ABSTRACT

Soil and land resource inventory of Madavoor 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.

Madavoor panchayat is located in Chirayinkeezh taluk of Thiruvananthapuram district and extends over 1853.0 ha. The panchayat lies in the midland and mid upland region. The garden land covers an area of 1366.5 ha and is cultivated with coconut, rubber, banana, pepper, tapioca, etc. The total area under wetland is 285.75 ha. Paddy is the main crop cultivated. An area of 26.25 ha of the original wetlands has been converted for cultivation of crops like tapioca, banana, coconut, arecanut, etc. During the course of soil survey, six soil series were identified. The soils identified in the garden land are Chempakathipara, Mukkunni, Nedumangad, Trivandrum and Thonnakkal series. The major portion of the garden land is under Nedumangad series (898.25 ha) followed by Trivandrum series (269.75 ha). Vembayam series (285.75 ha) is the only soil identified in the wetland. The soils identified in the converted wetlands were classified as Miscellaneous soils.

Based on the characteristics of the soils, land capability subclasses IIw, IIIw, IIIe, IVe, IVes, Vle and Vles and land irrigability subclasses 2d, 3t, 4t, 4st and 6st were recognized in the panchayat. IVes and 4st 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.