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## APPENDIX A

### SUMMARY OF THE PARTICIPATORY RURAL APPRAISAL AT MADLIKI

#### OBJECTIVES

- a. To get first hand information from the community about their own situation.
- b. To get the community's needs, fears and limitations
- c. To facilitate the ownership of the project by the community through them making an input from the planning stages of the project, thus, ensuring their participation throughout the project.

#### APPROACH

A workshop or meeting was held with the writer being the facilitator. The meeting was conducted the traditional way, that is, the way the community usually conduct the meetings, however, specific questions were asked to ensure that everything that is entailed in the project was covered, and the facilitator had a task of ensuring that the community was relaxed and the discussions were open.

#### RESULTS

##### MEANS OF SURVIVAL, LIMITATIONS AND PROPOSED SOLUTIONS AS IDENTIFIED BY THE COMMUNITY

Survival Means	Limitation	Proposed Solution
<b>Crop production</b> —mainly rainfed, focusing only on summer crops, like maize, vegetables and legumes.	<b>Low rainfall</b>  <i>Tractors are expensive</i>	<b>Irrigation</b>  <i>Government must provide as it was done in the past</i>
<b>Livestock</b> -mainly cattle and lesser extent sheep and goats	<b>Poor veld conditions and diseases</b>	<b>Camp fencing and Rotational grazing</b>
<b>Old age pension and</b>		

disability grant		
<b>Survival Means</b>	<b>Limitation</b>	<b>Proposed Solution</b>
<b>Income from migrant labour</b>	<b>Retrenchments</b>	<i>Government must provide jobs</i>

**NEEDS (PRIORITISED)**

1. Jobs (approximately 80% of the community is unemployed)
2. Clinic
- 3. Soil conservation**
4. Water- for drinking and irrigation
5. Fencing material for fencing camps and arable land
6. Agricultural extension service
7. Creche
8. More classrooms in the primary schools
9. Woodlot

**FEARS**

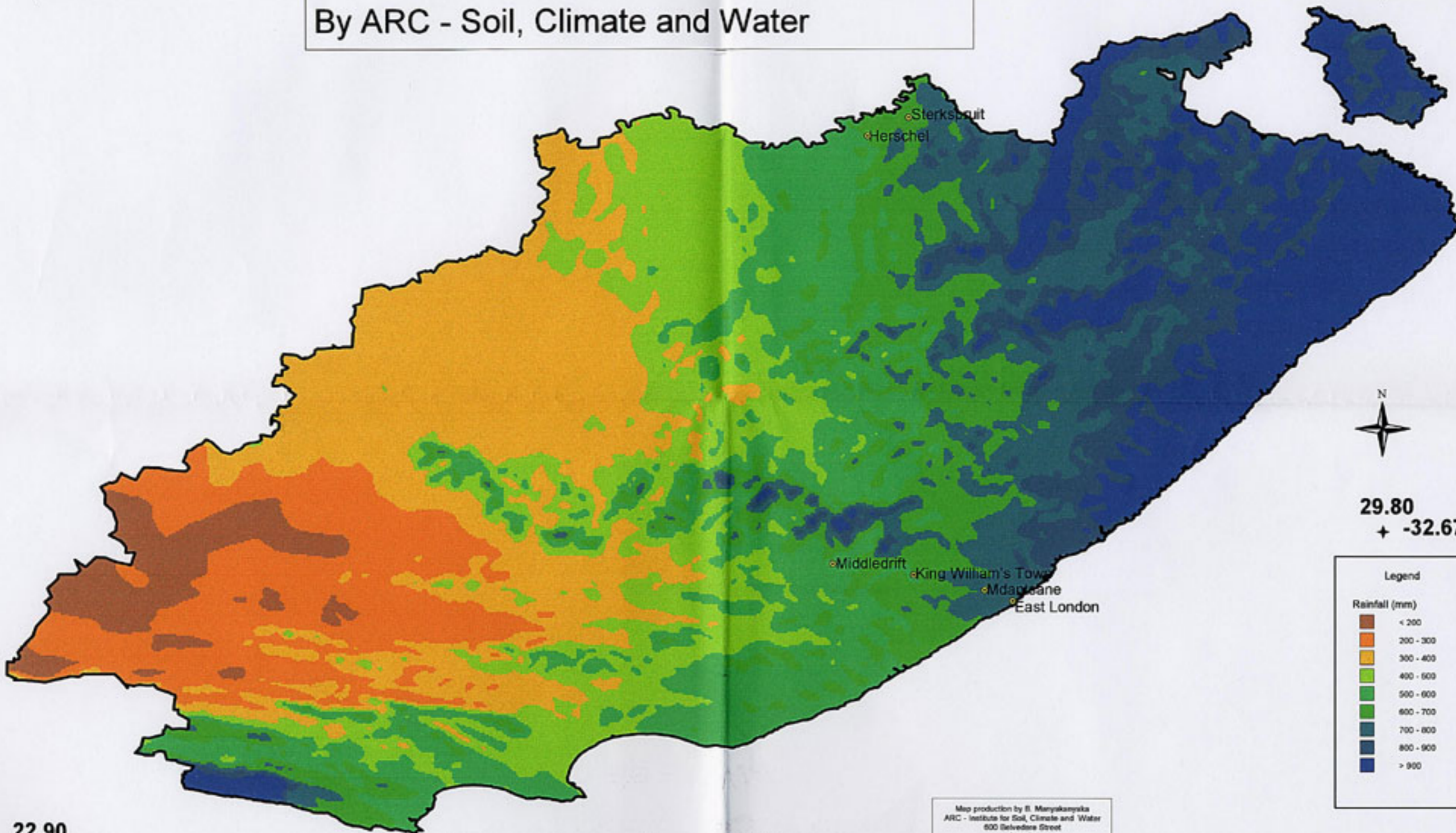
1. Soil erosion
2. Imposed development by government might affect their way of living: e.g., culling of livestock has been mentioned several times to them and is against their culture.
3. Job losses and low agricultural productivity, might lead to starvation.

22.90  
+ -29.88

# Map 2.1 Average annual rainfall

By ARC - Soil, Climate and Water

29.80  
+ -29.88



22.90  
+ -34.34

50 0 50 100 Kilometers

29.80  
+ -32.67

Legend

Rainfall (mm)

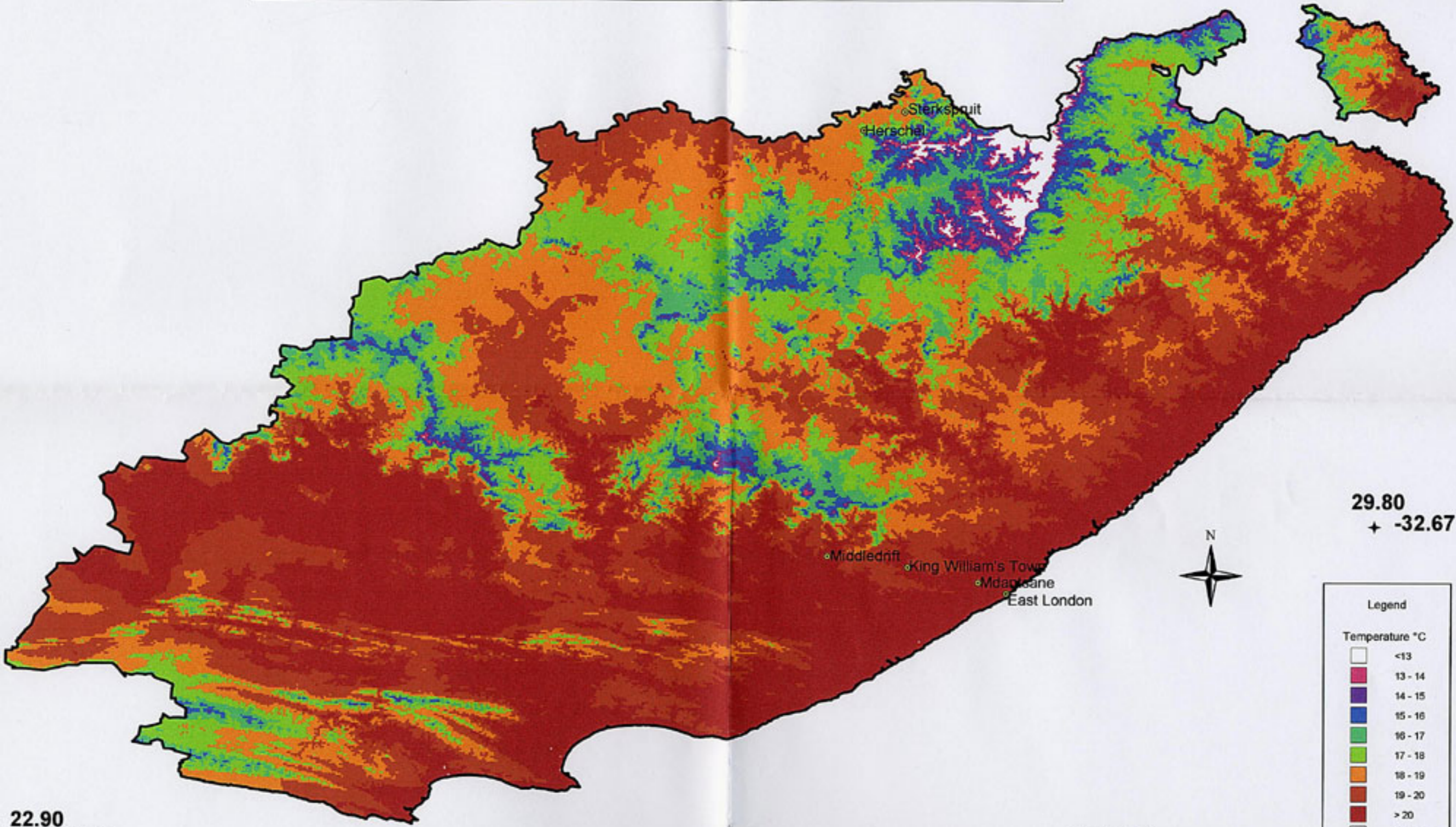
	< 200
	200 - 300
	300 - 400
	400 - 500
	500 - 600
	600 - 700
	700 - 800
	800 - 900
	> 900

Map production by B. Manyakanya  
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Pretoria  
0001

# Map 2.2 Longterm average temperature

22.90  
+ -29.88

29.80  
+ -29.88



29.80  
+ -32.67

## Legend

Temperature °C

	<13
	13 - 14
	14 - 15
	15 - 16
	16 - 17
	17 - 18
	18 - 19
	19 - 20
	> 20
	No Data

22.90  
+ -34.34

50 0 50 100 Kilometers

Map production by B. Manyakanyaka  
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900 Belvedere Street  
Arcadia  
Private Bag X79  
Pretoria  
0001

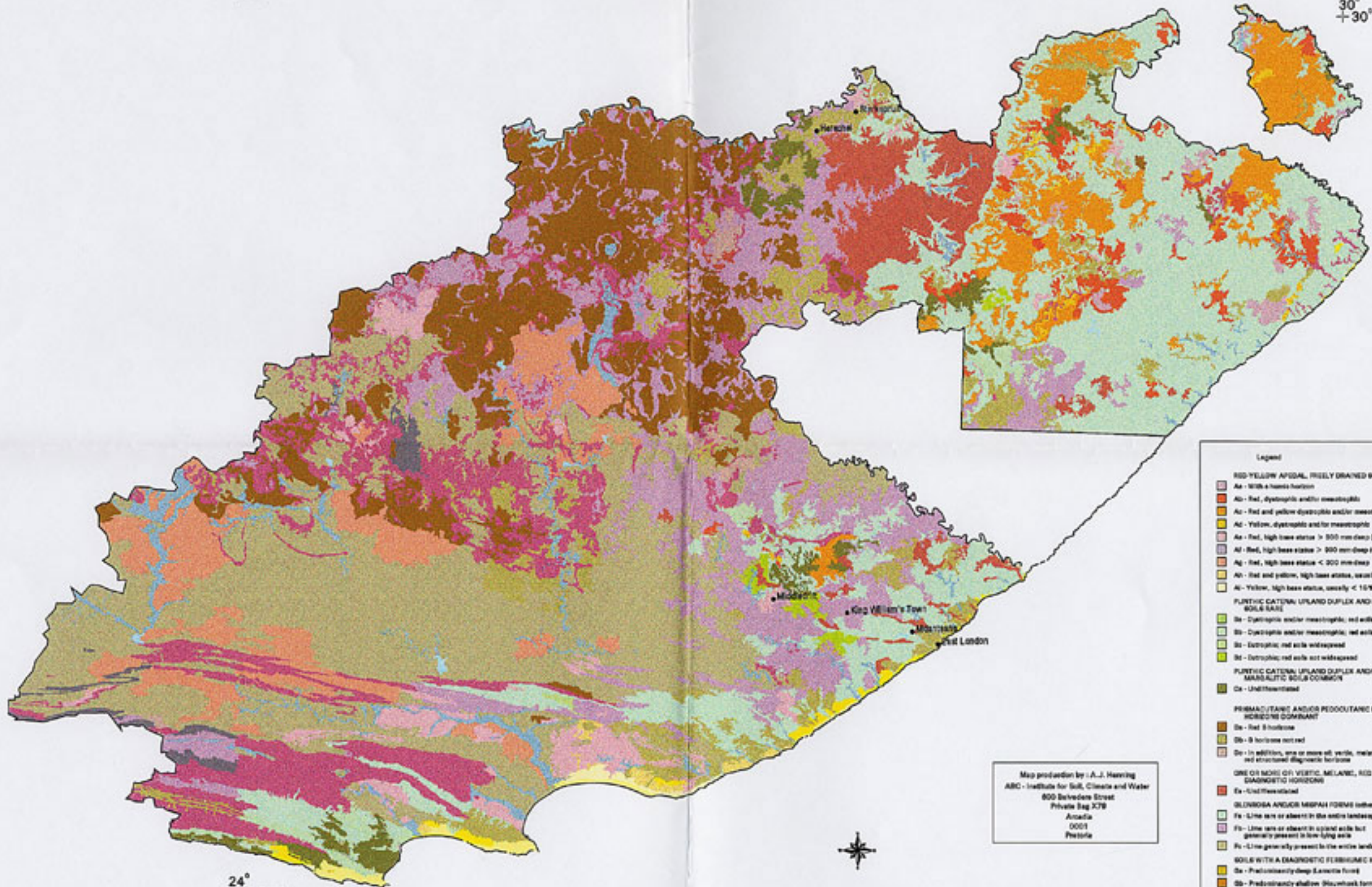


# Map 2.3. Broad Soil Patterns

By ARC - Institute for Soil, Climate and Water

24°  
+30°

30°  
+30°



24°  
+34°15'

SCALE 1 : 2 000 000

50 0 50 100 150 200 km

Map production by: A.J. Havning  
ARC - Institute for Soil, Climate and Water  
600 Belvedere Street  
Private Bag X78  
Amanda  
6001  
Pretoria

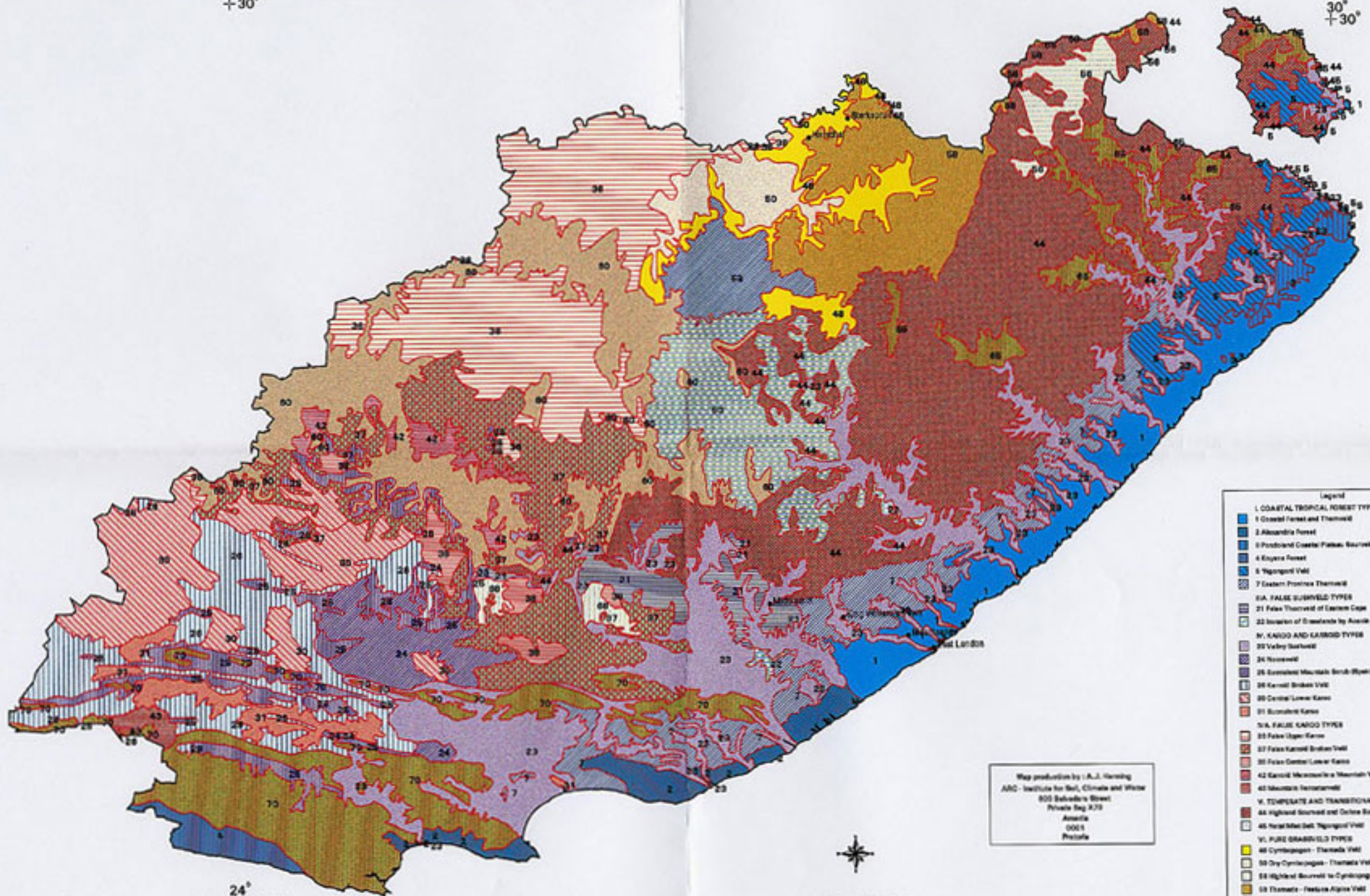
- Legend**
- RED-YELLOW APICAL, FREELY DRAINED SOILS**
    - Ae - With a haem horizon
    - Ae - Red, dystrophic and/or mesotrophic
    - Ae - Red and yellow dystrophic and/or mesotrophic
    - Ae - Yellow, dystrophic and/or mesotrophic
    - Ae - Red, high base status > 500 mm deep (no forest)
    - Ae - Red, high base status < 500 mm deep
    - Ae - Red and yellow, high base status, usually < 15% clay
    - Ae - Yellow, high base status, usually < 15% clay
  - PURPLE CATENA, UPLAND DUPLEX AND MARSHALIC SOILS RARE**
    - Bc - Dystrophic and/or mesotrophic, red soils widespread
    - Bc - Dystrophic and/or mesotrophic, red soils not widespread
    - Bc - Eutrophic red soils widespread
    - Bc - Eutrophic red soils not widespread
  - PURPLE CATENA, UPLAND DUPLEX AND/OR MARSHALIC SOILS COMMON**
    - Ce - Undifferentiated
  - PRIMA/TANO AND/OR PEDOCUTANE DIAGNOSTIC HORIZONS DOMINANT**
    - Dc - Red B horizons
    - Dc - B horizons not red
    - Dc - In addition, one or more of: vertic, melanic, and structural diagnostic horizons
  - ONE OR MORE OF VERTIC, MELANIC, RED STRUCTURED DIAGNOSTIC HORIZONS**
    - Ea - Undifferentiated
  - OLIGOSA AND/OR MIPAH FORMS (other soils very scarce)**
    - Fa - Lime rare or absent in the entire landscape
    - Fa - Lime rare or absent in upland soils but generally present in low lying soils
    - Fa - Lime generally present in the entire landscape
  - SOILS WITH A DIAGNOSTIC FERROUSIC HORIZON**
    - Ga - Predominantly deep lamitic form
    - Ga - Predominantly shallow (shallowest form)
  - GREY RESIC BANDS**
    - Ha - High sands dominant
    - Hb - High sands and other soils
  - MISCELLANEOUS LAND CLASSES**
    - Ia - Undifferentiated deep deposits
    - Ib - Rock areas with micaceous soils
    - Ic - Rock with little or no soil

# Map 2.4. Veld Types

By J.P.H. Acocks

24°  
+ 30°

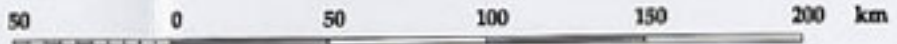
30°  
+ 30°



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Amanda  
0001  
Pretoria



SCALE 1 : 2 000 000



24°  
+ 34°15'

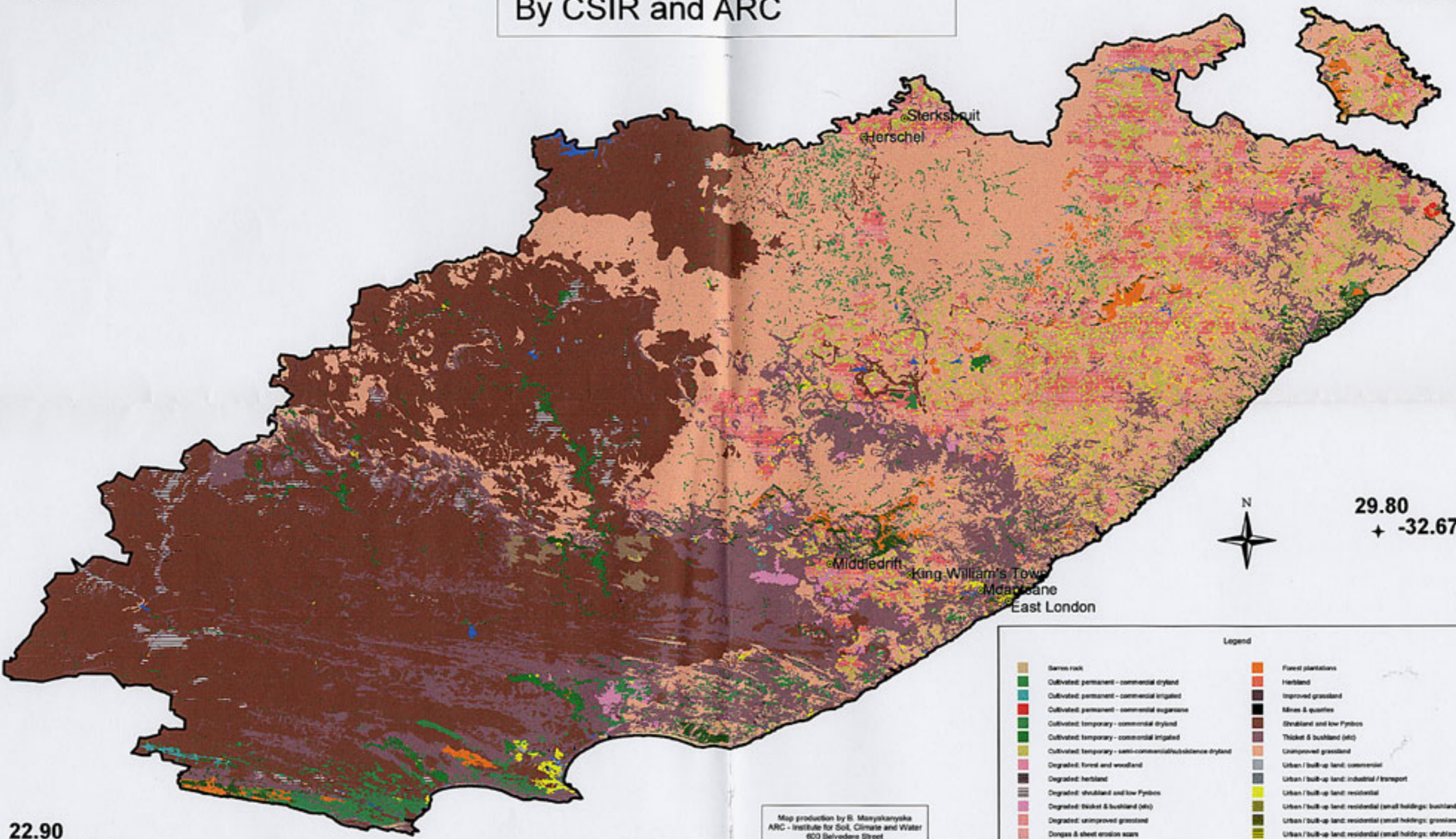
- Legend
- I COASTAL TROPICAL FOREST TYPES
    - 1 Coastal Forest and Thicket
    - 2 Alexandria Forest
    - 3 Pondoland Coastal Palms, Succulents
    - 4 Ekyene Forest
    - 5 Ngqongqo Veld
    - 7 Eastern Province Thicket
  - IIA. FALSE SUBVELD TYPES
    - 21 False Thicket of Eastern Cape
    - 22 Invasion of Grasslands by Acacia Karoo
  - IV. KAROO AND KAROOID TYPES
    - 23 Valley Bushveld
    - 24 Rensseland
    - 25 Eastern Mountain Scrub (Sphynkewald)
    - 26 Karoo Bushveld
    - 28 Central Lower Karoo
    - 29 Eastern Karoo
    - 31 Succulent Karoo
  - IVA. FALSE KAROO TYPES
    - 32 False Upper Karoo
    - 37 False Karoo Bushveld
    - 38 False Central Lower Karoo
    - 42 Karoo Mesomediterranean Mountain Veld replaced by Karoo
    - 43 Mountain Karoo
  - V. TEMPERATE AND TRANSITIONAL FOREST AND SCRUB TYPES
    - 44 Highland Succulent and Deciduous Bushveld
    - 45 Natal Macadamia, Ngqongqo Veld
  - VI. PURE GRASSFIELD TYPES
    - 46 Cynodactylon - Themeda Veld
    - 50 Dry Cynodactylon - Themeda Veld
    - 54 Highland Succulent to Cynodactylon - Themeda Veld Transition
    - 55 Themeda - Festuca Alpina Veld
    - 56 Succulent Palms Bushveld
    - 61 Karoo Mesomediterranean Mountain Veld
  - VIa. FALSE GRASSFIELD TYPES
    - 65 Southern Tall Grassveld
    - 68 Eastern Province Grassveld
  - VIa. FALSE SCLEROPHYLLOUS SUBVELD TYPES
    - 70 False Fynbos

22.90  
+ -29.88

# Map 2.5 Land - Cover

By CSIR and ARC

29.80  
+ -29.88



22.90  
+ -34.34

29.80  
+ -32.67

50 0 50 100 Kilometers

Map production by B. Masayakanyika  
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Pretoria  
0001

Legend	
Barren rock	Forest plantations
Cultivated: permanent - commercial dryland	Herbland
Cultivated: permanent - commercial irrigated	Improved grassland
Cultivated: permanent - commercial sugarcane	Mines & quarries
Cultivated: temporary - commercial dryland	Shrubland and low Pyrois
Cultivated: temporary - commercial irrigated	Thicket & bushland (etc)
Cultivated: temporary - semi-commercial/subsistence dryland	Unimproved grassland
Degraded: forest and woodland	Urban / built-up land: commercial
Degraded: herbland	Urban / built-up land: industrial / transport
Degraded: shrubland and low Pyrois	Urban / built-up land: residential
Degraded: Thicket & bushland (etc)	Urban / built-up land: residential (small holdings: bushland)
Degraded: unimproved grassland	Urban / built-up land: residential (small holdings: grassland)
Dongas & sheet erosion scars	Urban / built-up land: residential (small holdings: shrubland)
Forest	Urban / built-up land: residential (small holdings: woodland)
Forest and Woodland	Waterbodies
	Wetlands