ABSTRACT

This report deals with the soil and land resources of Meppayur panchayat of Koilandy taluk of Kozhikode district and provides a good amount of knowledge about the soils, their spatial distribution and relationship with other topographical features, land use and land cover, present cropping pattern and management level and socio-economic data of the panchayat in detail. It also analyses the major problems especially in relation to the extent of soil and land degradation, and gives management requirements and recommendations for various uses.

Meppayur panchayat is located about 15 KM north-east of Koilandy town and covers an area of 2341 ha. The garden lands are mainly cultivated with coconut, areca nut, rubber, cashew and tapioca. It occupies an area of 2016.95 ha (nearly 86 % of the total area). The total wet land covers 259.05 ha in the panchayat and most of the area is converted for various purposes such as cultivation of plantation crops like arecanut and banana and for construction purposes. Nearly 54.5 % (141.35 ha) of this original wet lands is converted various other purposes and is put under miscellaneous land type. The major soil series identified in the garden lands are Chaliar, Sivapuram, Nanminda Kunnamangalam, Memmala and Tanneeramala series. The major portion of the garden land is under Kunnamangalam series (853.95 ha) followed by Nanminda series (425.15 ha). Ulleyeri is the major soil series (84.20 ha) identified in the wet lands.

More than 95% of the soils in the panchayat are susceptible to moderate erosion hazards and 1.29 % severe erosion hazards. These areas coming under Kunnamangalam, Nanminda, Memmala, Sivapuram, Tanneeramala and Chaliar series require urgent and suitable soil conservation measures to prevent further degradation.

Based on the characteristics of the soils, land capability classes IIw, IIIe, IIIes, IVe and Vle and land irrigability classes 2d, 2t, 3t, 4t, 5t and 6t were recognized in the panchayat. IVe and 3t 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 were made. The main problems encountered in the panchayat are dealt with briefly. Interpretative maps are appended.