



UNIVERSITY OF
KWAZULU-NATAL

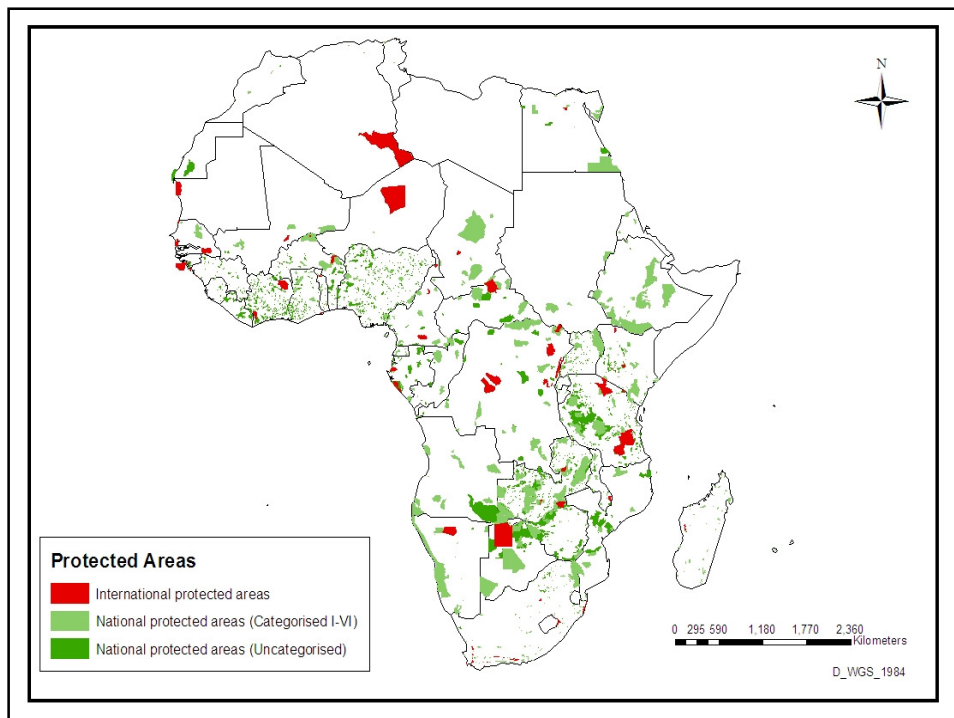


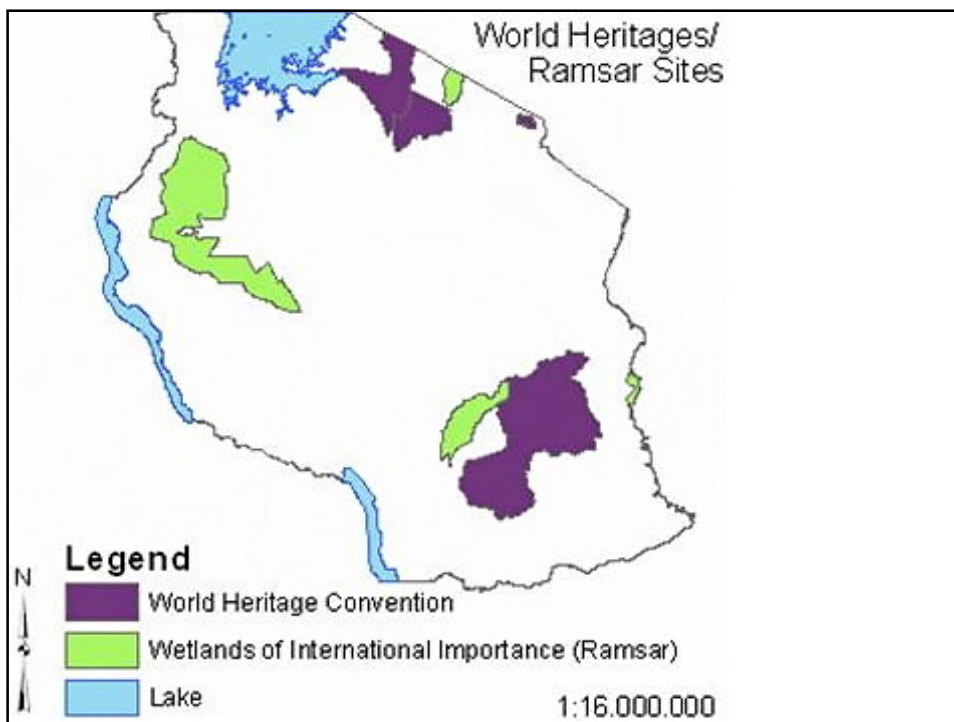
Biofuels in Africa – The Land Use Issue

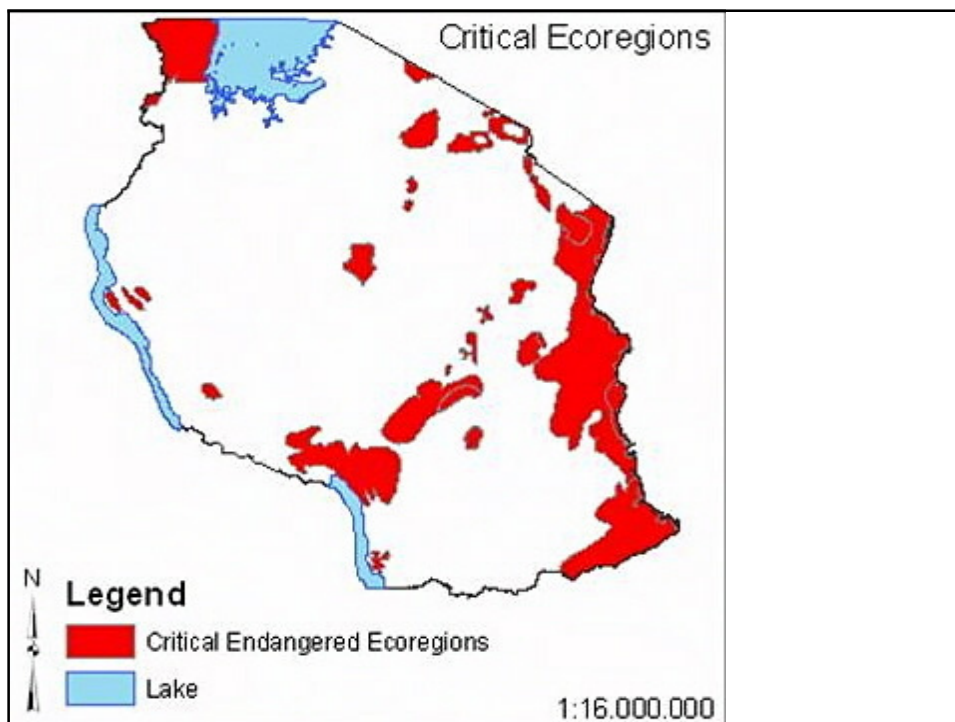
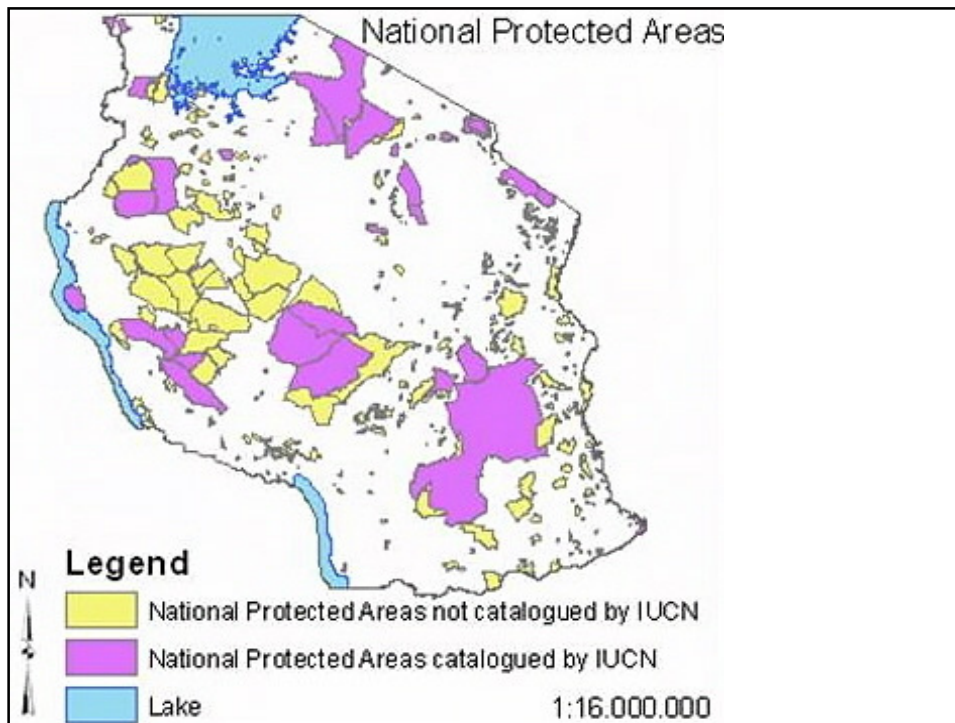
Dr Helen Watson

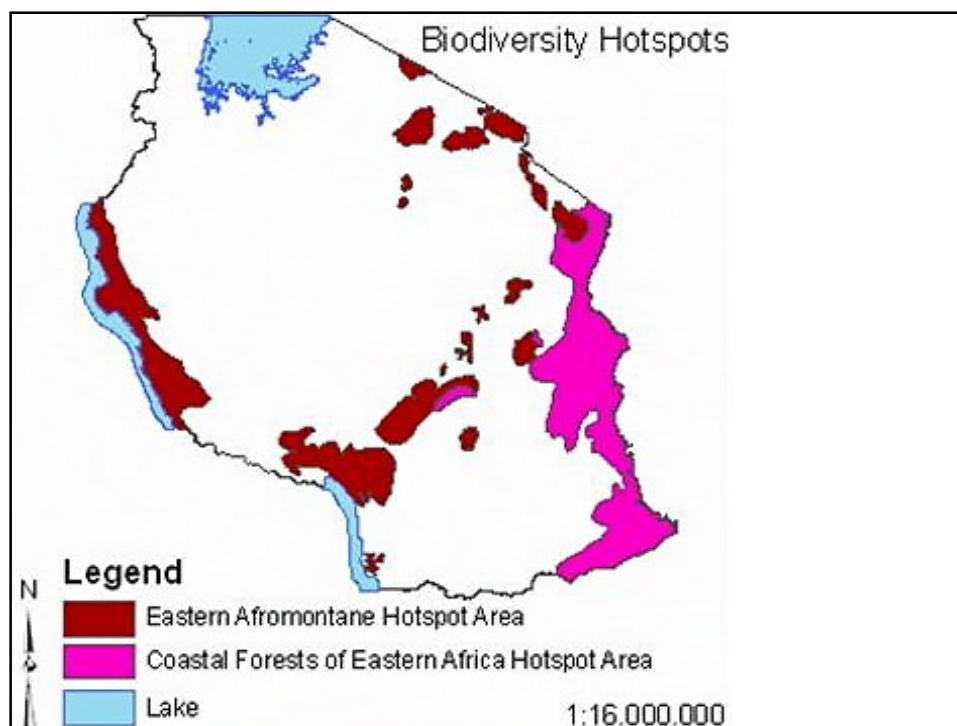
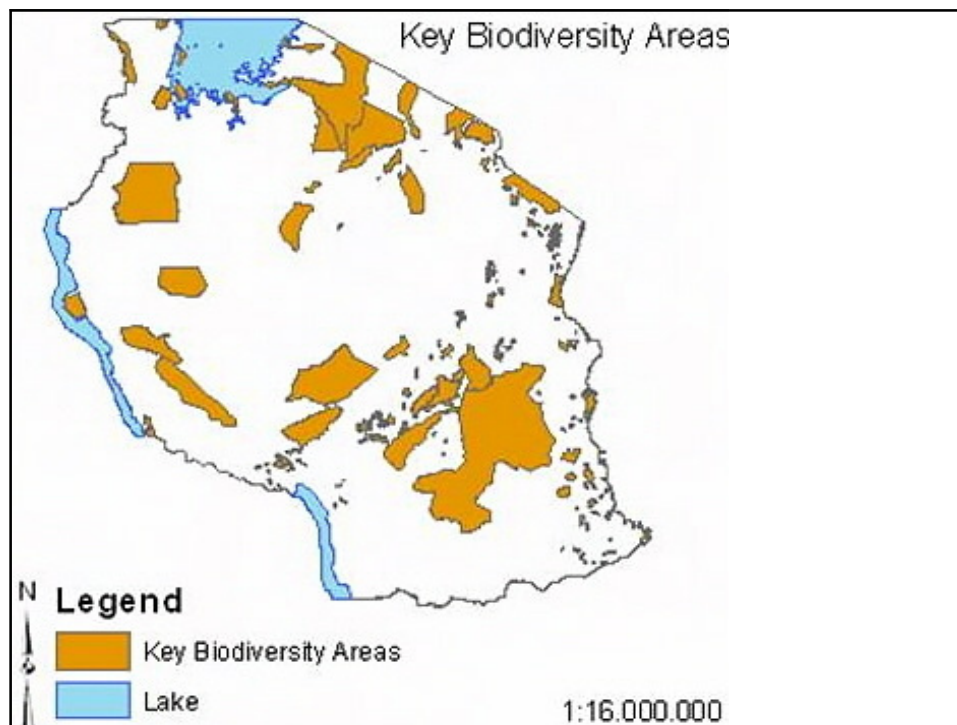


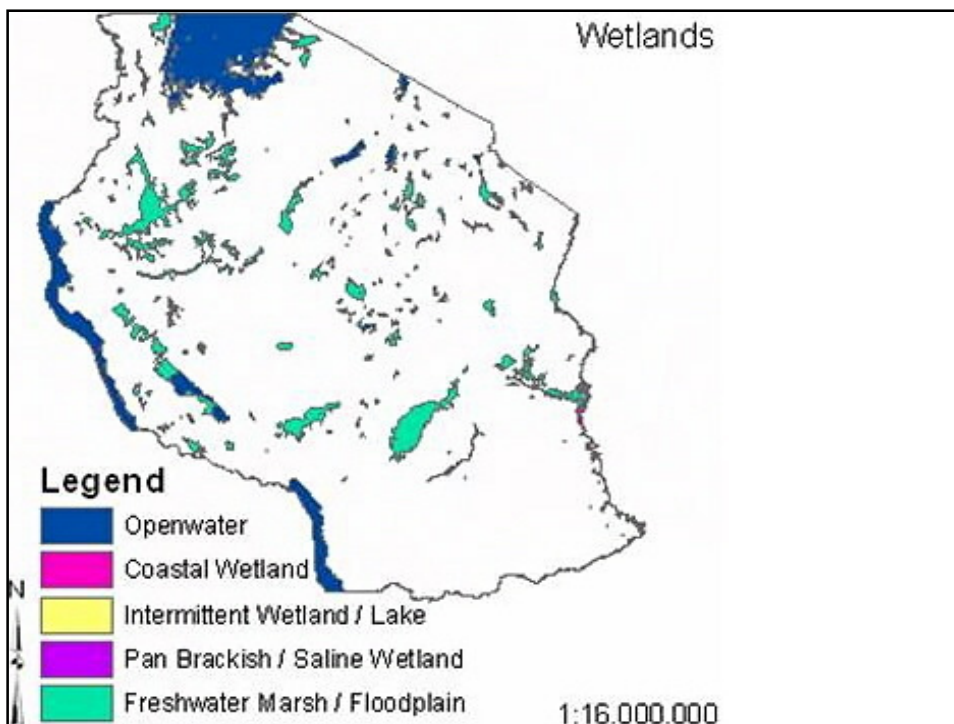
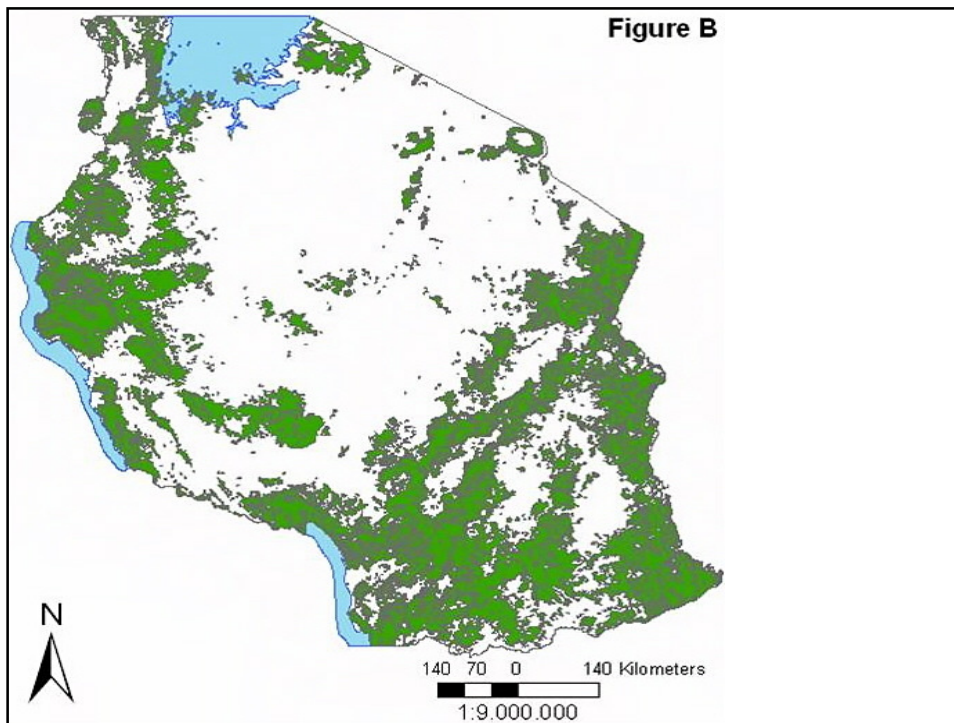
*'Bioenergy Policies for Sustainable Development in Africa'
International Workshop - 25 November 2008
Hotel Olympe International, Bamako, Mali*

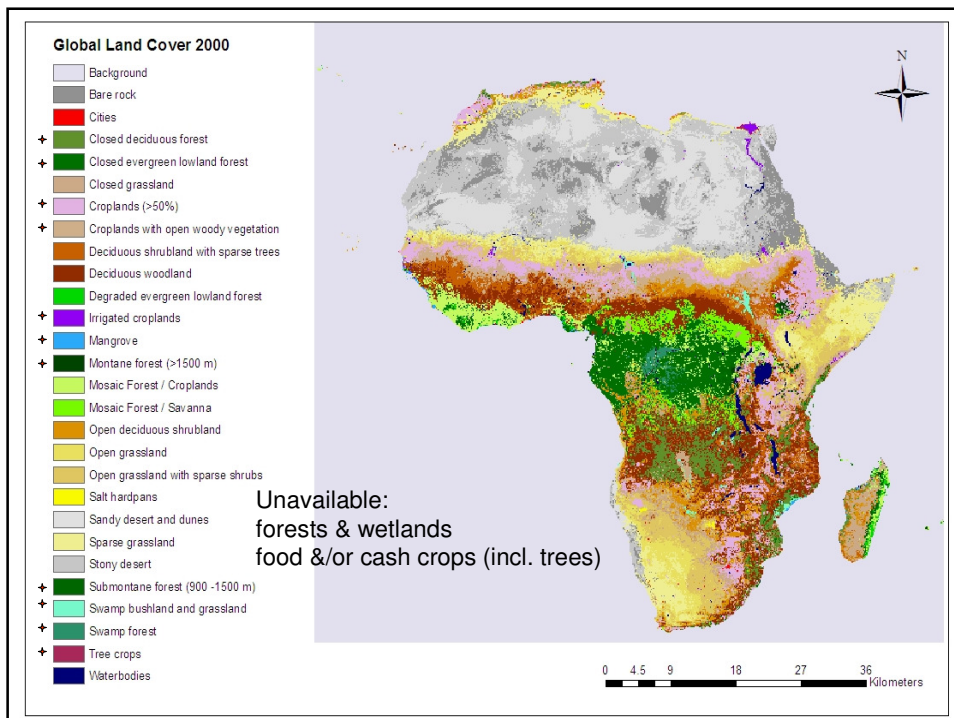
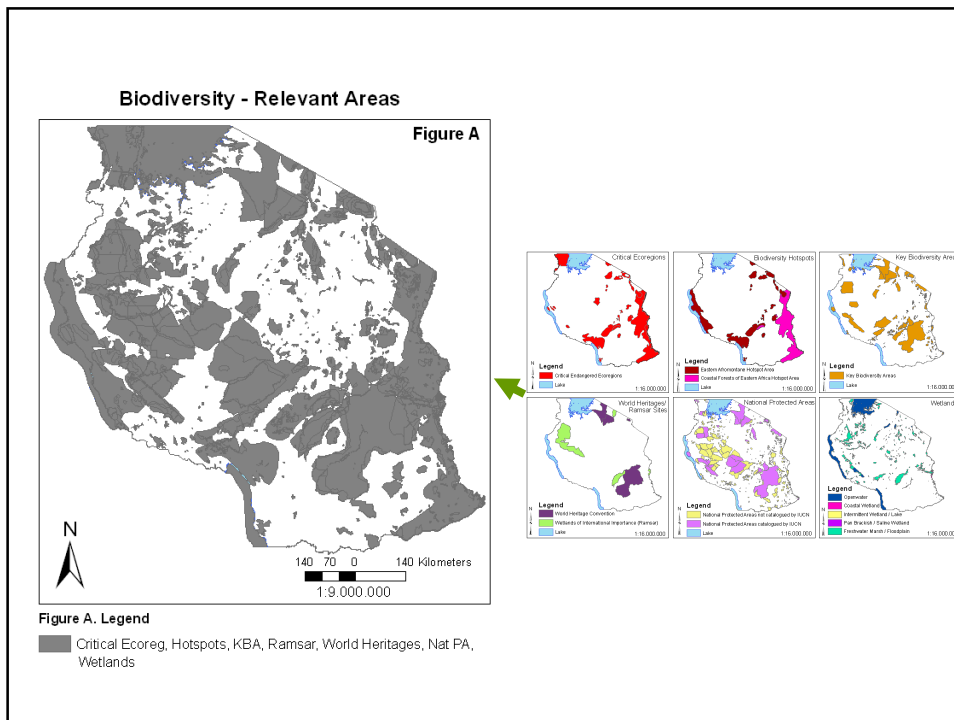












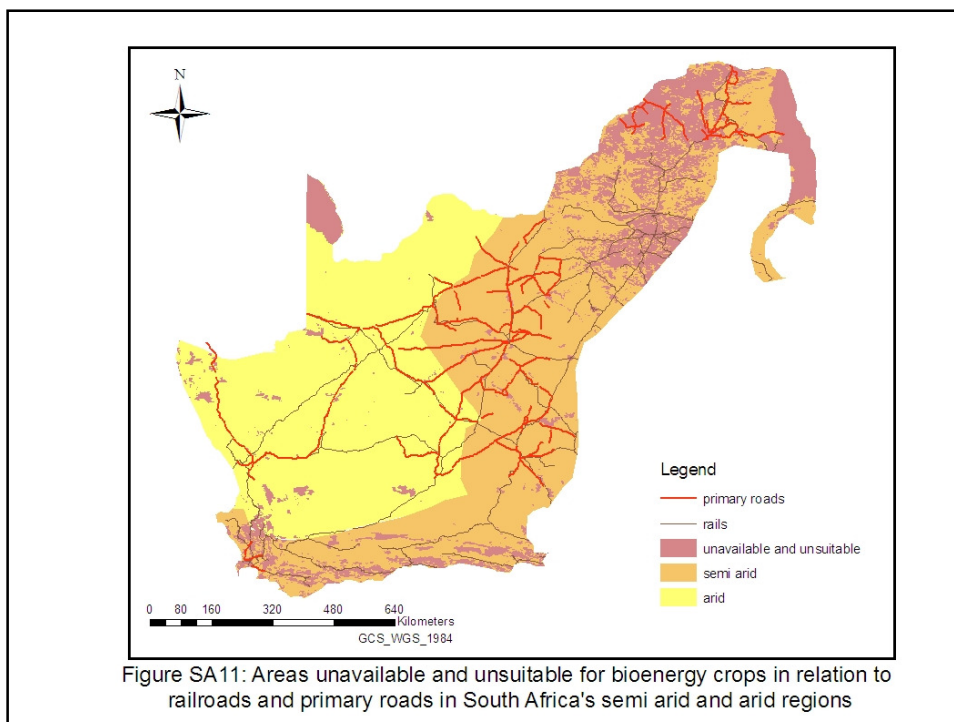
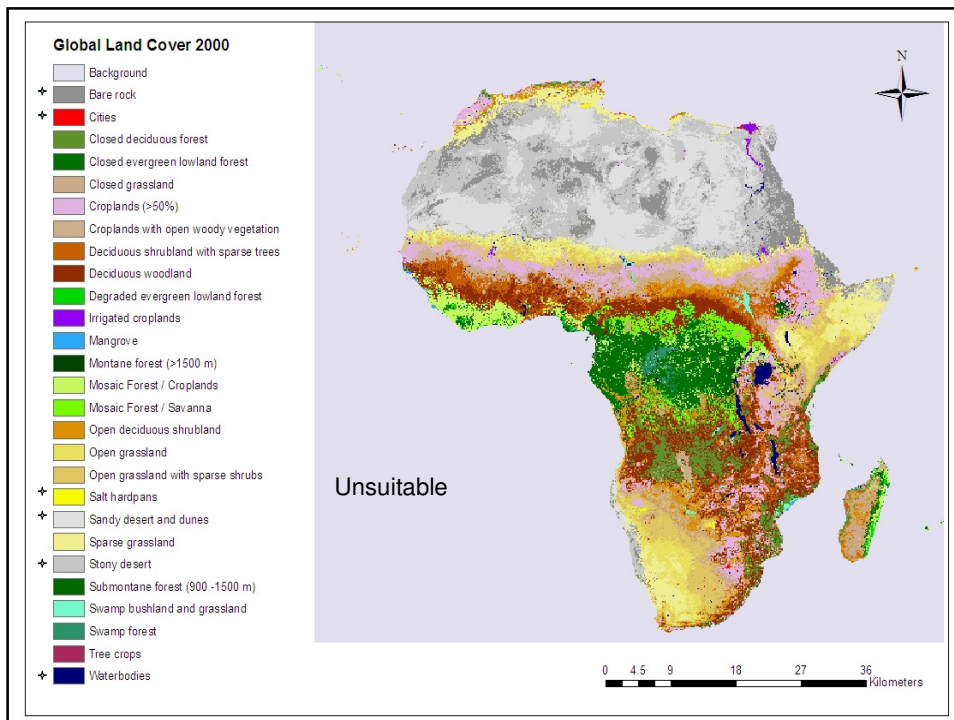
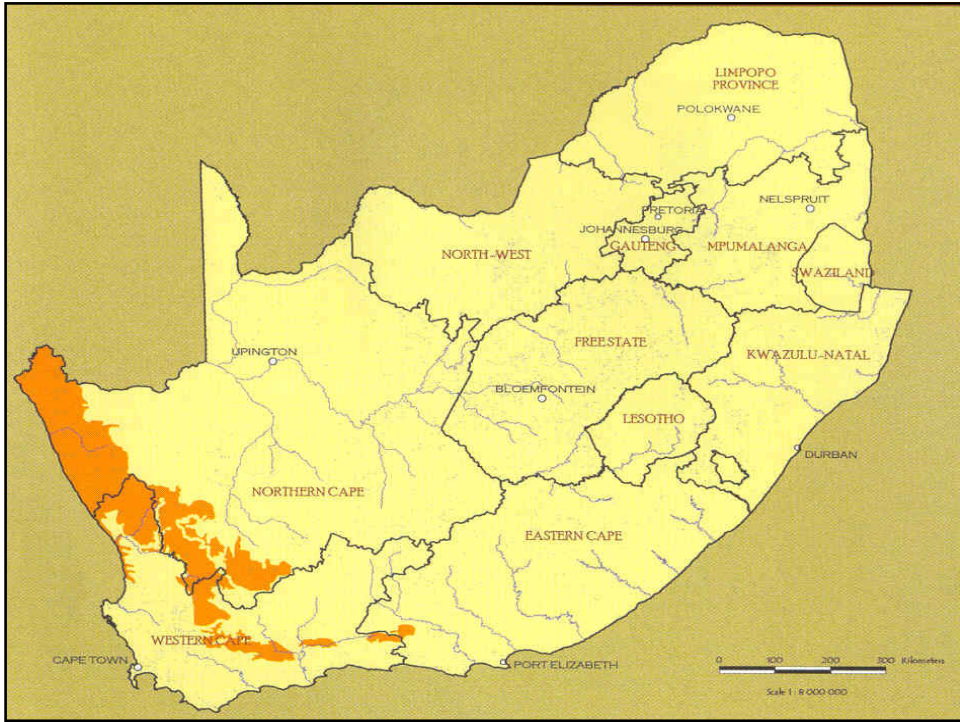


Figure SA11: Areas unavailable and unsuitable for bioenergy crops in relation to railroads and primary roads in South Africa's semi arid and arid regions



Bastard Quiver Tree
Aloe pillansii

Bastard Quiver Tree

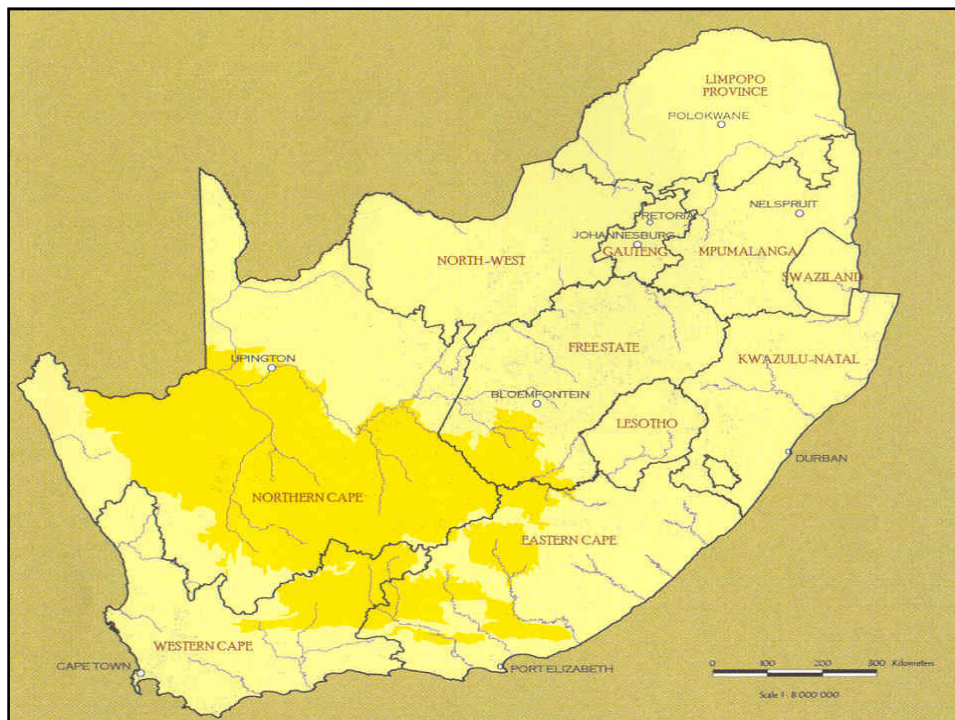
Year	Population
1990	High
2000	Low

Taxonomic Group	No. Species	No. Endemic Species	% Endemism	Critical	Endangered	Vulnerable
Mammals ^{JH}	67	16	39%	1	2	10
Birds ^{JH}	232	23	43%	0	0	5
Reptiles ^{BB,JH}	94	29	31%	0	0	6
Amphibians ^{JH}	12	8	13%	0	0	0
Invertebrates ^{MH}	?	?	?	0	0	8
Plants SM	4 849	1 954	40%			

JH: James Harrison, BB: Bill Branch, SM: Sue J Milton, MH: Michelle Hamer

SM From Cowling RM & Hilton-Taylor C (1999). *Plant biogeography, endemism and diversity*. In Dean WRJ & Milton SJ (eds) *The Karoo – ecological patterns and processes*. pp 42-56. Cambridge University Press, Cambridge, UK.

MH Assessment includes only butterflies, dragonflies and damselflies, some molluscs, the Colophon beetles, and some of the freshwater crustaceans.





Taxonomic Group	No. Species	No. Endemic Species	% Endemism	Critical	Endangered	Vulnerable
Mammals ^{JH}	75	16	39%	1	3	8
Birds ^{JH}	271	21	40%	0	0	10
Reptiles ^{BB,JH}	64	6	9%	0	0	1
Amphibians ^{JH}	13	5	8%	0	0	0
Fishes SM	29	1	3%	2	-	-
Invertebrates ^{MH}	?	?	?	0	1	13
Plants SM	2174	377	18%	?	?	?

JH: James Harrison, BB: Bill Branch, SM: Sue J Milton, MH: Michelle Hamer

MH Assessment includes only butterflies, dragonflies and damselflies, some molluscs, the Colophon beetles, and some of the freshwater crustaceans.

