

# Provincial Fact Sheet Land Degradation Western Cape

## Reviewing land degradation

As part of a national review of land degradation, information about soil and veld degradation was gathered at three workshops held in the Western 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 Western Cape has the third lowest combined index of land degradation in South Africa.

#### Provincial profile

Other than areas around Cape Town and parts of the southern Cape, most of the Western Cape is sparsely populated (0–25 people/km<sup>2</sup>). The 1995 census recorded more than 3,7 million people living in an area of 123 370 km<sup>2</sup>. Settlement areas have been increasing in the south west and along the southern Cape coast. 18,4% of the population of the Western Cape lives in poverty.

The Western Cape was part of the former Cape Province, and does not incorporate any former homelands or self-govening states. However, in various parts of the province there are small pockets of land managed under non-freehold tenure.

The natural vegetation of most of the Western Cape is fynbos, with succulent karoo in the west, Nama-karoo in the interior and the small forest biome in the vicinity of Knysna in the southern Cape. The climate varies from hyper arid in the west to humid in parts of the Cape Fold Mountains. Most of the interior is classified arid.

## Agricultural land use

43% of land in the Western Cape is used for stock farming, including dairy cattle, sheep, ostriches and karakul. Crops account for a further 36% of land use, including wheat, citrus, deciduous fruit, and indigenous crops like rooibos tea and wild flowers. 4% of land is used for commercial forestry and only 3% is set aside for conservation.

During the period 1988–98, there was a general decrease in the area of land used for grazing. Croplands decreased in the Karoo but increased in the western districts.

#### Land degradation issues

The Western Cape has the second lowest provincial soil degradation index in South Africa (see over). Soil degrada-

tion is insignificant in most agricultural lands, but affects some commercial grazing areas in the Little Karoo and around Vanrhynsdorp. Sheet erosion is the most common form of soil degradation, with some rill and gully erosion in the southern Cape. Salinisation affects some croplands in the north-east.

Overall, the Western Cape has a moderate index of veld degradation. In general, the north-eastern districts are well managed. The most degraded areas are Hermanus on the south coast, and Montagu, Oudtshoorn, and Calitzdorp in the Little Karoo.

In the grazing lands of the arid interior, change in plant species composition is the most common veld degradation problem. Along the coast and in the mountains, alien plants are the biggest threat. With nearly 29% of the land invaded, the Western Cape has by far the most serious alien plant problem in South Africa. Bugweed, rooikrans, Port Jackson willow and black wattle invade fynbos and forest areas, while prosopis is common in the arid interior. Unlike most other provinces, alien plants invade not only river courses but also landscapes in the Western Cape.

If all magisterial districts in South Africa are considered together, none of the top twenty districts requiring priority attention occur in the Western Cape. However, if the commercial farming districts are considered separately, four priority districts can be identified.

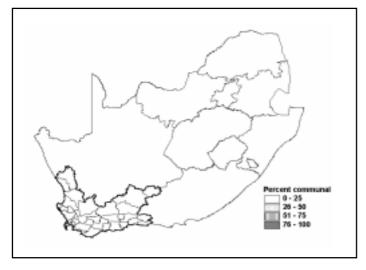
Priority districts (commercial farming)	
Calitzdorp	Montagu
Oudtshoorn	Vanrhynsdorp

## Combating land degradation

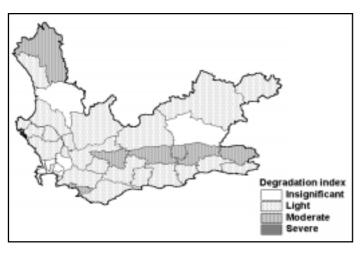
Other than a serious problem with alien plants and loss of plant species diversity, land in the Western Cape is relatively undegraded. Effective agricultural extension services, farmer study groups, government-subsidised soil conservation works and the strict application of agricultural legislation have all helped 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 Western Cape.



#### Indices of Land Degradation in the Western Cape

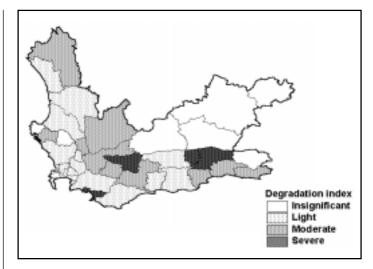


The location of the Western Cape, showing the percentage of each magisterial district managed under a communal land tenure system.

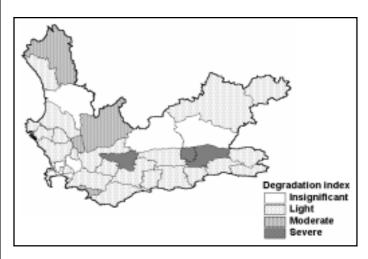


The total Soil Degradation Index (SDI) for the 42 magisterial districts of the Western Cape:

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 total Veld Degradation Index (VDI) for the 42 magisterial districts of the Western Cape: The Veld Degradation Index (VDI) incorporates the severity and rate of veld degradation, as well as the % area of veld in the magisterial district.



The Combined Degradation Index (CDI) for the 42 magisterial districts of the Western Cape: The CDI is the sum of the total SDI and VDI for each magisterial district.

Where can I get more information?

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Department of Water Affairs & Forestry, Western Cape, Private Bag X16, Sanlamhof 7532 Tel: (021) 950 7100, Fax: (021) 946 3664

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



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