

PROVINCIAL FACT SHEET

LAND DEGRADATION

North West

Reviewing land degradation

As part of a national review of land degradation, information about soil and veld degradation was gathered at four workshops held in the North West during 1997. Based on the insights of agricultural extension officers and conservationists, three consensus maps were produced (see over). These represent the status of soil and veld degradation and an overall measure of land degradation in the province. In terms of this analysis the North West is rated as a fairly degraded province.

Provincial profile

The 1995 census recorded more than 3,35 million people living in the North West (116 190 km²). The population density in most districts is about 5–25 people/km². In the Rustenberg district and in some of the communal areas, population densities are 50–100 people/km². During the period 1988–98 there was an increase in settlement areas in the province. Approximately 52% of the population lives in poverty.

The commercial farming districts of the North West used to be part of the northwestern Transvaal and the northern part of the former Cape Province, while most of the communal areas were part of the former homeland of Bophuthatswana. In some districts land tenure systems are very mixed.

The natural vegetation of the North West is mainly savanna, with grassland in the south-east. The western half of the province has an arid climate, while the eastern part is semi-arid.

Agricultural land use

54% of land in the North West is used for grazing of beef and dairy cattle, sheep and game. Crops account for a further 30% of land use, and include maize, sorghum, sunflowers and groundnuts. Most crop farming takes place in the grassland biome. There is no commercial forestry and only 1% of land in the province is set aside for conservation.

Between 1988 and 1998 there was a slight decrease in the total area of land used for crops and grazing, while settlement areas increased.

Land degradation issues

The North West has a fairly high provincial soil degradation index (see over). The districts with the highest soil

degradation index values are Madikwe, Lehurutshe and Mankwe. Both croplands and grazing lands are affected by wind and water erosion. The Vryburg district has a problem of farmland being covered by wind-blown sand. The rate of soil degradation in grazing lands has remained fairly constant but in croplands it has decreased slightly.

The North West also has a fairly high provincial veld degradation index (see over). Marico is the district with the highest veld degradation index, and Lehurutshe, Madikwe and Mankwe are also badly affected. Loss of plant cover is a very serious threat in the grasslands of the south-east. In these and other areas, change in plant species composition is also a problem. Bush encroachment is the most serious veld degradation issue in the north and west. Neither deforestation nor alien plants are considered significant problems.

If all magisterial districts in South Africa are considered together, none of the top twenty districts requiring priority attention occur in the North West. However, if communal and commercial farming areas are considered separately, three priority districts can be identified.

Priority magisterial districts

Communal: Lehurutshe Madikwe
Commercial: Marico

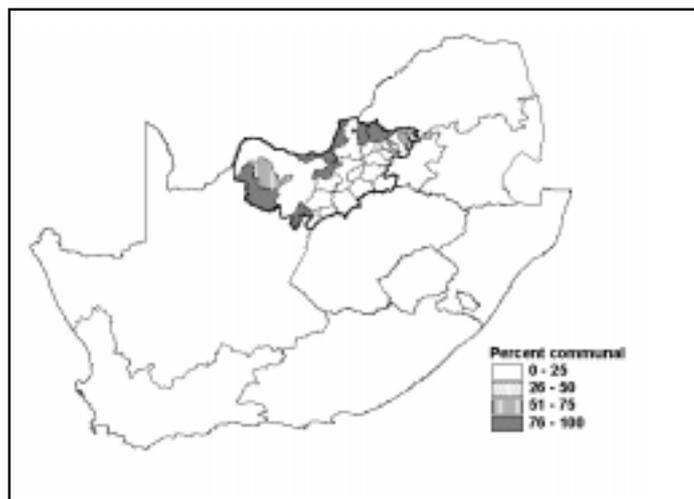
Combating land degradation

Land degradation is fairly serious in the North West, particularly in the communal areas. In order to address problems of soil and veld degradation, the province will have to deal with the legacy of apartheid, which forced too many people to live on too little land, with poor infrastructure and services.

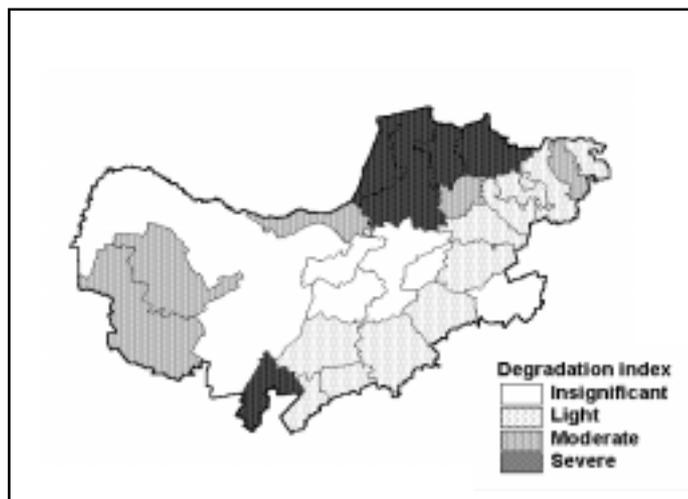
In less degraded districts, agricultural extension services, farmer study groups, government-subsidised soil conservation works and bush clearing schemes, and strict application of agricultural legislation have all help to combat land degradation. This experience should be taken into account when developing sustainable land use policies and programmes to address land degradation in the North West.



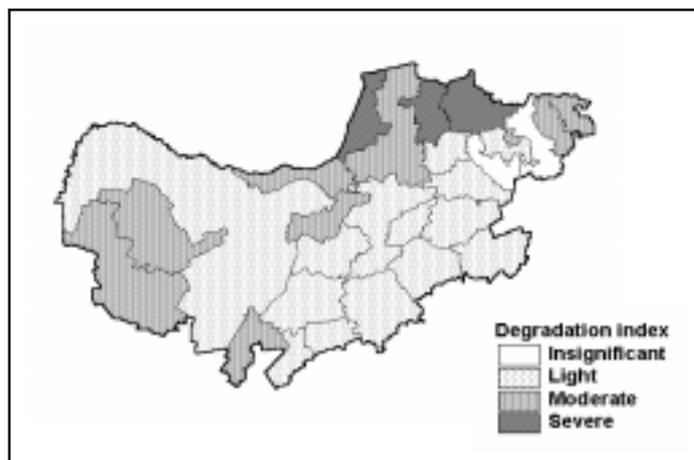
Indices of Land Degradation in the North West



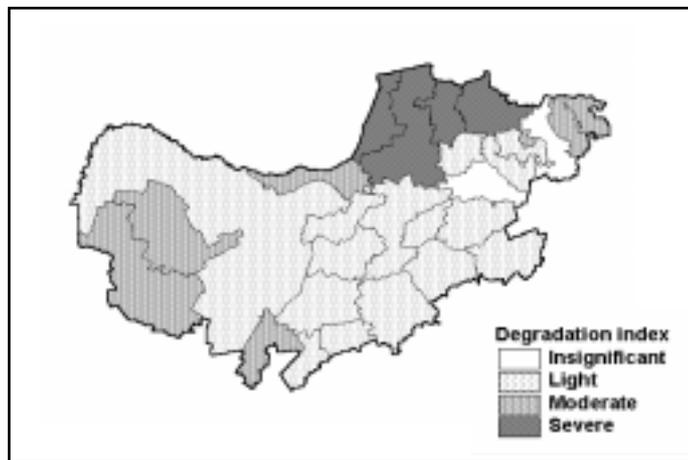
The location of the North West, showing the percentage of each magisterial district managed under a communal land tenure system.



The total Veld Degradation Index (VDI) for the 28 magisterial districts of the North West:
The VDI incorporates the severity and rate of veld degradation, as well as the % area of veld in the magisterial district.



The total Soil Degradation Index (SDI) for the 28 magisterial districts of the North West:
The SDI incorporates the severity and rate of soil degradation for all land use types, adjusted for the % area of each land use type in the magisterial district.



The Combined Degradation Index (CDI) for the 28 magisterial districts of the North West:
The CDI is the sum of the total SDI and VDI for each magisterial district.

Where can I get more information?

Department of Agriculture, North West, PO Box 112, Vryburg 8600
Tel: (05392) 71809, Fax: (05392) 70436

Department of Water Affairs & Forestry, North West, Private Bag X5, Mmabatho 2735
Tel: (0183) 64 3270, Fax: (0183) 64 0913

For more information about the national review of land degradation and its products, visit the following web-site:
www.nbi.ac.za/landdeg



National Department of Agriculture



National Botanical Institute



Environmental Monitoring Group



Department of Environmental Affairs & Tourism



Programme for Land & Agrarian Studies



Department of Water Affairs & Forestry