ABSTRACT

Soil and land resource inventory of Vayalar panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during 2002 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.

Vayalar panchayat is located in Cherthala taluk of Alappuzha district and extends over 1450 ha. The panchayat is part of the low land tract. The garden land covers an area of 771.5 ha and is cultivated with coconut, banana, cashew, arecanut, vegetables, tuber crops, etc. The total wetland area is 143.0 ha. Paddy is cultivated only in less than 10 ha. Waterlogging, salt water intrusion, pest and disease incidence, and high cost of cultivation are the constraints in paddy cultivation. Prawn cultivation is undertaken to a limited extent. The remaining area of wetland is kept fallow. Nearly 70% (340.0 ha) of the original wetlands has been converted for various uses and is put under Miscellaneous soil. The soil series identified in the garden land are Kavur (490.25 ha) and Kattur (281.50 ha). Cherukole (143.0ha) is the only wetland soil identified in the wetland.

Based on the characteristics of the soils, land capability subclasses IIIs, IVs and IVsw and land irrigability subclasses 3s and 3sd were recognized in the panchayat. IVs and 3s 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.