## Quality Assessment of Groundwater in Rampachodavaram Division of East Godavari District, Andhra Pradesh

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## ABSTRACT

Quality of ground water resources in the Rampachodavaram division of East Godavari district in Andhra Pradesh assessed for its suitability for irrigation. For this, one hundred and two (102) ground water samples were collected from study area in pre and post-monsoon seasons of 2017-2018). The ground water samples were analyzed for pH, EC, cations and anions viz.,  $Ca^{2+}$ ,  $Mg^{2+}$ ,  $Na^+$ ,  $K^+$ ,  $HCO_3^-$ ,  $CO_3^{-2-}$ ,  $CI^-$  and  $SO_4^{-2-}$ , SAR and RSC were also calculated. Eighty six per cent (86%) ground water samples were neutral (pH 6.5-7.5) in reaction in both pre and post-monsoon seasons while EC values of majority of water samples were under  $C_3$  class (EC 0.75-2.25 dS m<sup>-1</sup>) in both pre and post-monsoon seasons seasons. The SAR and RSC values of majority samples were under  $S_1$  (0-10) and  $A_1$  (< 1.25 me L<sup>-1</sup>) classes in pre and post-monsoon seasons, respectively,

Key words: Quality assessment, Groundwater quality, Irrigation.