Research **A**rticle

Characterization and evaluation of soils of Lalpuram village, Cuddalore district using geospatial technologies

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Summary

A study was undertaken to evaluate three soil series belonging to Lalpuram village of Cuddalore district, Tamil Nadu for sustainable land use planning. Three soil series were tentatively identified and mapped into three mapping units using GIS technique. These mapping units were grouped in to land capability class III and IV with limitations of soil texture and cation exchange capacity. Soil-site suitability evaluation for cotton, sorghum, sunflower, maize and pearlmillet showed that clay soils were moderately suitable (S2) for sorghum and sunflower, marginally suitable (S3) for cotton, maize and pearl millet. The sandy soils were marginally suitable (S3) for pearl millet and not suitable for cotton, sorghum, sunflower and maize.

Key words : Land evaluation, GIS, Soil-site suitability