

Mpumalanga Provincial Government



Department of Agriculture and Land Administration

Integrated Resource Information Report

Emalahleni

06 May 2005

**RESOURCE MANAGEMENT AND LAND USE PLANNING
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Emalahleni

Summary

Emalahleni is situated in the western part of the Mpumalanga highveld. Major towns in the area are Witbank and Kriel. Moderate summers and cold winters characterize the climate of the area. The annual rainfall, which falls mainly during summer, varies between 550 and 800 mm. The area of 2 670 km² is covered mainly by grassland, with some patches of savanna in the north. Mixed farming is practiced in the area. Cattle (Beef and Dairy), sheep, maize, potatoes and sweet potatoes are produced. Rich coal deposits are found around Witbank. Many coal related and other industries are found near Witbank. Most notably are the Highveld Steel and Vanadium plant west of Witbank and the four ESKOM Power Stations (Kendal, Matla, Kriel and Duvha).

GENERAL INFORMATION

Common Name(s)	Witbank
Area	267,303.0 ha
Coordinates	28°54'36"E 25°38'59"S 29°24'36"E 26°23'24"S
District Municipality	Nkangala District Municipality
Region	Nkangala Region

Towns

Name

Clewer
Kriel
Lynville
Matla
Ogies
Witbank

Neighbouring Municipalities

Name

Delmas
Govan Mbeki

Groblersdal
Steve Tshwete
Thembisile

Natural Resources

Climate

Rainfall

Rainfall Range 550 to 800 mm per year

Temperature

Temperature Zone 57/14

	DJF	Mar	Apr	May	JJA	Sep	Oct	Nov
T	20	17.5	13.8	10	7.4	13.9	17.6	18.9
Tn	17.6	14.8	10.1	5.6	2.7	10.2	14.9	16.2
Td	22.4	20.2	17.5	14.4	12.1	17.6	20.3	21.6
Tmax	23.8	21.7	19.6	16.9	14.8	19.7	21.8	23.2
Tmin	16.2	13.3	8	3.1	0	8.1	13.7	14.7

T - Average Temperature

Tn - Average Night Temperature

Td - Average Daily Temperature

Tmax - Average Maximum Temperature

Tmin - Average Minimum Temperature

Soils

Land Types

Land Type	Area (ha)	%
Dystrophic and/or mesotrophic; red soils not widespread (Bb)	182,921.9	68.4
Dystrophic and/or mesotrophic; red soils widespread (Ba)	56,054.8	21.0
Exposed rock areas with miscellaneous soils (Ib)	3,700.8	1.4
Pedologically young soils (lime rare or absent) (Fa)	10,058.6	3.8
Red, dystrophic and/or mesotrophic (Ab)	11,305.5	4.2
Vertic, melanic, and/or red structured diagnostic horizons (Ea)	2,486.5	0.9

Soil Clay Contents

ClayClass	Area (ha)	%
Clay	5,348.9	2.0
Clayey	13,864.8	5.2
Loam	94,176.6	35.2
Loam & Clay	31,481.8	11.8
Loamy Sand	36,279.5	13.6
Non-perennial pans	296.7	0.1
Sandy	2,794.7	1.0
Sandy Loam	75,942.7	28.4
Very Clayey	2,948.4	1.1
Very Sandy	1,277.1	0.5
Waterbodies	2,891.8	1.1

Soil Depth

Soil Depth Class	Area (ha)	%
Deep	129,138.1	48.3
Medium Deep	25,854.6	9.7
Medium Shallow	1,133.2	0.4
Non-perennial pans	296.7	0.1
Shallow	6,776.8	2.5
Steep Slopes	1,036.8	0.4
Very Deep	81,013.0	30.3
Very Shallow	19,153.5	7.2
Very Steep Slopes	8.7	0.0
Waterbodies	2,891.8	1.1

Soil Form Association

Soil Form Association Class	Area (ha)	%
Ar, My, Va	3,526.1	1.3
Ar-dominant	4,981.5	1.9
Av, Gc, We, Cv	90,988.5	34.0
Hu, Av, Cv, Gc	88,588.6	33.1
Hu, Sd, Sw, Gs	7,613.5	2.8
Hu-dominant	3,343.2	1.3
Lithosols, Cv, Gc, Hu	13,513.3	5.1
Lithosols, Cv, Va	18,676.4	7.0
Lithosols, Hu, Cv, Gc	1,163.2	0.4
Lithosols, Hu, Cv, Sd, Sw	3,913.2	1.5
Non-perennial pans	296.7	0.1
Rg, Ar	27,807.1	10.4
Waterbodies	2,891.8	1.1

Topography

Elevation

Range (m)	Area (ha)	%
1301 - 1400	4,134	1.5
1401 - 1500	23,423	8.8
1501 - 1600	205,300	76.8
1601 - 1700	34,446	12.9

Slope

Class	Area (ha)	%
Level (0 - 3%)	176,353	66.
Moderate (4 - 15%)	88,731	33.2

Steep (16 - 25%)	2,218	.8
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Vegetation

Acocks Veld Type (1975)

Acocks Veld Type	Area (ha)	%
Bankenveld (61)	216,614	81.0
Sourish Mixed Bushveld (19)	15,653	5.9
Themeda Veld or Turf Highveld (52)	35,036	13.1

Water Resources

Dams

Dam	Primary Drainage Region	River	Capacity
Doornpoort	Olifants		
Rietspruit	Olifants		
Witbank	Olifants		104.0

Drainage Regions

Drainage Region / Catchment			Area	%
Primary	Secondary	Tertiary		
Olifants	Olifants	Upper Olifants River	205,369.5	76.8
Wilge	Wilge	Wilge River	61,933.6	23.2

Land Utilisation

Land Cover (1995)

Class	Area (ha)	%
Cultivated: temporary - commercial dryland	77,113.8	28.8
Cultivated: temporary - commercial irrigated	748.1	0.3
Forest plantations	7,582.6	2.8
Herbland	7.2	0.0
Improved grassland	927.5	0.3
Mines & quarries	16,710.6	6.3
Thicket & bushland (etc)	1,909.5	0.7
Unimproved grassland	149,144.3	55.8
Urban / built-up land: commercial	112.2	0.0
Urban / built-up land: industrial / transport	2,431.7	0.9
Urban / built-up land: residential	6,315.3	2.4
Urban / built-up land: residential (small holdings: grassland)	932.3	0.3
Waterbodies	2,734.1	1.0
Wetlands	634.2	0.2

Silos

Silo	Owner	Commodities	Capacity (Ton)
Kendal	OTK	Maize (White & Yellow), Soya beans, Sorghum, Sunflower	111,769
Ogies	OTK	Maize (White & Yellow)	77,231

Co-operatives

Location	Co-operative
Ogies	OTK
Witbank	OTK

Conservation Areas

Name	Authority	Area (ha)
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No Records

Demographic Information

Population Distribution and Dynamics

Population Group (Dominant)

	2001	1996
African	227,321	176,596
Coloured	3,956	3,893
Indian	1,092	1,322
White	44,044	53,434
Total	276,413	236,680

Home Language (Dominant)

	2001	1996
Afrikaans	40,302	47,308
English	9,874	11,756
IsiNdebele	27,627	19,954
IsiXhosa	9,902	6,266
IsiZulu	117,071	99,333
Sepedi	34,492	24,430
Sesotho	10,349	7,393
Setswana	2,250	979
SiSwati	16,287	11,323
Tshivenda	693	204
Xitsonga	6,803	4,315
Other	762	1,266

Place of Birth

	2001	1996
RSA	268,106	

SADC (Excluding RSA)	6,468
RestAfrica	151
Europe	1,533
Asia	83
North America	20
Central/South America	39
Australia/New Zealand	13

Citizenship

	2001	1996
RSA	273,037	234,011
SADC (Excluding RSA)	2,780	1,600
Rest of Africa	49	10
Europe	485	647
Asia	83	12
North America	11	15
Central/South America	6	150
Australia/New Zealand	8	3

Demographic Characteristics

Age

	2001	1996
Age 0 - 4	26,856	22,780
Age 5 - 14	51,564	45,460
Age 15 - 34	106,088	91,875
Age35 - 64	84,003	66,187
Age 65+	7,902	7,037

Gender

	Males		Females	
	2001	1996	2001	
0 to 4	13,133	11,410	0 to 4	13,723
5 to 14	25,498	22,435	5 to 14	26,066
15 to 34	53,259	46,759	15 to 34	52,829
35 to 64	45,484	36,844	35 to 64	38,519
Over 65	3,341	2,925	Over 65	4,561
Total	140,715	120,373	Total	135,698

Persons with Disabilities

	2001	1996
Sight	4,065	7,059
Hearing	2,631	1,850
Communication	460	
Physical	2,578	2,337
Intellectual	1,247	748
Emotional	1,746	
Multiple	2,233	785

Socio-Economic

Highest Level of Education

	2001	1996
None	24,874	19,500
Some Primary	23,083	17,609
Complete Primary	11,011	9,815
Secondary	57,868	52,574
Grade12	41,328	24,842
Higher	13,415	11,419

Persons Attending Education Institutions

Institution	2001	1996
None	30,482	
Pre-school	3,427	
School	66,309	
College	2,634	
Technikon	1,374	
University	393	
Adult Education Centre	139	
Other	284	

Economic Active Population

	2001	1996
Employed	76,668	76,608
Unemployed	47,703	27,540
No Economical Active	66,514	
Total Labour Force	124,371	

Industry

	2001	1996
Agriculture/Forestry/Fishing	2,406	2,868
Community/Social/Personal	10,153	8,671
Construction	4,234	4,429
Electricity/Gas/Water	4,867	6,237
Financial/Insurance/Real Estate/Business	5,150	3,096
Manufacturing	8,164	9,628
Mining/Quarrying	17,607	16,330
Other	3	

Private Households	6,344	6,973
Transport/Storage/Communication	3,090	3,226
Undetermined	4,581	6,201
Wholesale/Retail	10,071	9,026

Occupation

	2001	1996
Clerks	8,019	6,131
Craft/Trade	18,212	15,793
Elementary	15,992	16,797
Legislators/Senior Officials	3,146	3,607
Unspecified/Not Economically Classified	0	
Plant/Machine Operators	9,310	10,833
Professionals	4,380	5,732
Service Workers	6,812	6,459
Agricultural/Fishery	1,066	
Technicians	5,933	4,487
Undetermined	3,799	

Individual Monthly Income

	2001	1996
None	184,160	119,104
R 1 to R 400	9,205	5,833
R 401 to R 800	19,787	28,338
R 801 to R 1,600	19,093	13,911
R 1,601 to R 3,200	20,352	11,871
R 3,201 to R 6,400	13,056	16,696
R 6,401 to R 12,800	7,713	4,394
R 12,801 to R 25,600	2,123	713

R 25,601 to R 51,200	467	321
R 51,201 to R 102,400	224	156
R 102,401 to R 204,800	174	
R 204,801+	59	

Travel to work

	2001	1996
Bicycle	2,127	
Bus	23,413	
Car Driver	17,575	
Car Passenger	16,115	
Minibus/Taxi	24,961	
Motorcycle	766	
Train	401	
NA	127,488	
Foot	62,359	
Other	1,205	

Households and Housing

Household Size (Average)

Household Size	2001	1996
1	14,952	
2	14,449	
3	12,491	
4	12,057	
5	8,064	
6	5,210	
7	3,137	
8	1,833	

9	1,105
10+	1,619

Dwelling Type (Dominant)

	2001	1996
Formal	50,254	39,638
Informal	19,514	12,948
Traditional	4,851	3,002
Other	299	196

Rooms per Household (Average)

Room(s)	2001	1996
1	12,434	8,560
2	11,660	5,450
3	8,775	5,329
4	14,533	11,608
5	9,436	7,879
6	9,345	9,216
7	3,998	3,577
8	2,538	2,031
9	1,074	1,114
10 +	1,124	895

Household Income

	2001	1996
None	17,062	3,252
R 1 to R 4,800	4,034	2,015
R 4,801 to R 9,600	9,754	5,015

R 9,601 to R 19,200	13,834	11,550
R 19,201 to R 38,400	15,842	10,514
R 38,401 to R 76,800	9,603	6,590
R 76,801 to R 153,600	7,112	5,043
R 153,601 to R 307,200	3,704	2,211
R 307,201 to R 614,400	843	159
R 614,401 to R 1,228,800	203	
R 1,228,801 to R 2,457,600	166	
R 2,457,600+	83	

Energy Source for Cooking (Dominant)

	2001	1996
Electricity	45,567	
Gas	845	
Paraffin	17,218	
Wood	1,244	
Coal	9,286	
Animal Dung	288	
Solar	277	
Other	192	

Energy Source for Lighting (Dominant)

	2001	1996
Electricity	51,534	39,609
Gas	120	259
Paraffin	2,161	1,953
Candles	20,786	14,144
Solar	130	
Other	186	3

Access to Piped Water (% Households)

	2001	1996
Dwelling	31,369	38,359
Inside Yard	23,337	6,505
Communal Stand	7,721	8,521
Communal Stand 200m+	7,433	
Borehole	430	1,349
Spring	587	467
Rain Tank	412	198
Dam/Pool/Stagnant Water	427	
River/Stream	240	
Water Vendor	381	
Other	2,579	763

Toilet Facilities (% Households)

	2001	1996
Flush Toilet	52,153	43,007
Flush Septic Tank	789	
Chemical Toilet	653	
VIP	839	
Pit Latrine	14,097	9,961
Bucket Latrine	1,171	887
None	5,215	2,328

Telephone Facilities (% Households)

	2001	1996
Telephone and Cellphone	12,485	
Telephone	7,730	22,112
Cellphone	19,684	

Neighbour	2,008	1,451
Public Telephone	26,749	24,636
Other Nearby	2,452	2,586
Other Not Nearby	2,259	919
No Access	1,551	4,330

Refuse Removal (% Households)

	2001	1996
Municipal Weekly	47,385	38,608
Municipal Other	2,628	1,736
Communal Dump	1,940	1,863
Own Dump	18,478	10,705
No Disposal	4,486	2,782

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