

7.20 Gherang Gherang Land System

Inland from Point Addis and extending west as far as Wormbete Creek, flat-topped hills represent the remnants of an extensive former lateritic plateau. Small remnants are also found further north towards Moriac.

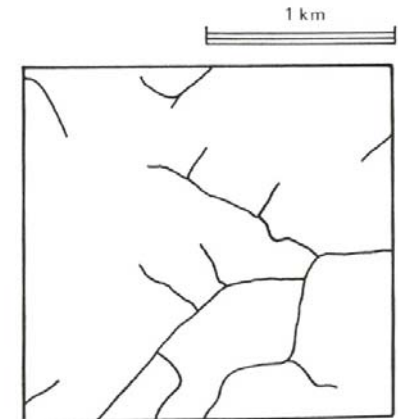
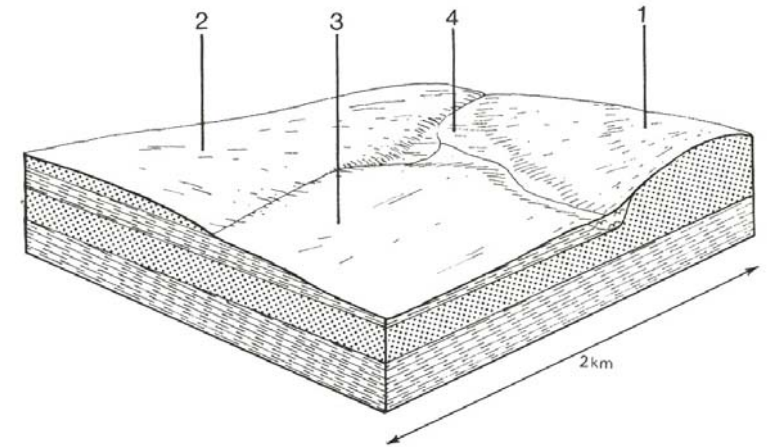
Over most of this landscape lateritic profiles are present, indicating former climatic conditions different from those experienced today. Where the Tertiary sediments contain excessive amounts of gravel, lateritic profiles are absent, but there is still evidence of deep weathering and leaching.

The soils are generally infertile, carrying a vegetation of stunted woodlands of *Eucalyptus obliqua* and *E. radiata*. The cinnamon fungus, *Phytophthora cinnamomi*, is very common on these plateau remnants and large areas of dead and dying native vegetation can be found.

Many of these remnants remain uncleared and are used for flora and fauna reserves and some minor forestry operations. Gravel extraction pits have been established on suitable areas of Crown land. These pits will not revegetate quickly without the appropriate management and have become popular with trail-bike-riders.



The flat lateritic plateaux carry woodland of E. obliqua and E. radiata, but the timber is generally unsuitable for milling.



GHERANG GHERANGArea: 52 km²

	Component and its proportion of land system			
	1 20%	2 7%	3 65%	4 8%
CLIMATE Rainfall, mm Temperature, 0°C Seasonal growth limitations	Annual: 600 – 850, lowest January (35), highest August (80) Annual: 14, lowest July (9), highest February (17) Temperature: less than 10°C (av.) July Precipitation: less than potential evapotranspiration mid October - April			
GEOLOGY Age, lithology	Lateritized Tertiary clay, gravel and clayey silt Recent aeolian siliceous sand			
TOPOGRAPHY Landscape Elevation, m Local relief, m Drainage pattern Drainage density, km/km ² Land form Land form element Slope (and range), % Slope shape	Flat or gently dissected plateau remnants 50 - 230 10 Rectangular 1.6 Gently undulating plateau Crest, slope Slope Broad flat crest, slope Swale, broad depression 2 (0-8) 2 (0-3) 2 (0-5) 1 (0-3) Convex Irregular Linear Concave			
NATIVE VEGETATION Structure Dominant species	Woodland <i>E. obliqua, E. radiata, E. ovata</i>	Woodland <i>E. radiata, E. nitida, E. obliqua</i>	Open forest <i>E. obliqua, E. baxteri, E. radiata, E. aromaphloia</i>	Open forest <i>E. ovata, E. viminalis</i>
SOIL Parent material Description Surface texture Permeability Depth, m	Quartz gravel, sand, some clay Stony yellow gradational soils Gravelly loamy sand Very high >2	Siliceous sand Grey sand soils, uniform texture Loamy sand Very high >2	Lateritized sediments Mottled yellow and red duplex soils with ironstone Loamy sand Moderate 1.2	Alluvial sand, clay, silt and plant remains Yellow-brown duplex soils, coarse structure Fine loamy sand Very low >2
LAND USE	Uncleared areas: Hardwood forestry for posts, poles and firewood; nature conservation; passive and active recreation; gravel extraction. Cleared areas: Beef cattle grazing on unimproved pastures; residential			
SOIL DETERIORATION HAZARD Critical land features, processes, forms	Low inherent fertility and high permeability lead to leaching of nutrients.	Low inherent fertility and high permeability lead to leaching of nutrients. Weakly structured sands with low water holding capacities are prone to wind erosion.	Low inherent fertility phosphate fixation and leaching of permeable upper horizons lead to nutrient decline.	High seasonal water table and weak surface structured lead to surface compaction.