ABSTRACT

Soil and land resource inventory of Kottakkal panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during 2003-2004 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.

Kottakkal panchayat is located in Tirur taluk of Malappuram district and extends over 2045 ha. The panchayat lies in the midland region and has normal relief. The garden land covers an area of 1722.0 ha and is under a coconut based mixed cropping pattern. The total area under wetland is 323.0 ha. Paddy is the main crop cultivated. An area of 7 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, seven soil series were identified. The soils identified in the garden land are Naduvattom, Vattallur, Angadipuram and Ponmundom series. The major portion of the garden land is under Naduvattom series (1023.0 ha) followed by Vattallur series (316.0 ha). Ramapuram (182.0 ha), Valampur (121.0 ha and Perumanna (13.0 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, Ille, Illes, IVe, IVes and Vles and land irrigability subclasses 2d, 2t, 3t, 3ts, 4t, 4ts, 5t, 5ts and 6ts were recognized in the panchayat. Ille 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.