ABSTRACT

Erath panchayat comprising an area of 2174ha is located in the southern portion of Pathanamthitta district. The garden land covers an area of 1843.6ha. Major portion of garden land is under mixed cropping of coconut, banana, tapioca, pepper and fruit trees and the rest is occupied by rubber. The area under wetland cultivated with paddy and vegetables is 284.4ha. An area of 20ha of wetland has been converted for the cultivation of coconut, tapioca, banana and vegetables.

In 1984 detailed soil survey of Erath panchayat was carried out. The data collected then were updated in 2002. Six soil series have been identified in the panchayat. These include Adoor, Bharanikkavu, Sooranad, Ezhamkulam, Peruvellikkara and Erath series. Adoor series occupies the major portion of the garden land with an area of 1298ha followed by Ezhamkulam series (308ha), Peruvellikkara (162.4ha) and Baranikkavu series (75.2 ha) and made up land covers an area of 20ha. The two wetland soils, namely Earth and Sooranad covers an area of 226.9 and 57.5 ha respectively. The soil series Adoor, Ezhamkulam, and Peruvellikkara are gravelly in nature and have low organic matter content. These soils require application of a high amount of organic manures. In wet lands, periodical flooding is experienced due to the over flow from the main stream, Keerathil thode which empties in to Kallada river. Proper checking of the overflow should be done by construction of suitable structures so as to protect rice crop from damage.

In the garden lands, coconut based mixed cropping pattern is most suited. In areas with a slope range of 10 to 15 %, rubber is the suitable crop. Paddy is grown in wetlands. Generally during the 3rd crop season, land is kept fallow except in few areas where pulses and vegetables are cultivated. In Miscellaneous soils, coconut, tapioca, banana and vegetables are cultivated.

Four land capability classes such as II, III , IV and VI and two land irrigability classes viz.2,3,4,5 and 6 are encountered. IIIes is the predominant land capability subclass and 3ts, the land irrigability subclass. Other interpretative studies like hydrologic grouping, Crop suitability, soil fertility and production potential of the soils are conducted. The main problems encountered in the panchayat are dealt with briefly. Interpretative maps are appended.