



ChemTech

## International Journal of ChemTech Research

CODEN(USA): IJCRGG, ISSN: 0974-4290, ISSN(Online):2455-9555

Vol.10 No.1 pp110-115,2017

### Assessment of Physico- Chemical Characteristics of the Soil in Vaigai Reservoir, Tamilnadu, India

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**Abstract:** Industrialisation, urbanisation and modern agricultural practices play a vital role in the quality and yield of water resources. Proper management as well as protection and exploitation of the water resources are the challenges imposed by the population growth. The use of fertilizers in the catchment area of vaigai reservoir as well as agricultural waste inflow cause some changes in the nutrients of the soil. The present study deals with the change in physico chemical properties of the soil in the upstream side of vaigai reservoir. The physico chemical properties such as moisture content, specific gravity, plasticity, pH, electrical conductivity etc., were studied. The nutrients such as nitrates, phosphates and potassium present in the soil were also analysed. These results demonstrate that agricultural management impacts will vary the soil nutrients depending on climatic conditions and also the erosion in the upstream side may also leads to changes in the characteristic properties of the soil.

**Keywords:** Industrialisation, Nutrients, Plasticity, Reservoir, organic matter.

Ninijamerina, R. *et al*/International Journal of ChemTech Research, 2017,10(1): 110-115.

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