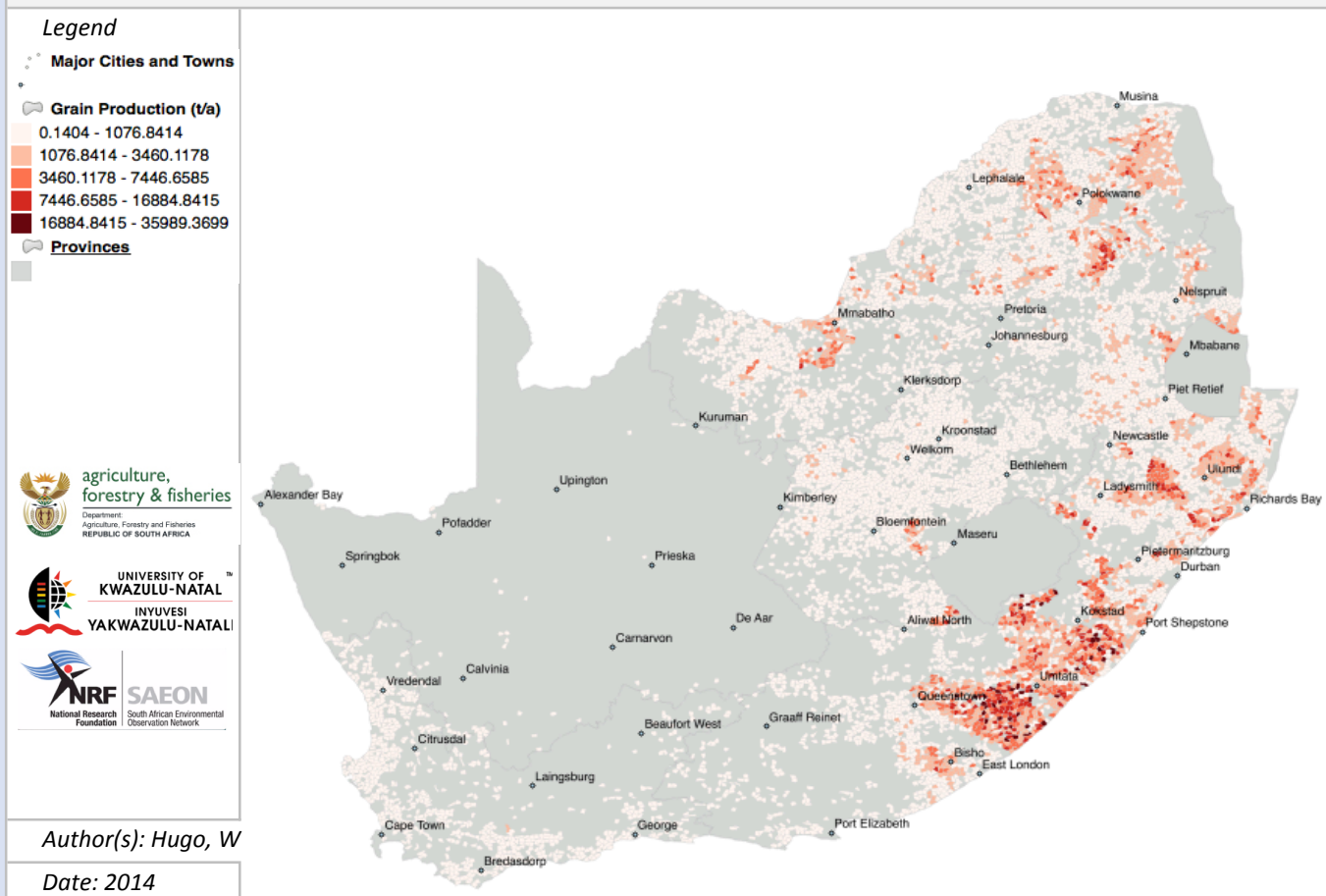


**Production of Maize on Subsistence and Underutilised Farmland****Meta-Data**

<b>Title</b>	<i>Production of Maize on Subsistence and Underutilised Farmland</i>
<b>File Name</b>	1_03_MAI
<b>Author(s)</b>	Hugo, W
<b>Publication Date</b>	2014
<b>Citation</b>	Hugo, W, 2014. Maize Production on Subsistence Farmland. In: Hugo W. (Ed). 2015. South African BioEnergy Atlas. DST, Pretoria, RSA, Section W03_00.
<b>License</b>	<a href="#">Creative Commons 4.0 BY SA (No restrictions on re-use, proper citation and attribution required)</a>
<b>Abstract</b>	<p>Data was derived from the following sources:</p> <ul style="list-style-type: none"> <li>* Extent of underutilised and subsistence farmland, data obtained from Department of Agriculture, Forestry, and Fisheries.</li> <li>* On such land, maize potential was calculated from data published by Schulze (2007) on maize-growing potential.</li> <li>* Grain, Oil, and Residue (Stover) production was calculated based on grain yields, and aggregated to meso-zones for planning and feasibility analysis.</li> <li>* Grain, Oil and Residue ratios were derived from literature.</li> <li>* Exploitable fraction of residue was reported based on assessment of yields and published literature.</li> </ul>

<b>Keywords</b>	<i>biomass, potential, agriculture, maize, stover, grain, oil, residue, straw</i>
<b>Caveats</b>	
<b>Web Meta-Data</b>	
<b>Web Resource</b>	<a href="http://app01.saeon.ac.za:8082/geoserver/BEEH_shp/wms?service=WMS&amp;version=1.1.0&amp;request=GetMap&amp;layers=BEEH_shp:prim_prod.shp&amp;styles=&amp;bbox=16.469,-34.834,32.891,-22.124&amp;width=512&amp;height=396&amp;srs=EPSG:4326&amp;format=application/openlayers">http://app01.saeon.ac.za:8082/geoserver/BEEH_shp/wms?service=WMS&amp;version=1.1.0&amp;request=GetMap&amp;layers=BEEH_shp:prim_prod.shp&amp;styles=&amp;bbox=16.469,-34.834,32.891,-22.124&amp;width=512&amp;height=396&amp;srs=EPSG:4326&amp;format=application/openlayers</a>

#### **Methodology/ Protocol**

Processing/ Provenance	<i>As described above.</i>
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#### **Important Attributes**

MESO_ID	Meso-zone ID
INF_HA	Subsistence and Underutilised farmland in mesozone, ha
MAI	Biomass production in zone per annum, tons
OIL	Oil production in zone per annum, tons
GRAIN	Grain production in zone per annum, tons
LIGNO	Ligno-Cellulose (Residue) production in zone per annum, tons

#### **References and Sources**

[1]	Schulze, R.E. and Walker, N.J. 2007. Maize 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 16.2.
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[3]	Hugo, W 2015. Basis of Estimates of Exportable Maize Residues, South African BioEnergy Atlas, DST, Pretoria, South Africa, 2015. Section WP04_05_FACT_Maize_Residue
[4]	Crop boundaries for South Africa - Obtained from Department of Agriculture, Fisheries, and Forestry, 2014. Refer to <a href="http://app01.saeon.ac.za:8085/geoserver/WP03/wms?service=WMS&amp;version=1.1.0&amp;request=GetMap&amp;layers=WP03:cropland_rsa&amp;styles=&amp;bbox=17.87917501867629,-34.72917318565405,32.84584168833629,-22.1426006450060048,width=512&amp;height=420&amp;srs=EPSG:4326&amp;format=application/openlayers">http://app01.saeon.ac.za:8085/geoserver/WP03/wms?service=WMS&amp;version=1.1.0&amp;request=GetMap&amp;layers=WP03:cropland_rsa&amp;styles=&amp;bbox=17.87917501867629,-34.72917318565405,32.84584168833629,-22.1426006450060048,width=512&amp;height=420&amp;srs=EPSG:4326&amp;format=application/openlayers</a>
[5]	Hugo, W 2014. Crop Yield Ratios and Potential for Yield Improvement, South African BioEnergy Atlas, DST, Pretoria, South Africa, 2015. Section WP03_00_CROP_YIELD