Abstract: The expansion of plantations of cocoa is the main component in the plantation revitalization program which is applied by the Government of Indonesia in order to optimize the potential of cocoa. This policy has not been implemented well in East Dusun District, East Barito Regency, Central Kalimantan Province that just open cocoa plantations covering an area of 3 ha in the year 2016. The spatial analysis of land suitability by utilizing Geographic Information System capability that allows the expansion of plantations of cacao in this district. Spatial analysis to get the suitability of land for cocoa plantations uses overlay based on climate conditions and regulations of the Governor of Central Kalimantan. The proportion of land suitability class that is highly suitable, suitable, marginally suitable, and not suitable with each area size of 56,434.63 ha, 2,302.81 ha, not found, and 19,510.42 ha.

Keywords: Cocoa, Overlay, Land Suitability