ABSTRACT

Soil and land resource inventory of Kalliyoor panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during April to June 2004 to assess the resources, to identify the problem and to suggest suitable development of the area. The report gives a detailed account of the general characteristics and soils of the area, major problems and management requirements, interpretations and recommendations for various uses.

The panchayat spreads over an area of 1728 ha and is located in the southern part of Thiruvananthapuram taluk in Thiruvananthapuram district. Physiographically, the panchayat comes under midland region. The major crops in the panchayat are coconut, tapioca, vegetables, banana, and paddy. During the course of detailed soil survey six soil series were identified viz. Vizhinjam, Neyyattinkara, Amaravila, Vellayani, Korani and Pallichal. Out of these Amaravila and Korani cover the wetland area. Vizhinjam series occupies the major share of the garden land (567 ha). The miscellaneous soil type consists of the reclaimed paddy fields and it covers an area of 138 ha. The garden land is mainly cultivated to coconut, banana, pepper and tapioca. Paddy is the main crops cultivated in the wet land (85 ha). Banana, tapioca and vegetables are also grown.

The soils of Kalliyoor panchayat are classified into three land capability classes such as II, III and IV and three land irrigability classes such as 2, 4 and 5. The predominant land capability subclass is IVes and 5st, the land irrigability subclass. Other interpretative studies like hydrologic grouping, crop suitability, soil fertility and production potential of the soils were made. The main problems that are encountered in the panchayat and its suggested management are dealt with briefly. Interpretative maps are also appended.