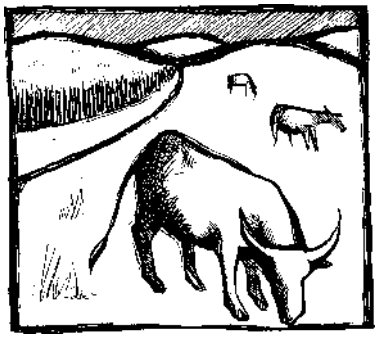


PROVINCIAL FACT SHEET

LAND DEGRADATION
KwaZulu-Natal

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 KwaZulu-Natal during 1998. 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 KwaZulu-Natal is one of the two most degraded provinces in South Africa.

Provincial profile

KwaZulu-Natal is relatively densely populated. The 1995 census recorded more than 8,7 million people living in an area of 92 180 km^2. Population densities are lowest in the commercial farming districts of the midlands and highest along the coast, in the metropolitan areas and in some of the communal areas (more than100 people /km^2). The rate of growth of settlement areas increased rapidly during the period 1988–98. About 31,8% of the population lives in poverty.

KwaZulu-Natal comprises the former province of Natal and the self-governing state of KwaZulu. It has a relatively high proportion of land under communal land tenure.

On the whole, the natural vegetation of the coastal region of KwaZulu-Natal is savanna, with the inland region being grassland. The climate of much of the province is classified semi-arid, with coastal areas and parts of the Drakensberg escarpment being dry sub-humid to humid.

Agricultural land use

58% of land in KwaZulu-Natal is used for stock farming, including beef and dairy cattle, sheep and game. Crops account for a further 17% of land use and include sugar cane, subtropical fruit, maize and potatoes. 8% of the province is used for commercial forestry and only 3% is set aside for conservation.

Overall, there was a slight decrease in the area of land used for both grazing lands and croplands in KwaZulu-Natal between 1988 and 1998, but an increase in forestry and conservation land.

Land degradation issues

KwaZulu-Natal has the second highest provincial soil degradation index in South Africa (see over). Rates of soil degradation are increasing in grazing lands. Communal areas are significantly more degraded than commercial farming areas, particularly in the steeply sloping parts along the eastern escarpment. Gully and sheet erosion affect croplands, grazing lands, commercial forestry and settlement areas.

The province has the second highest provincial veld degradation index in South Africa (see over) and the rate is increasing. Loss of plant cover and change in plant species composition are problems in the grasslands. Deforestation is a concern in some communal areas in the savanna biome. Bush encroachment is a priority in a few magisterial districts. Alien plants such as black wattle have invaded most river systems, and triffid weed, lantana and bugweed are problems in coastal and mistbelt areas. Alien plants use about 17% of the annual runoff in KwaZulu Natal.

Acid rain and effluent from mining and industrial areas, such as Newcastle and Richards Bay have polluted some rivers and estuaries. Many of the upper reaches of rivers are eroded and turbid because of trampling and grazing by cattle.

If all magisterial districts in South Africa are considered together, seven of the twenty districts requiring priority attention in terms of land degradation are in KwaZulu-Natal.

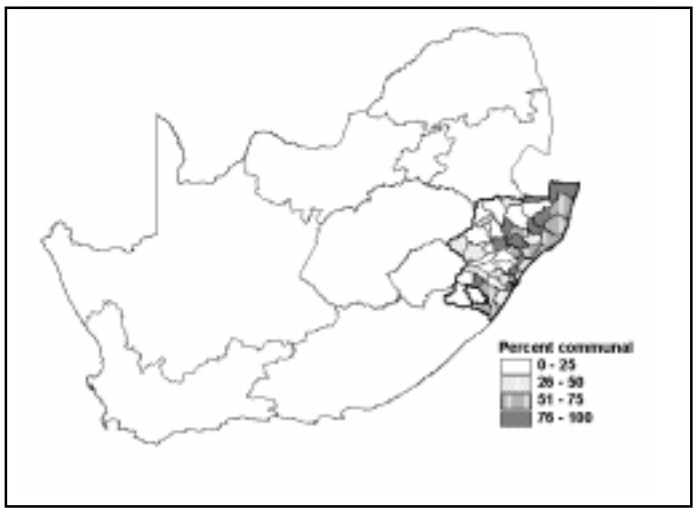
Priority magisterial districts

Mahlabatini	Mapumulo	Msinga
Nkandla	Nongoma	Nqutu
Weenen		

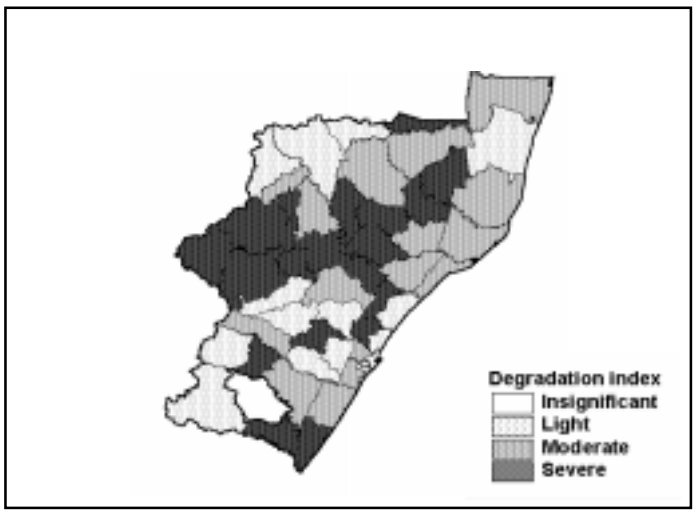
Combating land degradation

Soil degradation is decreasing in some commercial croplands of KwaZulu-Natal because of good agricultural extension services, farmer study groups, minimum tillage, government-subsidised soil conservation works and strict application of agricultural legislation. In many communal districts, however, insufficient access to land, a lack of government support, finance and education, and inadequate infrastructure have resulted in overstocking and poor cultivation practices. These experiences should be taken into account when developing sustainable land use policies and programmes to address land degradation in KwaZulu-Natal.

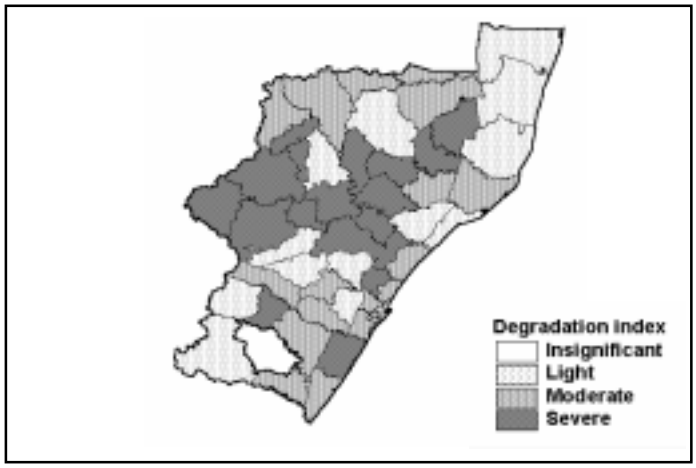
Indices of Land Degradation in KwaZulu-Natal



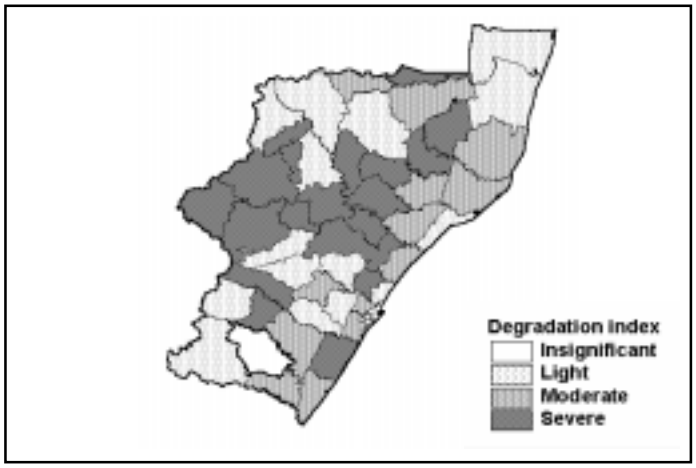
The location of KwaZulu-Natal, showing the percentage of each magisterial district managed under a communal land tenure system.



The total Veld Degradation Index (VDI) for the 51 magisterial districts of KwaZulu-Natal:
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 51 magisterial districts of KwaZulu-Natal:
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 51 magisterial districts of KwaZulu-Natal:
The CDI is the sum of the total SDI and VDI for each magisterial district.

Where can I get more information?

Department of Agriculture, KwaZulu-Natal, Private Bag X9050, Pietermaritzburg 3200
Tel: (033) 355 9339, Fax: (033) 335 9330

Department of Water Affairs & Forestry, KwaZulu-Natal, P O Box 1018, Durban 4000,
Tel: (031) 336 2700, Fax: (031) 307 7279

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

Text by Timm Hoffman (NBI) and Ally Ashwell (EnviroEds). Illustrations by Carlos Amato. Desktop publishing by Andy Thesen. Printed by Salty Print.