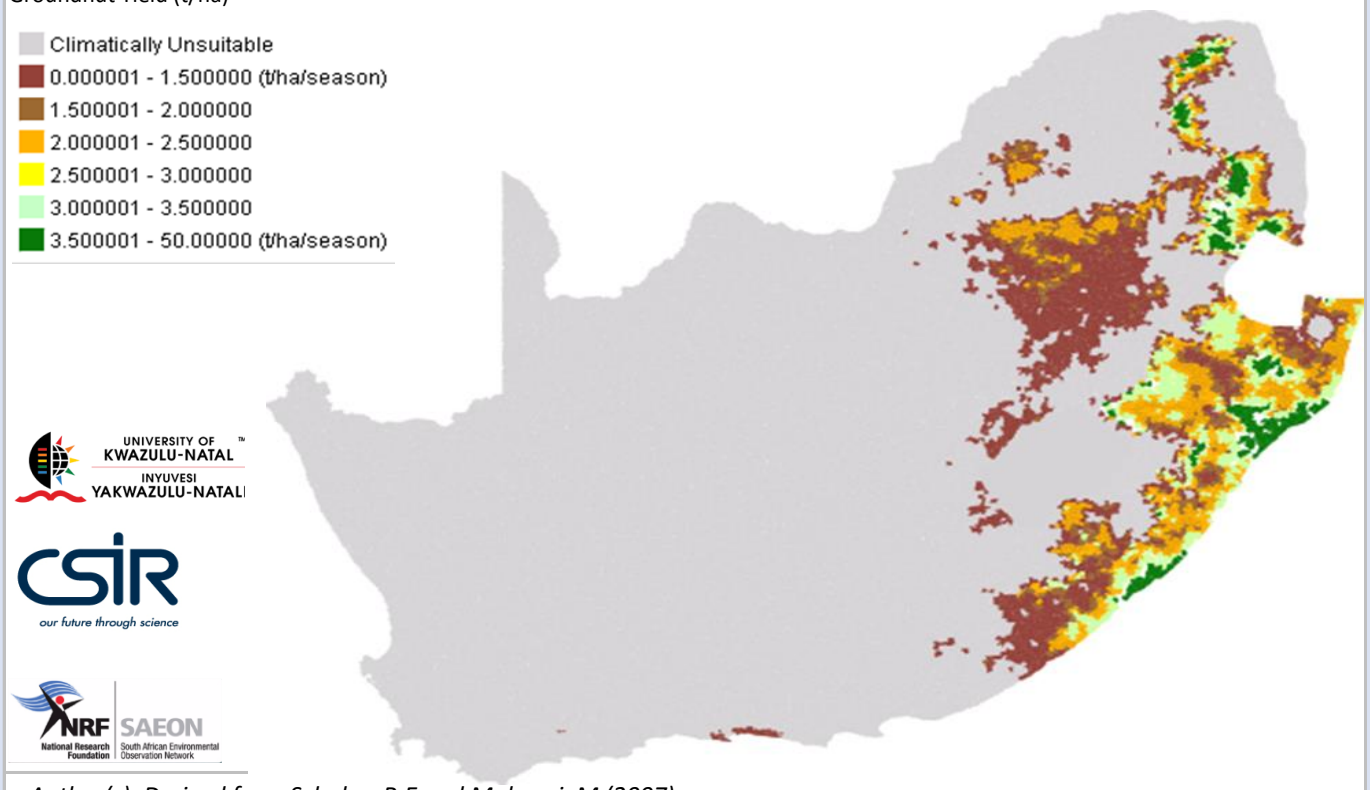
THEME: PLANNING YIELD POTENTIALS	Prepared by: Wim Hugo, SAEON

Groundnut Yield Estimation

Legend

Groundnut Yield (t/ha)



Author(s): Derived from Schulze, R.E and Maharaj, M (2007)

Date: 2007

Meta-Data

Title	*Groundnut Yield Estimates per mesozone*
File Name	*Join_meso_base_and_yld_gnut_int_pt.shp*
Author(s)	*Derived from Schulze, R.E and Maharaj, M (2007)*
Publication Date	*2007*
Citation	Schulze, R.E. and Maharaj, M. 2007. Groundnut Yield Estimation. In: Schulze, R.E. (Ed). 2007. South African Atlas of Climatology and Agrohydrology. Water Research Commission, Pretoria, RSA, WRC Report 1489/1/06, Section 16.7.
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Abstract	**Data shows groundnut yield estimates allocated to mesozones. Yield estimates were derived from Schulze R.E. and Maharaj M. (2007) and then allocated to mesozones by combining with a base mesozone layer obtained from the CSIR Geospatial Analysis Platform (GAP).* **Going by Smith's (1994; 1998) criteria, the climatically most suitable areas for dryland groundnut production are the northeastern parts of the Eastern Cape, much of KwaZulu Natal, and parts of Mpumalanga and Limpopo, with some areas having the potential to produce in excess of 3.5 t/ha. This is in stark contrast with the actual production areas of North West, the Northern Cape and the Free State.* **Using Smith's (1994; 1998) climatic criteria, yields of groundnuts are estimated using the effective rainfall for October to March and heat units (base 10°C) for the same period, with modifications to yields made for soil properties and levels of management.*
Keywords	*agriculture, crops, mesozones, groundnuts, yield estimation*
Caveats	http://bea.dirisa.org/resources/metadata-sheets/WP03_00_META_GRN.pdf
Web Meta-Data	
Web Resource	http://app01.saeon.ac.za:8086/geoserver/BEA/wms?service=WMS&version=1.1.0&request=GetMap&layers=BEA:Join_meso_base_and_yld_gnut_int_pt&styles=&bbox=16.45192000002853,-34.83416989569373,32.89253174669768,-22.12503000000106&width=512&height=395&srs=EPSG:4326&format=application/openlayers

Methodology/ Protocol

Processing/ Provenance	*As described above*

Important Attributes

MESO_ID	Meso-zone ID
AVG_GRID_C	Groundnut yield estimates, t/ha

References and Sources

[1]	Base Mesozone Dataset: http://196.21.191.61:8085/geoserver/GAP/wms?service=WMS&version=1.1.0&request=GetMap&layers=GAP:meso_2010_base_wgs84&styles=&bbox=16.4519200000285,-34.8341698956937,32.8925317466977,-22.1250300000011&width=512&height=395&srs=EPSG:4326&format=application/openlayers
[2]	Geospatial Analysis Platform. 2015. GAP. [ONLINE] Available at: http://www.gap.csir.co.za/. [Accessed 30 March 2015].
[3]	Groundnut Yield Estimation: http://196.21.191.61:8082/geoserver/BEEH_grid/wms?service=WMS&version=1.1.0&request=GetMap&layers=BEEH_grid:yld_groundnut&styles=&bbox=16.458333,-34.841667,32.908333,-22.141667&width=512&height=395&srs=EPSG:4326&format=application/openlayers
[4]	Schulze, R.E. and Maharaj, M. 2007. Groundnut Yield Estimation. In: Schulze, R.E. (Ed). 2007. South African Atlas of Climatology and Agrohydrology. Water Research Commission, Pretoria, RSA, WRC Report 1489/1/06, Section 16.7.