested to determine various physico-chemical parameters such as pH, Total Dissolved Solids, Total Hardness, Bicarbonate, Nitrate, Sodium, Calcium, Magnesium, Chloride, Electrical Conductivity (EC), Sodium Absorption Ratio(SAR), Flouride Suitability of water for irrigation is interpreted interms of IWQI.

Key words : Sodium Absorption Ratio (SAR) physicochemical parameters, Irrigation Water Quality Index (IWQI), Head, , Supply Middle, Tail reaches channels.

M. Latha *et al* /International Journal of ChemTech Research, 2019,12(3): 146-158.

DOI= <http://dx.doi.org/10.20902/IJCTR.2019.120322>
