

# **Mpumalanga Provincial Government**



## **Department of Agriculture and Land Administration**

### **Integrated Resource Information Report**

#### **Marble Hall**

06 May 2005

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**RESOURCE MANAGEMENT AND LAND USE PLANNING  
PRIVATE BAG X9019, ERMELO, 2350 TEL: (017) 8115811 FAX: (017) 810 1223**

# Marble Hall

## Summary

Marble Hall is situated in the north-western part of Mpumalanga on the transition between the highveld and the bushveld. Marble Hall is the major town in the area. Warm summers and moderate winters characterize the climate of the area. The annual rainfall, which falls mainly during summer, varies between 500 and 650 mm. The area of 1 103 km<sup>2</sup> is covered by savanna veld. Cattle, maize, wheat, cotton, tobacco and citrus are produced. Marble are quarried near the town of Marble Hall.

## GENERAL INFORMATION

Common Name(s)	Marble Hall / Moutse West
Area	110,315.0 ha
Coordinates	28°53'24"E 24°45'00"S 29°27'00"E 25°06'35"S
District Municipality	Sekhukhune Cross Boundary District Municipality
Region	Nkangala Region

## Towns

### Name

Marble Hall  
Matlala  
Metsanangwane  
Mmakola

## Neighbouring Municipalities

### Name

Dr. J.S. Moroka  
Groblersdal

## Natural Resources

### Climate

#### Rainfall

Rainfall Range 450 to 650 mm per year

#### Temperature

Temperature Zone 77/25

	DJF	Mar	Apr	May	JJA	Sep	Oct	Nov
T	23.5	20.9	17.5	14.2	12	17.6	21	22.2
Tn	17.8	15.4	12.4	9.5	7.2	12.5	15.5	16.9
Td	29.2	26.4	22.6	18.9	16.8	22.7	26.5	27.5
Tmax	32.5	29.5	25.5	21.6	19.5	25.6	29.6	30.5
Tmin	14.5	12.3	9.5	6.8	4.5	9.6	12.4	13.9

Temperature Zone 77/35

	DJF	Mar	Apr	May	JJA	Sep	Oct	Nov
T	23.6	21.8	18.9	16	14.3	18.9	21.9	22.6
Tn	17.6	15.8	12.7	9.4	7.5	12.8	15.9	16.8
Td	29.6	27.8	25.1	22.6	21.1	25	27.9	28.4
Tmax	33	31.2	28.6	26.4	25	28.5	31.3	31.4
Tmin	14.2	12.4	9.2	5.6	3.6	9.5	12.4	13.5

Temperature Zone 77A/35

	DJF	Mar	Apr	May	JJA	Sep	Oct	Nov
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T	23.6	21.8	18.9	16	14.3	18.9	21.9	22.6
Tn	17.6	15.8	12.7	9.4	7.5	12.8	15.9	16.8
Td	29.6	27.8	25.1	22.6	21.1	25	27.9	28.4
Tmax	33	31.2	28.6	26.4	25	28.5	31.3	31.7
Tmin	14.2	12.4	9.2	5.6	3.6	9.5	12.4	13.5

Temperature Zone 88B/46

	DJF	Mar	Apr	May	JJA	Sep	Oct	Nov
T	26	24.2	21.6	18.9	17.2	21.8	24.4	25.1
Tn	22.5	21.2	18	14.8	12.9	18.1	21.4	22.7
Td	29.5	27.2	25.2	23	21.5	25.5	27.4	28.3
Tmax	31.5	28.9	27.3	25.3	24	27.6	29.1	29.9
Tmin	20.5	19.5	15.9	14.5	10.4	16	19.8	21.1

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)	%
Eutrophic; red soils not widespread (Bd)	19,574.6	17.7
Eutrophic; red soils widespread (Bc)	24,068.7	21.8
Exposed rock areas with miscellaneous soils (Ib)	5,275.6	4.8
Pedologically young soils (lime rare or absent) (Fa)	3,564.1	3.2
Red and yellow dystrophic and/or mesotrophic (Ac)	9,405.7	8.5
Red and yellow, high base status (Ah)	12,957.4	11.7
Red, high base status > 300 mm deep (no dunes) (Ae)	33,298.9	30.2
Vertic, melanic, and/or red structured diagnostic horizons (Ea)	340.8	0.3

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### Soil Clay Contents

<b>ClayClass</b>	<b>Area (ha)</b>	<b>%</b>
Clay	2,612.0	2.4
Clayey	2,556.8	2.3
Loam	22,451.9	20.4
Loam & Clay	10,712.6	9.7
Loamy Sand	39,865.0	36.1
No Data	0.8	0.0
Sandy	2,416.7	2.2
Sandy Loam	27,646.3	25.1
Very Clayey	280.6	0.3
Very Sandy	1,623.0	1.5
Waterbodies	149.6	0.1

### Soil Depth

<b>Soil Depth Class</b>	<b>Area (ha)</b>	<b>%</b>
Deep	29,839.7	27.0
Medium Deep	17,019.8	15.4
Medium Shallow	32,432.4	29.4
No Data	0.8	0.0
Shallow	4,799.7	4.4
Steep Slopes	1,752.3	1.6
Very Deep	21,837.1	19.8
Very Shallow	2,483.6	2.3
Waterbodies	149.6	0.1

### Soil Form Association

<b>Soil Form Association Class</b>	<b>Area (ha)</b>	<b>%</b>
Ar, My, Va	2,539.9	2.3
Ar-dominant	755.6	0.7
Av, Gc, We, Cv	9,831.9	8.9
Hu (30%), Sd (30%)	850.2	0.8
Hu, Av, Cv, Gc	20,463.0	18.5
Hu, Sd, Sw, Gs	2,908.8	2.6
Hu-dominant	20,264.1	18.4
Lithosols, Cv, Gc, Hu	8,740.3	7.9
Lithosols, Cv, Va	1,884.3	1.7
Lithosols, Hu, Cv, Gc	33,886.5	30.7
Lithosols, Hu, Cv, Sd, Sw	3,809.2	3.5
No Data	0.8	0.0
Rg, Ar	4,023.7	3.6
Sd, Bo, My, Ar, Hu	207.2	0.2
Waterbodies	149.6	0.1

## Topography

### Elevation

<b>Range (m)</b>	<b>Area (ha)</b>	<b>%</b>
801 - 900	66,977	60.7
901 - 1000	43,338	39.3

### Slope

<b>Class</b>	<b>Area (ha)</b>	<b>%</b>
Level (0 - 3%)	74,658	67.7
Moderate (4 - 15%)	33,429	30.3
Steep (16 - 25%)	2,229	2.

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## Vegetation

### Acocks Veld Type (1975)

<b>Acocks Veld Type</b>	<b>Area (ha)</b>	<b>%</b>
Mixed Bushveld (18)	107,525	97.5
Springbok Flats Turf Thornveld (12)	2,790	2.5

## Water Resources

### Dams

<b>Dam</b>	<b>Primary Drainage Region</b>	<b>River</b>	<b>Capacity</b>
Arabie	Olifants		98.8

### Drainage Regions

<b>Drainage Region / Catchment</b>				
<b>Primary</b>	<b>Secondary</b>	<b>Tertiary</b>	<b>Area</b>	<b>%</b>
Arabie	Arabie	Arabie	19,491.8	17.7
Elands	Elands	Elands River	71,892.8	65.2
Elands	Elands	Moses River	18,930.5	17.2

## Land Utilisation

### Land Cover (1995)

<b>Class</b>	<b>Area (ha)</b>	<b>%</b>
Cultivated: permanent - commercial irrigated	1,957.8	1.8
Cultivated: temporary - commercial dryland	2,425.2	2.2
Cultivated: temporary - commercial irrigated	24,565.3	22.3
Cultivated: temporary - semi-commercial/subsistence dryland	16,021.6	14.5
Degraded: forest and woodland	12,760.5	11.6
Degraded: thicket & bushland (etc)	261.3	0.2
Forest and Woodland	49,238.9	44.6
Forest plantations	70.8	0.1
Improved grassland	50.7	0.0
Mines & quarries	262.5	0.2
Thicket & bushland (etc)	244.4	0.2
Unimproved grassland	186.0	0.2
Urban / built-up land: industrial / transport	134.5	0.1
Urban / built-up land: residential	1,660.1	1.5
Waterbodies	475.5	0.4

### Silos

<b>Silo</b>	<b>Owner</b>	<b>Commodities</b>	<b>Capacity (Ton)</b>
Marble Hall	OTK	Maize (White & Yellow), Soya beans, Wheat	85,077

### Co-operatives

<b>Location</b>	<b>Co-operative</b>
Marble Hall	OTK

### Conservation Areas

<b>Name</b>	<b>Authority</b>	<b>Area (ha)</b>
Marble Hall Fisheries	DACE	1751



## Demographic Information

### Population Distribution and Dynamics

#### Population Group (Dominant)

	2001	1996
African	118,673	93,963
Coloured	140	49
Indian	79	34
White	2,435	2,175
Total	121,327	96,635

#### Home Language (Dominant)

	2001	1996
Afrikaans	2,461	2,253
English	317	126
IsiNdebele	6,368	5,166
IsiXhosa	451	242
IsiZulu	1,667	1,312
Sepedi	95,970	77,646
Sesotho	2,685	2,622
Setswana	1,162	772
SiSwati	1,042	485
Tshivenda	627	303
Xitsonga	8,258	4,279
Other	318	304

#### Place of Birth

	2001	1996
RSA	119,323	

SADC (Excluding RSA)	1,940
RestAfrica	21
Europe	23
Asia	16
North America	0
Central/South America	5
Australia/New Zealand	0

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### Citizenship

	2001	1996
RSA	119,829	96,117
SADC (Excluding RSA)	1,485	416
Rest of Africa	3	4
Europe	6	4
Asia	16	5
North America	0	0
Central/South America	2	2
Australia/New Zealand	0	0

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### Demographic Characteristics

#### Age

	2001	1996
Age 0 - 4	14,643	13,036
Age 5 - 14	33,092	27,332
Age 15 - 34	41,752	31,686
Age 35 - 64	24,627	18,055
Age 65+	7,212	5,427

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#### Gender

	<b>Males</b>		<b>Females</b>	
	<b>2001</b>	<b>1996</b>	<b>2001</b>	
0 to 4	7,241	6,450	0 to 4	7,403
5 to 14	16,625	13,625	5 to 14	16,467
15 to 34	19,549	14,690	15 to 34	22,203
35 to 64	9,839	7,262	35 to 64	14,788
Over 65	2,512	1,992	Over 65	4,700
<b>Total</b>	<b>55,766</b>	<b>44,019</b>	<b>Total</b>	<b>65,561</b>

#### Persons with Disabilities

	<b>2001</b>	<b>1996</b>
Sight	1,672	2,841
Hearing	1,173	1,288
Communication	226	
Physical	1,158	1,168
Intellectual	636	493
Emotional	847	
Multiple	713	373

#### Socio-Economic

##### Highest Level of Education

	<b>2001</b>	<b>1996</b>
None	21,711	17,460
Some Primary	8,689	5,901
Complete Primary	3,109	2,451
Secondary	14,395	9,845
Grade12	7,175	4,606
Higher	2,456	1,169

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Persons Attending Education Institutions

<b>Institution</b>	<b>2001</b>	<b>1996</b>
None	27,446	
Pre-school	1,896	
School	44,103	
College	146	
Technikon	67	
University	48	
Adult Education Centre	33	
Other	78	

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Economic Active Population

	<b>2001</b>	<b>1996</b>
Employed	15,665	11,451
Unemployed	12,734	10,034
No Economical Active	38,494	
Total Labour Force	28,399	

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Industry

	<b>2001</b>	<b>1996</b>
Agriculture/Forestry/Fishing	4,829	4,260
Community/Social/Personal	2,306	1,783
Construction	540	712
Electricity/Gas/Water	112	191
Financial/Insurance/Real Estate/Business	480	295
Manufacturing	792	423
Mining/Quarrying	59	62
Other	0	

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Private Households	3,119	1,332
Transport/Storage/Communication	426	480
Undetermined	1,423	1,229
Wholesale/Retail	1,577	1,119

### Occupation

	2001	1996
Clerks	1,456	365
Craft/Trade	934	1,109
Elementary	7,060	5,195
Legislators/Senior Officials	401	283
Unspecified/Not Economically Classified	0	
Plant/Machine Operators	1,248	709
Professionals	503	1,111
Service Workers	1,041	737
Agricultural/Fishery	779	
Technicians	1,027	272
Undetermined	1,213	

### Individual Monthly Income

	2001	1996
None	92,731	59,322
R 1 to R 400	10,528	7,631
R 401 to R 800	11,753	12,448
R 801 to R 1,600	2,527	1,494
R 1,601 to R 3,200	1,986	1,229
R 3,201 to R 6,400	1,165	1,392
R 6,401 to R 12,800	450	171
R 12,801 to R 25,600	117	36

R 25,601 to R 51,200	27	42
R 51,201 to R 102,400	17	22
R 102,401 to R 204,800	20	
R 204,801+	6	

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#### Travel to work

	2001	1996
Bicycle	289	
Bus	3,198	
Car Driver	1,511	
Car Passenger	1,826	
Minibus/Taxi	1,713	
Motorcycle	163	
Train	204	
NA	56,463	
Foot	55,438	
Other	521	

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#### Households and Housing

##### Household Size (Average)

Household Size	2001	1996
1	3,543	
2	3,016	
3	2,984	
4	3,290	
5	3,034	
6	2,541	
7	1,983	
8	1,296	

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9	944
10+	1,558

#### Dwelling Type (Dominant)

	2001	1996
Formal	19,097	13,272
Informal	1,196	1,077
Traditional	3,827	4,826
Other	69	43

#### Rooms per Household (Average)

Room(s)	2001	1996
1	3,131	3,131
2	3,681	3,003
3	3,557	3,152
4	3,672	3,081
5	2,707	1,976
6	2,770	1,911
7	1,905	1,265
8	1,284	806
9	714	526
10 +	767	381

#### Household Income

	2001	1996
None	8,561	3,783
R 1 to R 4,800	3,301	1,831
R 4,801 to R 9,600	6,860	4,467

R 9,601 to R 19,200	3,773	4,237
R 19,201 to R 38,400	2,137	1,560
R 38,401 to R 76,800	1,071	561
R 76,801 to R 153,600	560	244
R 153,601 to R 307,200	195	119
R 307,201 to R 614,400	39	30
R 614,401 to R 1,228,800	15	
R 1,228,801 to R 2,457,600	22	
R 2,457,600+	6	

Energy Source for Cooking (Dominant)

	2001	1996
Electricity	6,381	
Gas	210	
Paraffin	2,321	
Wood	14,775	
Coal	314	
Animal Dung	55	
Solar	64	
Other	70	

Energy Source for Lighting (Dominant)

	2001	1996
Electricity	19,938	10,680
Gas	21	126
Paraffin	485	1,907
Candles	3,610	5,985
Solar	34	
Other	100	5

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**Access to Piped Water (% Households)**

	<b>2001</b>	<b>1996</b>
Dwelling	1,478	2,962
Inside Yard	8,501	4,861
Communal Stand	2,526	4,225
Communal Stand 200m+	3,536	
Borehole	1,395	2,257
Spring	589	4,457
Rain Tank	104	306
Dam/Pool/Stagnant Water	1,443	
River/Stream	2,975	
Water Vendor	426	
Other	1,213	234

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**Toilet Facilities (% Households)**

	<b>2001</b>	<b>1996</b>
Flush Toilet	2,641	1,721
Flush Septic Tank	247	
Chemical Toilet	871	
VIP	3,378	
Pit Latrine	13,785	15,583
Bucket Latrine	121	163
None	3,147	1,824

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**Telephone Facilities (% Households)**

	<b>2001</b>	<b>1996</b>
Telephone and Cellphone	1,009	
Telephone	1,143	994
Cellphone	4,212	

Neighbour	1,594	527
Public Telephone	11,763	9,380
Other Nearby	1,978	2,034
Other Not Nearby	1,182	2,114
No Access	1,308	4,233

Refuse Removal (% Households)

	2001	1996
Municipal Weekly	3,030	1,688
Municipal Other	142	514
Communal Dump	208	1,550
Own Dump	17,103	13,738
No Disposal	3,706	1,598

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