Soil and land resource inventory of Amballoor panchayat was undertaken by the Soil Survey wing of the Department of Agriculture during 2010 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.

Amballoor panchayat is located in Kanayannur taluk of Ernakulam district and extends over 2259 ha. The panchayat is part of the midland tract. The garden land covers an area of 1352.0 ha and is cultivated with rubber, coconut, banana, pepper, tapioca, etc. The total wetland area is 771.0 ha. Paddy is the main crop cultivated. An area of 57 ha of the wetlands has been converted for various purposes such as cultivation of crops like rubber, coconut, banana, etc and for construction purposes. The soil series identified in the garden land are Kangarappady, Perumbavoor, Irapuram, Kurichilakode and Punnamattom. The major portion of the garden land is under Perumbavoor series (433.0 ha) followed by Kurichilakode series (244.0 ha). Thrikkakara (459.0 ha), Mulamthuruthy (261.0 ha), Kothamangalam (26.0 ha) and Charaladu (25.0 ha) are the soils identified in the wetlands.

Based on the characteristics of the soils, land capability subclasses IIw, Ile, IIle, IIIw, IVe, IVes and Vles and land irrigability subclasses 2d, 2t, 3t, 3st, 3ds, 4t, 4st and 6st were recognized in the panchayat. IVes and 4st 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.