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## Impact of agriculture on ground water quality of Batlagundu town, Tamil Nadu

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**Abstract:**The hydro chemical study was carried out in Batlagundu, Dindigul District, Tamilnadu, India, with an objective of understanding the suitability of local groundwater quality for domestic and irrigation purposes. Ground water samples have been collected from six different areas of Batlagundu town. The samples have been analyzed to determine 23physico chemical parameters. The parameters namely temperature, pH, sulphate, potassium, phosphate, DO, BOD and COD were within the permissible limits of BIS and WHO while other parameters were found to exceed the limit. From the analyzed data, water quality indices such as sodium absorption ratio, kelly's ratio, magnesium absorption ratio, residual sodium carbonate, residual sodium bicarbonate, permeability index and soluble sodium percentagehave also been determined.SAR and MAR signified good quality while other indices indicated the ground water as moderately suitable for irrigation purposes. This study revealed that the ground water of the study area was not potable but had good irrigation quality.

Key words: Ground water, water quality parameters, Batlagundu, water quality indices.

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