ABSTRACT

Soil and land resource inventory of Chengamanad panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during 2007 to assess the resources of the area, to identify the problems and to suggest suitable development programmes for sustained and integrated development of the area.

Chengamanad panchayat is located in Aluva taluk of Ernakulam district and extends over 1558 ha. The garden land covers an area of 763.5 ha and is mainly cultivated with coconut. The total area under wetland is 762.5 ha. Paddy is the major crop cultivated. An area of 95.5 ha of the wetlands is converted for brick making, raising garden land crops and for non agricultural purposes. The soil series identified in the garden land are Perumbavoor, Kilikulam, Irapuram, Kalady and Punnamattom. The major portion of the garden land is under Punnamattom series (266.0 ha) followed by kalady series (239.5 ha). Ikkaranad (619.0 ha) and Mulamthuruthy (48.0 ha) are the soils identified in the wetlands.

Based on the characteristics of the soils, land capability subclasses IIw, IIe, IIIe, IIles, IVe and IVes and land irrigability subclasses 2d, 2t, 3t, 3st, 4t and 4st were recognized in the panchayat. IIw and 2d are the predominant land capability class and land irrigability class respectively. Other interpretative studies like hydrologic grouping, crop suitability, fertility and production potential of the soils are also included in the report. The problems encountered in the panchayat are dealt with briefly. Interpretative maps are appended.