ABSTRACT

Soil and land resource inventory of Kottarakkara panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during 2006 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.

Kottarakkara panchayat is located in Kottarakkara taluk of Kollam district and extends over 1740.0 ha. The panchayat lies in the midland region. The garden land covers an area of 1398.25 ha and is mainly cultivated with rubber, tapioca, banana, coconut, tuber crops, pepper, etc. The total area under wetland is 173.7 ha. Paddy is cultivated only in 24.0 ha. Nearly 47 % (325.75 ha) of the original wetlands has been converted for various purposes such as cultivation of crops like tapioca, banana, rubber, etc and for construction purposes. During the course of soil survey, eight soil series were identified. The soils identified in the garden land are Chadayamangalam, Kulangumala, Ummannonoor, Kottarakkara, and Kureepuzha series. The major portion of the garden land is under Ummannonoor series (1076.10 ha) followed by Kottarakkara series (158.0 ha). Pooyappally (137.2 ha), Kunnakara (19.0 ha) Mylom (17.5 ha) are the soils identified in the wetland. The soils seen in the converted wetlands were classified as Miscellaneous soils.

Based on the characteristics of the soils, land capability subclasses IIw, IIle, IIIws, ILIes, IVe, IVes and Vles and land irrigability subclasses 2d, 2ds, 2st, 3t, 3st, 4t, 4st and 5st were recognized in the panchayat. IVe and 4t 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.