ABSTRACT

Soil and land resource inventory of Mukkam panchayat was undertaken by the soil survey wing of the Department of Agriculture during 2005-2006 to assess the soil and land resources of the area, to identify the problems and to suggest suitable development programmes for sustained and integrated development of the area.

Mukkam panchayat is located about 30 km east of Kozhikode city and covers an area of 3128 ha. The garden lands are mainly cultivated with coconut, arecanut, rubber, cashew, tapioca and miscellaneous fruit crops and cover an area of 2642.35 ha (nearly 85% of the total area). The total wet land area is 361.65 ha. Most of the area is converted for various purposes such as cultivation of crops like arecanut and banana and for construction purposes. Nearly 81% (292.10 ha) of this original wet lands has been converted for various uses and is put under miscellaneous soil. The major soil series identified in the garden lands are Nanminda, Thiruvampadi, Kunnamangalam, Memmala, Sivapuram, Chaliar, Tanneeramala and Kalarikunnu series. The major portion of the garden land is under Nanminda series (734.85 ha) followed by Thiruvampadi series (650.80 ha). Ulliyeri is the soil series (69.55 ha) identified in the wet lands.

The soils in the panchayat are susceptible to moderate erosion hazard. Based on the characteristics of the soils, land capability subclasses IIw, IIe, IIle, IIles, IVe, IVes and VIe and land irrigability subclasses 2d, 2t, 3t, 4t, 4st, 5t, 5st and 6t were recognized in the panchayat. IVe and 5t are the predominant land capability classes and land irrigability classes respectively. Other interpretative studies like hydrologic grouping, crop suitability, fertility and production potential of the soils are also included in the report. The main problems encountered in the panchayat are dealt with briefly. Interpretative maps are appended.