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## CARBON SINKS ATLAS FOR SOUTH AFRICA

### LADA Degradation Index

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**Metadata Date Stamp:**

28 February 2017

#### DATASET DESCRIPTION

**File Names:****Data:**

LADA\_South\_Africa\_Degradation\_Index\_DAFF\_Apr2016

**Metadata:**

LADA\_South\_Africa\_Degradation\_Index\_DAFF\_Apr2016\_METADATA

**Dataset Reference Date:**

April 2016

**Data quality:**

Good – During the Land Degradation Assessment in Drylands (LADA) project, the South African National Assessment of Land Degradation and Conservation was done between 2008 and 2011. 728 Contributing specialists throughout the country contribute their knowledge and experience on land degradation and sustainable land management during a series of 34 Participatory Expert Assessment (PEA) Workshops. It is important to notice that the results of these national assessments are qualitative in nature and based on the perceptions of contributing specialists based on the assumption that they all know their respective assessment areas well enough to report on land degradation and conservation attributes. To improve data quality, the same methodology (LADA-WOCAT Mapping Questionnaire (QM)) was used during all 34 PEA Workshops and one facilitator was used to guide the process and ensure terminology and definitions are used in a constant and repeatable way between workshops. During the PEA workshops the principle of consensus mapping was used as guiding principle to ensure good data quality. Assessment results of different assessment groups within a PEA workshop was discussed and calibrated within a bigger plenary session with all the groups present. This helped in calibrating results between mapping units within an assessment area and the facilitator was then responsible to calibrate results between PEA workshops within and between provinces.

**Dataset Responsible Party:**

Department of Agriculture, Forestry and Fisheries (DAFF), Directorate Land Use and Soil Management, Private Bag X120, Pretoria, 0001. Attention: Scientific Manager: Mr Hein Lindemann e-mail: [HeinL@daff.gov.za](mailto:HeinL@daff.gov.za)

**Geographic Location of the Dataset: RSA**

West: 16.081523

East: 33.484393

North: - 22.098501  
South: - 34.709233

**Keywords:**

LADA, Land degradation, Degradation Index, WOCAT, South Africa

**Dataset Language:**

English (SOUTH AFRICA)

**Dataset Character Set:**

utf8 - 8 bit UCS Transfer Format

**Dataset Topic Category:**

007 = Environment (ISO 19115 Topic category)

**Data Type:**

Shapefile feature class

**Format:**

ArcGIS Shapefile

**Geometry Type:**

Polygon

**Data Release classification:**

Release classification	Description	Time frame	Example
OR	Official release	28 February 2017	LADA_South_Africa_Degradation_Index_DAFF_Apr2016

**Citation:**

Lindeque, G.H.L., & Koegelenberg, F.A., 2015. *Perceptions on land degradation and current responses to land degradation problems in South Africa: Local Municipality Fact Sheet Series*. Department of Agriculture, Forestry and Fisheries, Pretoria.

**Abstract:**

Land degradation is a complex set of processes of impoverishment of terrestrial ecosystems mainly under the impact of human activities. Land degradation can be understood as the gradual or permanent loss of productivity of the land to produce ecosystem goods and services.

Variables on the state of land degradation (the extent, degree and rate of degradation processes) were combined with the level of impact of these degradation processes on ecosystem services to provide an unique Degradation Index (DI) for each type of degradation identified by the contributing specialist for each mapping unit as defined by the LADA Land

Use Map for South Africa. The DI values range from 0 to 100, for all degradation types identified. The higher the DI value, the more degraded the area are.

**Purpose:**

This data was made available for the online Carbon Sinks Atlas courtesy of Department of Agriculture, Forestry and Fisheries (DAFF). The purpose of including the data into the Carbon Atlas was to generate awareness on the state and severity of land degradation in South Africa as a direct driver of lowering soil carbon sink levels.

**Supplemental Information:**

None

**Lineage Statement:**

None

#### ATTRIBUTE INFORMATION

Field name	Data type	Description	Example
DI	Double	This field contains values of the Degradation index between 0 and 100  Class Intervals: < 32.5 Very Low 32.51 – 41.16 Low 41.17 – 47.91 Moderate 47.92 – 58.27 Severe > 58.27 Very Severe	47.91

#### SUPPLEMENTARY INFORMATION

None

#### DATA MAINTENANCE

**Dataset last updated:**

February 2017

**Time Period of Content:**

2008-2011

**Maintenance and update frequency:**

No updates.

#### DISTRIBUTION AND CONSTRAINTS

**On/line Resource:**

The South African Environmental Observation Network (SAEON)

<http://www.saeon.ac.za/>

**Distribution Format:**

ArcGIS shapefile

**Copyright:**

Department of Agriculture, Forestry and Fisheries (DAFF), Directorate Land Use and Soil Management, Private Bag X120, Pretoria, 0001. Attention: Scientific Manager: Mr Hein Lindemann e-mail: [HeinL@daff.gov.za](mailto:HeinL@daff.gov.za)

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**Acknowledgments:**

None

**METADATA INFORMATION**

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**Additional Extent information for the Dataset (Vertical & Temporal):**

N/A

**Spatial Representation Type:**

Polygon - Area

**Spatial Reference:**

Coordinate Reference: GCS\_WGS\_1984  
Projection - Albers\_Conic\_Equal\_Area

**Projection:**

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PROJCS["Albers_Equal_Area_Conic_South_Africa",  
  GEOGCS["GCS_WGS_1984",  
    DATUM["D_WGS_1984",  
      SPHEROID["WGS_1984",6378137,298.257223563]],  
    PRIMEM["Greenwich",0],  
    UNIT["Degree",0.0174532925199433]],  
  PROJECTION["Albers"],  
  PARAMETER["False_Easting",0],  
  PARAMETER["False_Northing",0],  
  PARAMETER["central_meridian",24],  
  PARAMETER["Standard_Parallel_1",-18],  
  PARAMETER["Standard_Parallel_2",-32],  
  PARAMETER["latitude_of_origin",0],
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**Metadata File Identifier:**

LADA\_South\_Africa\_Soil\_Degradation\_Index\_DAFF\_Apr2016\_METADATA

**Metadata Standard Name:**

SANS 1878

**Metadata Standard Version:**

SANS 1878/1:2005

**Metadata Language:**

English

**Metadata Character Set:**

US/Ascii