Some physico-chemical characters of groundwater in some (selected) water supply wells in the Jaffna peninsula

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Abstract

The study focussed on the criteria used in assessing the quality of ground water. Among physical properties, turbidity, colour, odour and taste and among chemical properties; chloride, iron and sulphate concentration, total alkalinity, total dissolved solids, electrical conductivity and pH were determined for seven water supply wells. These values were compared with WHO standards and Sri Lankan standard values. Water supply wells at Velanai and Chunnakam did not have quality problems and can be used continuously for human consumption. Extraction of water from water supply wells at Araly South, Vaddukoddai and Watharawatta could be extended but continuous monitoring of chemical characters is essential. Kayts and Karaveddy wells could not be used for drinking because some chemical and physical characters of these wells did not meet WHO and Sri Lankan standards.

Author keywords

Groundwater; Jaffna peninsula; Salinity; Shallow wells; Sri Lanka; Supply wells; Water