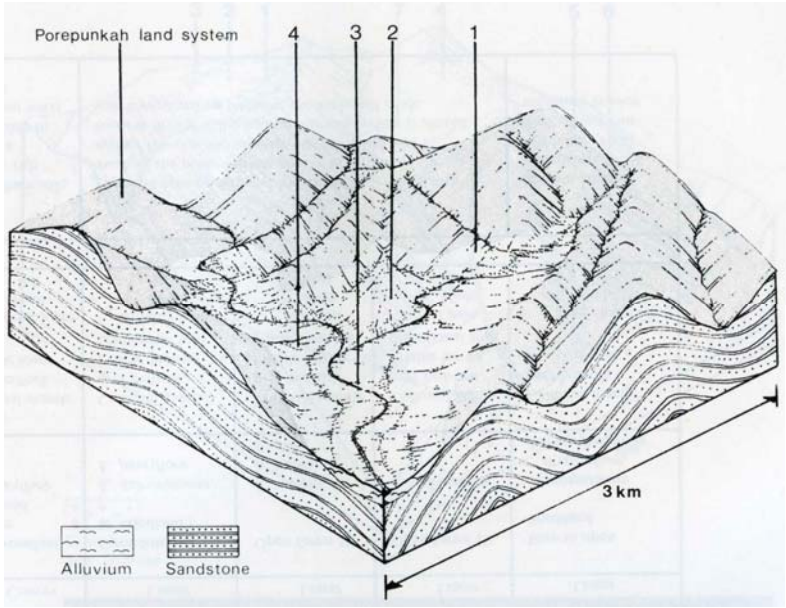
7.4 Bungamero land system

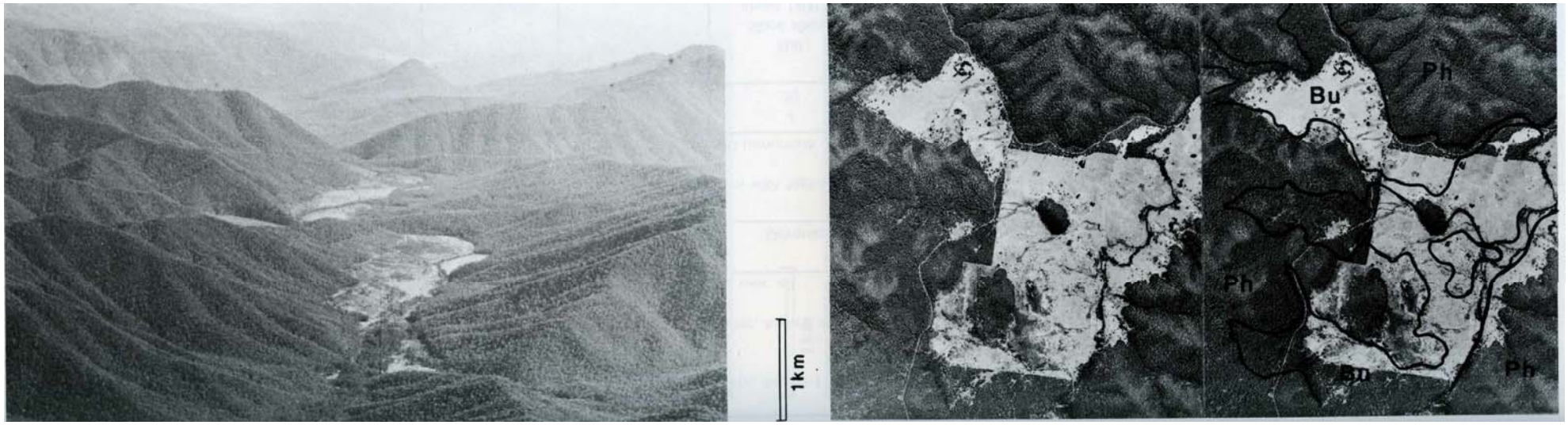
This is similar to the Myrtleford land system, but is wetter and cooler. It consists of the relatively broad valley bottoms of the main streams, up to 1 km wide, in their upper reaches. Where a mappable width of alluvial terraces exists along the stream, this is mapped as the Ovens land system. Ordovician sedimentary rocks predominate, although there are areas of metamorphosed sediments at Abbeyard, and the upper King River valley contains several rock types. Average annual rainfall is high. Temperatures are generally mild in summer and low in winter. Frosts are common in cleared areas through the colder months.

Reddish brown gradational soils with rough ped fabric are the most common, but those with smooth ped fabric are also common on the older land surface. Yellowish brown gradational soils on alluvium occur on the younger fans.

Open forest of *Eucalyptus radiata*, *E. rubida* and *E. dives* predominates, with small areas of *E. camphora* and *E. stellulata* in areas of impeded drainage. The relatively rare *E. neglecta* occurs along the upper reaches of the Buffalo and Buckland Rivers.

In many places, particularly where the valley bottom is wide, the native vegetation has been cleared for agriculture. These are relatively stable areas, but gullying of the dispersible soils in drainage lines could result if surface runoff increased.





BUNGAMERO LAND SYSTEM Area 300 sq km

CLIMATE				
Rainfall, mean (mm)	Annual 1000 -1500; lowest January (50-70), highest June (150-170)			
Temperature, mean (^{o}C)	Annual 13; lowest July (7), highest January (20)			
Seasonal growth limitations	Temperature – less than 10^{o}C (av): June-August Precipitation – months less than 50% frequency of effective rain: January-February			
GEOLOGY				
Age, lithology	Quaternary to Recent alluvium and colluvium			
PHYSIOGRAPHY				
Landscape	Valley piedmont			
Elevation range (m)	300-600			
Relative relief (m)	20			
LAND COMPONENT	1	2	3	4
Percentage of land system	25	50	15	10
PHYSIOGRAPHY				
Land form	Residual hill and fan	Fan	Fan	Stream flat
Position on land form	Upper level, dissected	Middle level	Lower level	-
Slope range (%)	5-20	5-15	3-8	2-3
Slope shape	Convex	Linear-Concave	Concave	Linear
NATIVE VEGETATION				
Structure	Open forest III	Open forest III	Open forest III	Open forest II to woodland
Dominant species	*E. radiata, E. rubida, E. dives, E. st-johnii*	*E. radiata, E. rubida, E. dives, E. st-johnii*	*E. radiata, E. rubida, E. dives, E. st-johnii*	*E. camphora, E. stellulata*
SOIL				
Parent material	Quaternary alluvium-colluvium; some *in situ* weathered rock (Ordovician sandstone, mudstone)	Quaternary alluvium colluvium	Quaternary alluvium-colluvium	Recent alluvium
Description	Reddish brown gradational soils with smooth ped fabric	Reddish brown gradational soils with rough ped fabric	Yellowish brown gradational soils on alluvium	Undifferentiated sand and loam soils
Surface texture	Clay loam	Loam	Loam	Sandy loam or gravelly loam
Permeability	High	High	High	High
Depth (m)	2.0	2.0	1.5	1.5
LAND USE	Mostly cleared; grazing, mostly beef or dairy cattle; some tobacco-cropping; pine plantations Uncleared areas; limited timber production; forest grazing			
SOIL DETERIORATION HAZARD				
Critical land features, processes, forms	Surface soils are readily compacted, which can result in excessive surface run-off and sheet erosion			High water table for much of the year; occasional flooding.