ABSTRACT

Soil and land resource inventory of Avoli panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during 1990 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.

Avoli panchayat is located in Moovattupuzha taluk of Ernakulam district and extends over 1860 ha. The garden lands cover an area of 1428 ha and are mainly cultivated with rubber, coconut, pepper, pineapple, banana, tapioca, etc. The total area under wetland is 340.5 ha. Paddy is cultivated only in an area of 35 ha. The wetlands are used for raising garden land crops or fallowed. An area of 41.5 ha of the wetlands is converted for the cultivation of pineapple, banana etc or used for non-agricultural purposes. The soil series identified in the garden land are Odakkali, Perumbavoor, Kilikulam, Irapuram, and Punnamattom. The major portion of the garden land is under Odakkali series (474.5ha) followed by Perumbavoor series (376.5ha). Vazhakulam (217.5 ha), Kothamangalam (58 ha), and Ikkaranad (23.5 ha) are the soils identified in the wetlands.

Based on the characteristics of the soils, land capability subclasses IIw, IIe, IIIe, IVe and IVes and land irrigability subclasses 2d, 2t, 3t, 3st, 4t and 4st 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.