

PROVINCIAL FACT SHEET

LAND DEGRADATION

Northern Cape

Reviewing land degradation

As part of a national review of land degradation, information about soil and veld degradation was gathered at five workshops held in the Northern Cape 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 Northern Cape is perceived to be one of the least degraded provinces in South Africa.

Provincial profile

The Northern Cape is the largest but most sparsely populated province. The 1995 census recorded only about 742 000 people living in an area of 361 800 km². In most of the province, population densities are 0-5 people/km². Overall, 58,6% of the population lives in poverty.

The Northern Cape comprises parts of the former Cape Province, including a number of communal areas previously known as 'Coloured reserves'.

The western coastal region receives small amounts of winter rain and succulent shrubs dominate the landscape. Most of the interior receives summer rain and a mixture of low shrubs and grasses occurs, especially in the east. Savanna vegetation predominates in the north east. The climate is hyper-arid in the west and arid in the east.

Agricultural land use

Because the Northern Cape is very arid, only 2% of the province is used for crop farming. For example, export grapes are grown under irrigation along the Orange River. 96% of the land is used for stock farming, including beef cattle in the savanna biome and sheep or goats elsewhere. Game farming is also popular. The environment is unsuitable for commercial forestry and only 1% of land is set aside for conservation.

Although about 98% of land in the Northern Cape is used for agriculture, mining is the prime income earner. However, some mines are closing down and workers are using their retrenchment packages to purchase livestock, which may further contribute to land degradation.

Land degradation issues

On the whole, soil degradation is not perceived to be a serious problem in Northern Cape agricultural areas. Britstown and Prieska are the magisterial districts with the

highest soil degradation index values. Wind erosion and sheet erosion are the most common problems in the province, with salinization affecting some croplands.

Although the overall rate of veld degradation is decreasing in the Northern Cape, such a large area is used for grazing that the province has the third highest veld degradation index (see over). Change in plant species composition is by far the most serious problem, while loss of plant cover is a minor concern. Bush encroachment is an issue in some of the eastern districts. Fraserberg in the south and the districts stretching from Gordonia in the north-west to Hopetown in the south-east have the highest veld degradation index values.

Alien plants have invaded more than a million hectares of the Northern Cape and are a serious threat in some districts. For example, prosopis (mesquite) may use as much as 200 million m³ water per year, reducing the amount of groundwater available to farmers and rural communities.

If all magisterial districts in South Africa are considered together, none of the top twenty districts requiring priority attention occur in the Northern Cape. However, if commercial farming areas are considered on their own, the province has eight districts requiring priority attention.

Priority districts (commercial farming)

Britstown	Carnarvon	Fraserburg
Gordonia	Hay	Hopetown
Prieska	Williston	

Combating land degradation

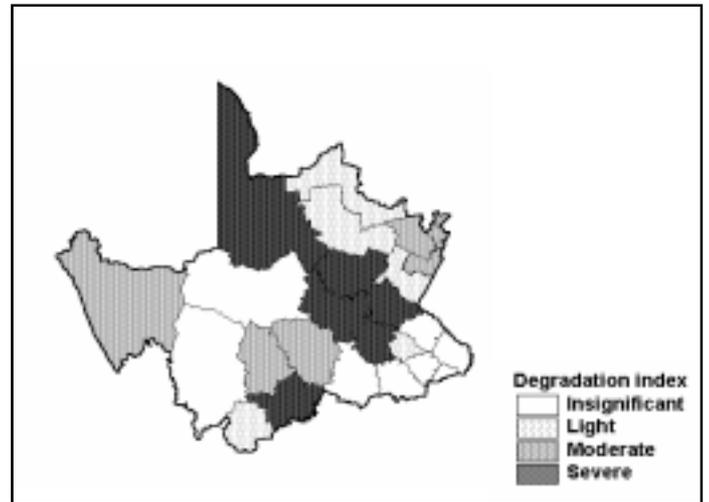
Government-sponsored schemes such as drought subsidies and bush clearing have contributed to a decrease in the rate of land degradation in the Northern Cape. Agricultural extension services, farmer study groups, and strict application of agricultural legislation have also helped. On the other hand, where there has been insufficient access to land, poor infrastructure and a lack of education, finance and government support, land degradation problems have resulted. These factors should be taken into account when developing sustainable land use policies and programmes to address land degradation in Northern Cape.



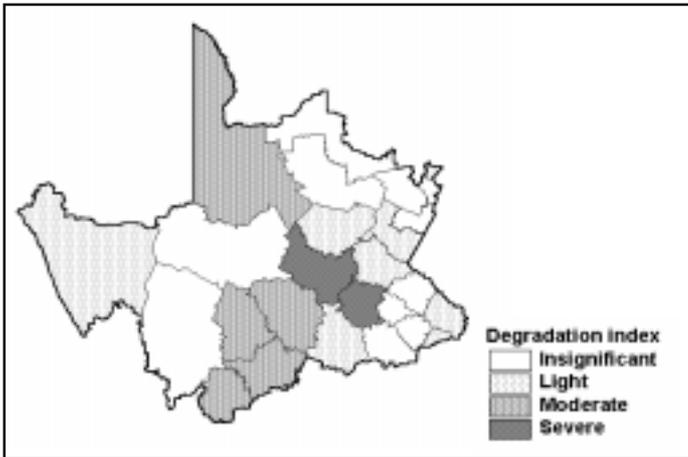
Indices of Land Degradation in the Northern Cape



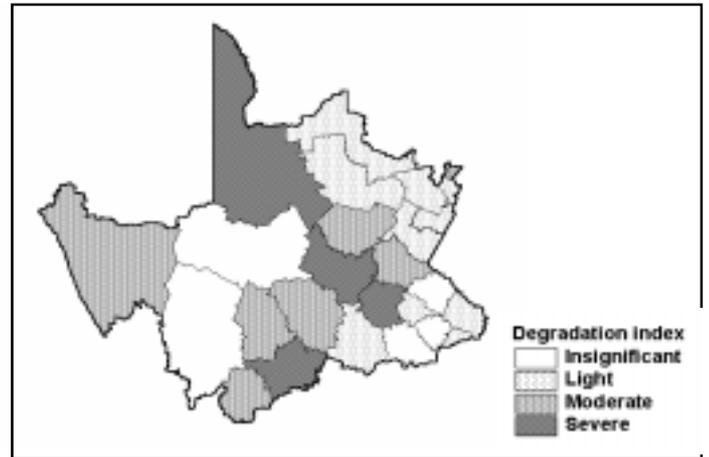
The location of the Northern Cape, showing the percentage of each magisterial district managed under a communal land tenure system.



The total Veld Degradation Index (VDI) for the 26 magisterial districts of the Northern Cape:
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 26 magisterial districts of the Northern Cape:
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 26 magisterial districts of the Northern Cape:
The CDI is the sum of the total SDI and VDI for each magisterial district.

Where can I get more information?

Department of Agriculture, Northern Cape, Private Bag X529, Middelburg 5900
Tel: (04984) 2 1113, Fax: (04984) 2 2769

Department of Water Affairs & Forestry, Northern Cape, Private Bag X6101, Kimberley 8300
Tel: (0538) 31 4125, Fax: (0538) 31 4534

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