BFAP

DATA DRIVEN INSIGHT

www.bfap.co.za

IVIS

INTEGRATED VALUE INFORMATION SYSTEM

www.ivis.africa

5th Agbiz Grain Symposium

"Farmer information system to identify growth opportunities for storage"

Pretoria

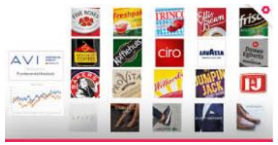
20 August 2018

Some of the IVIS Offerings:

IVIS
INTEGRATED VALUE INFORMATION SYSTEM

- The Integrated Value Information System provides a **single solution** to **systemise data management**, **analyse** available **data** to **derive strategically relevant insights** and provide spatial visualisation of information and insights.
- A **real-time, web-based spatial information system**. The spatial viewer enable's effective spatial planning, monitoring and reporting of business activities.
- a Proprietary **software solution** which uses the latest internet technologies (PHP, Java, MySQL) and security protocols to offer a **fully customizable platform** and business integration to our clients

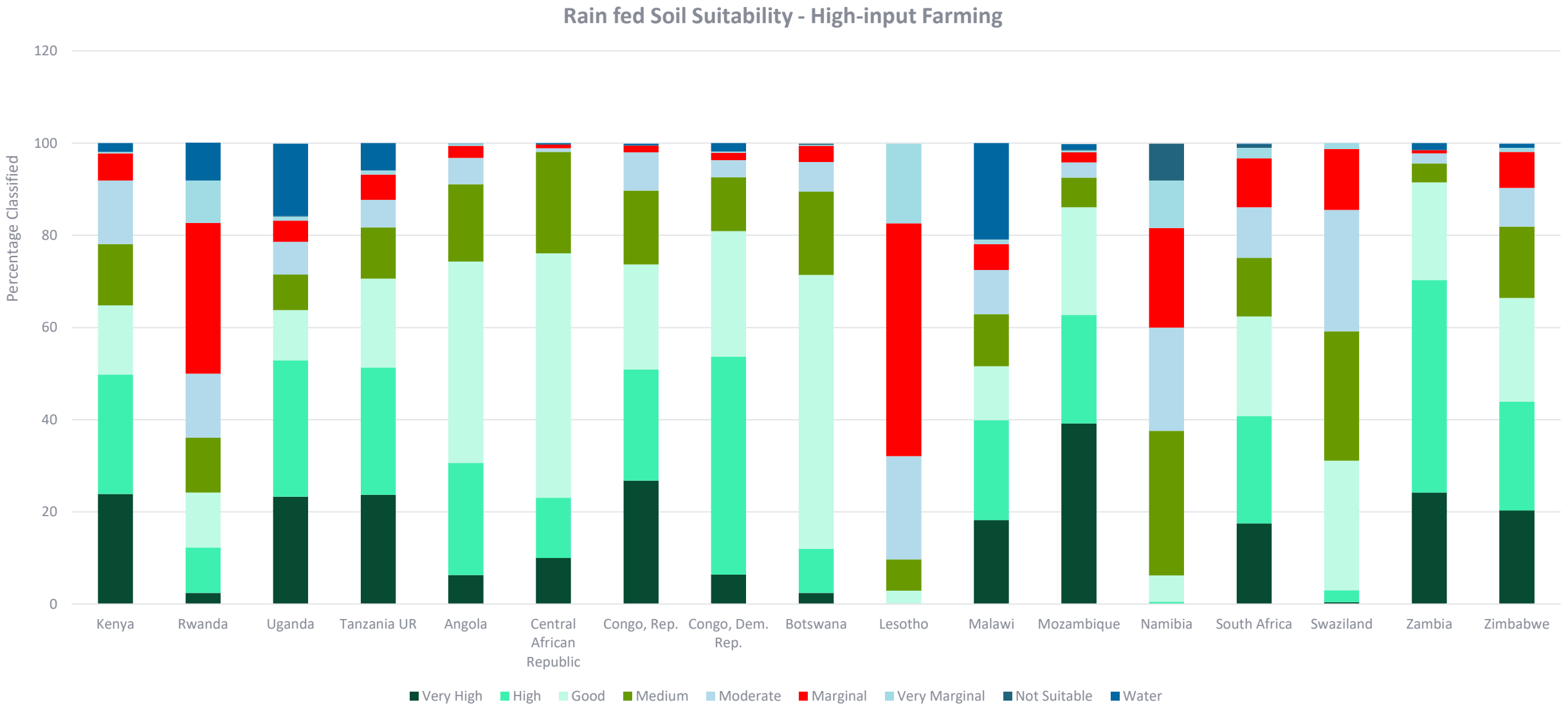
Clients / companies / organisations benefitting from IVIS products or applications:

ABInBev SAB MILLER · GRAIN SA GRAAN SA · ABSA · national treasury Department: National Treasury REPUBLIC OF SOUTH AFRICA · BFAP · sappo · WWF · 

IVIS as a spatial decision support system

Where can we grow what?

IVIS
INTEGRATED VALUE INFORMATION SYSTEM

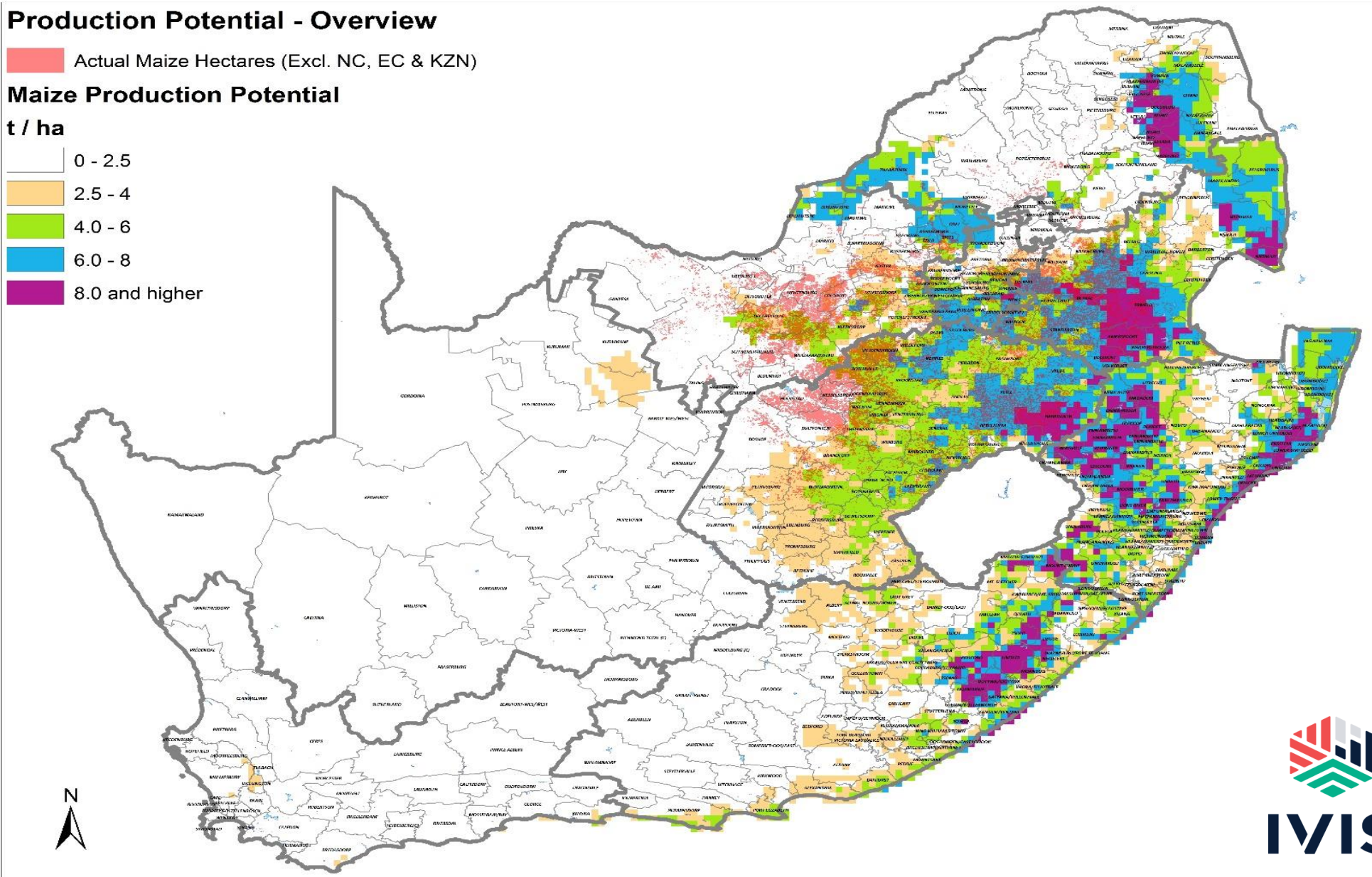


Full Value Chain Integration – E.g. Maize

IVIS
INTEGRATED VALUE INFORMATION SYSTEM

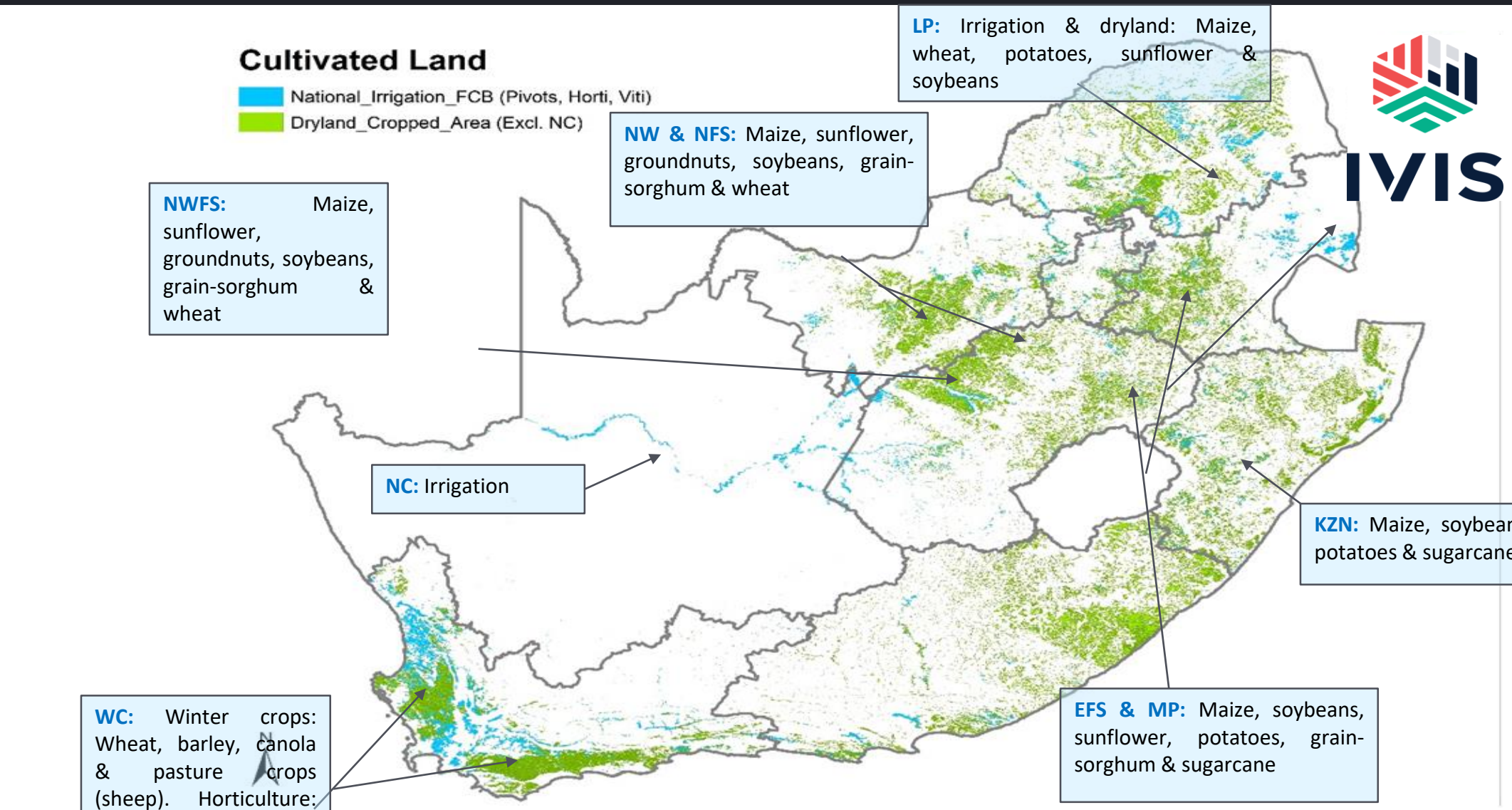
Where is the Risk / Opportunity ?

Where can we grow what?



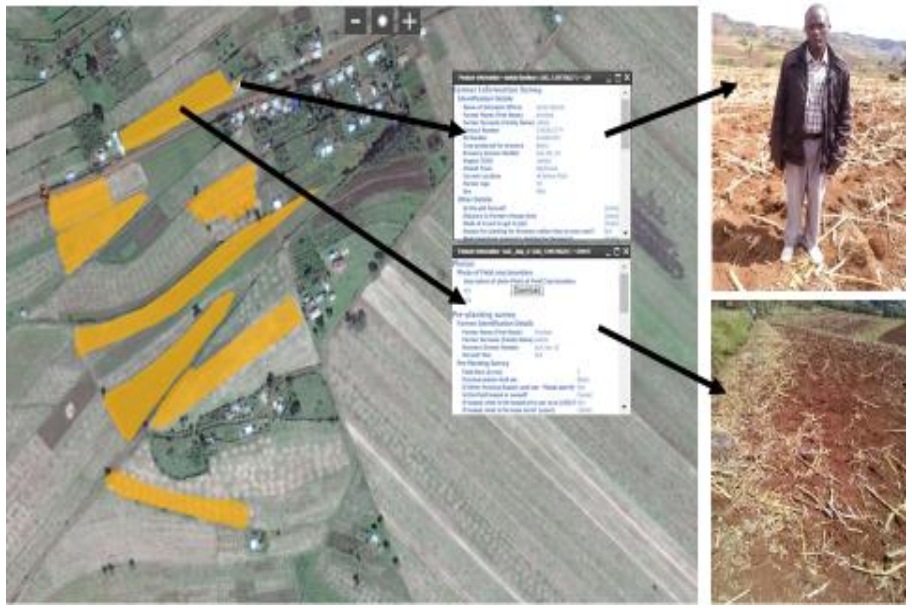
From the 15.8 million hectares of capable arable land in South Africa, only 1.8 million is considered high potential (11.8%)

Where do we cultivate?

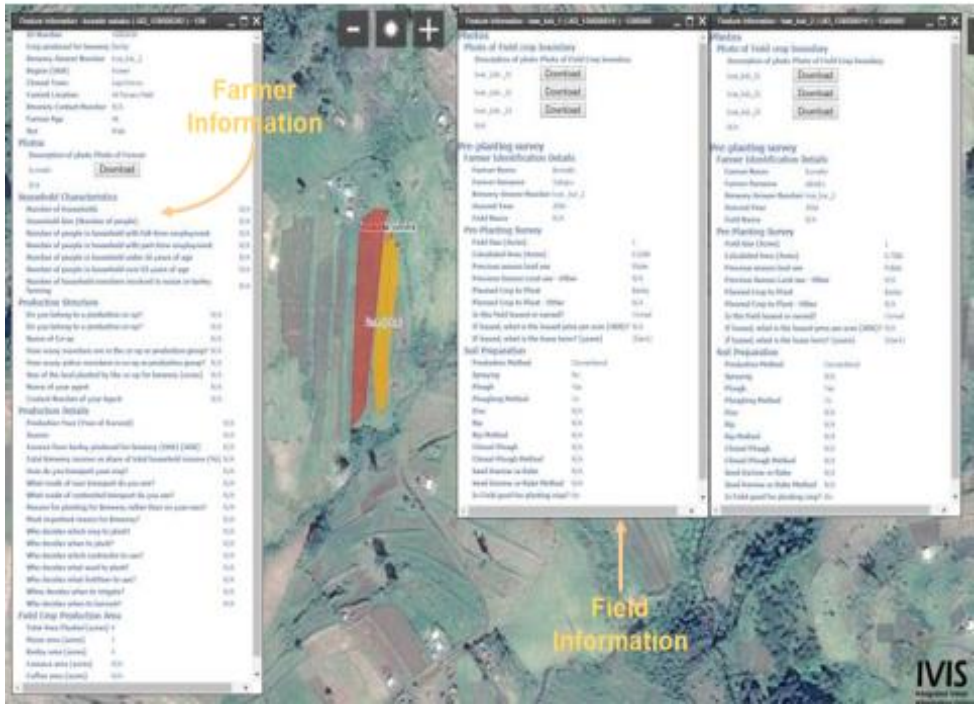


Gathering and Distributing Information using an the IVIS Off-line APP

Summary of field and farmer information



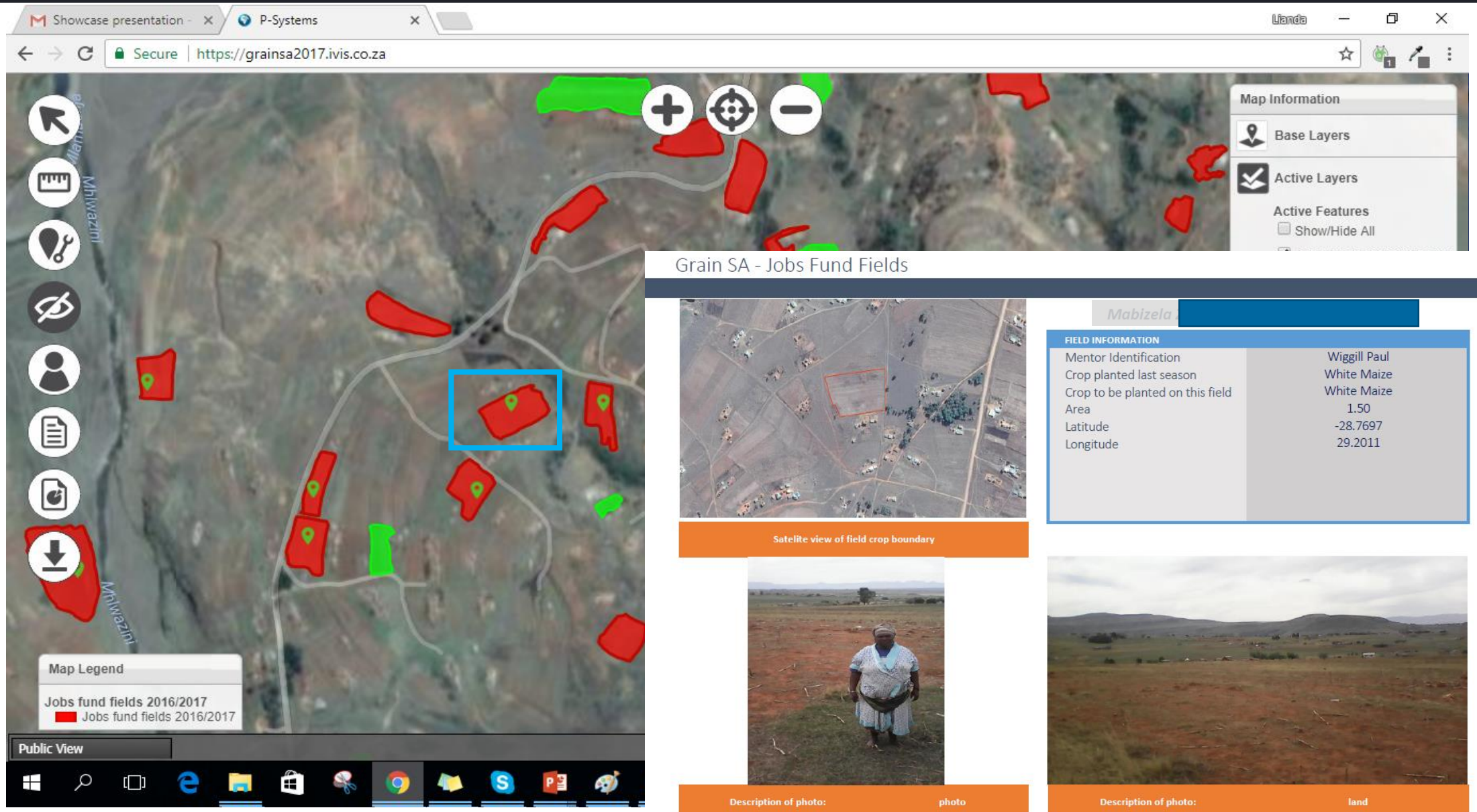
Detailed questionnaire designed to address client needs



The app is designed to work in remote locations (without reception).

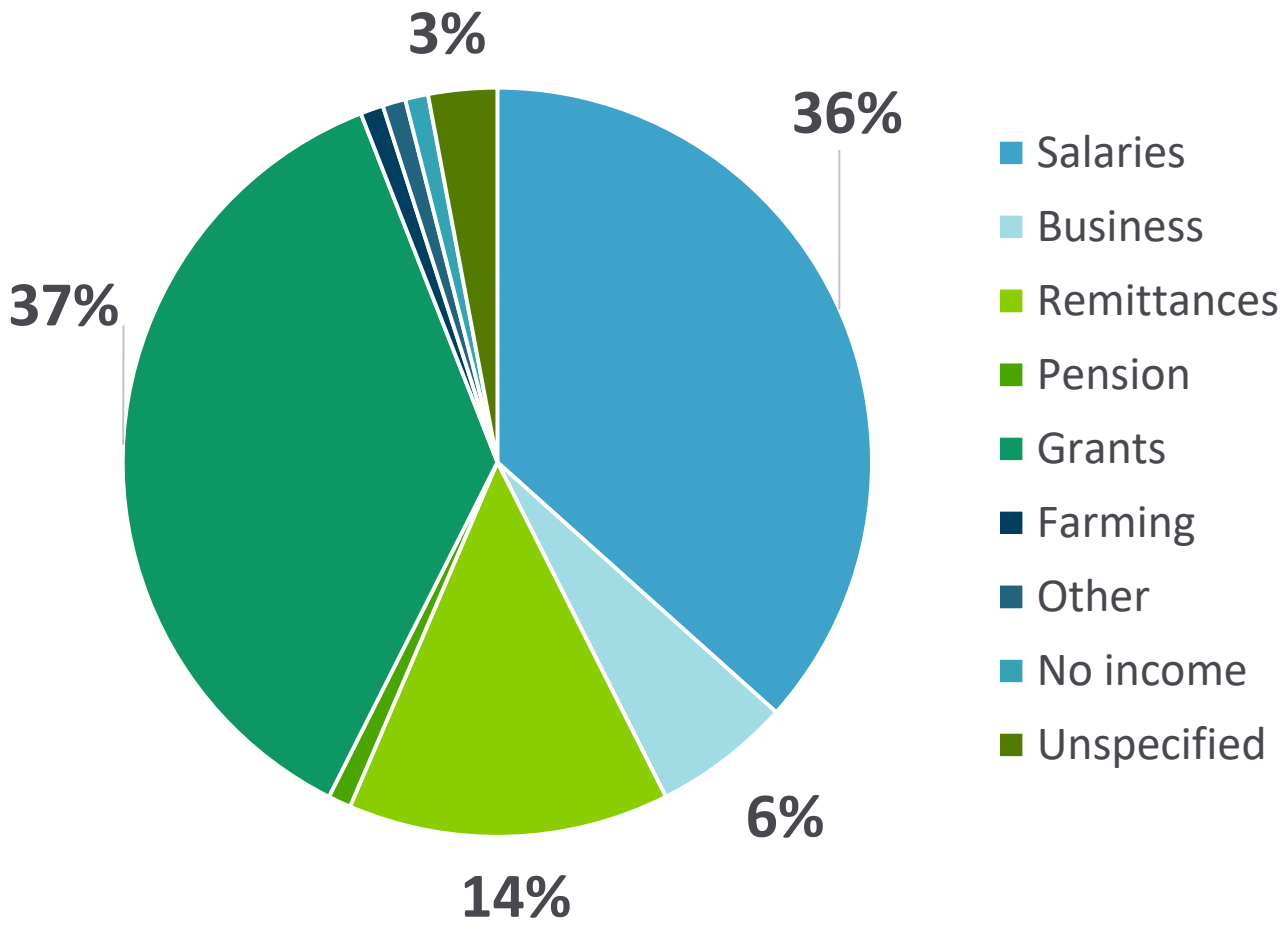
Each offline-app project can be monitored “hands-on” by the client and data can be verified as it is uploaded.

Grain SA Jobs fund Project

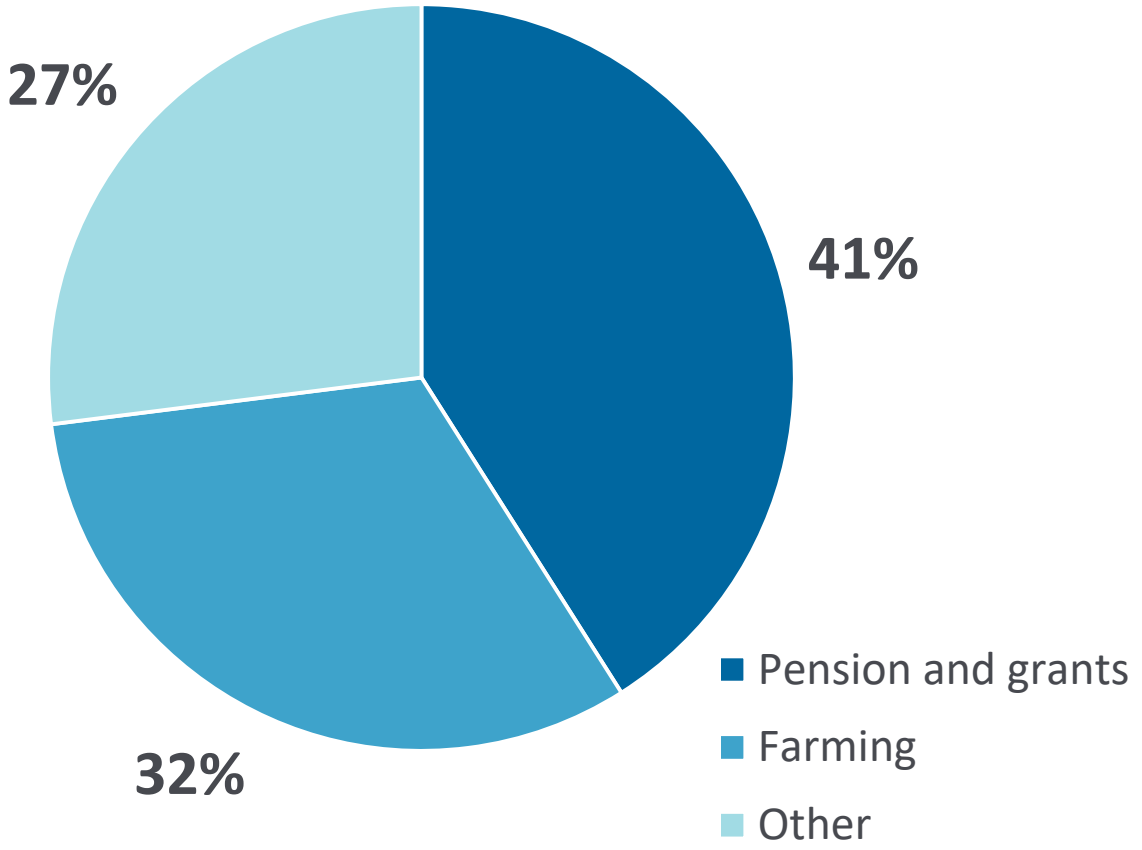


Farming as a source of income

StatsSA 2015 Household survey

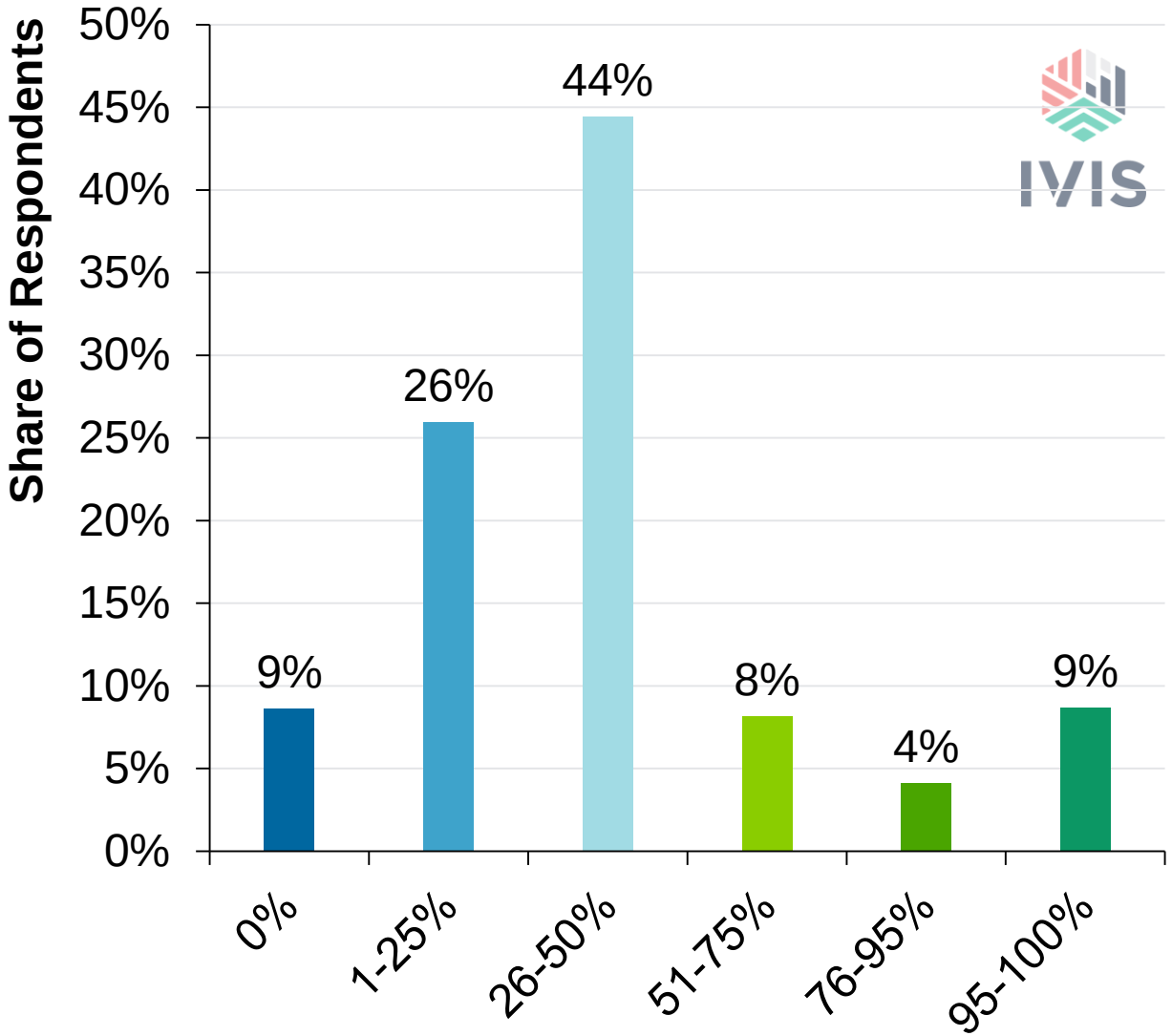


2016/17 Jobs Fund - GrainSA supported developing farmers

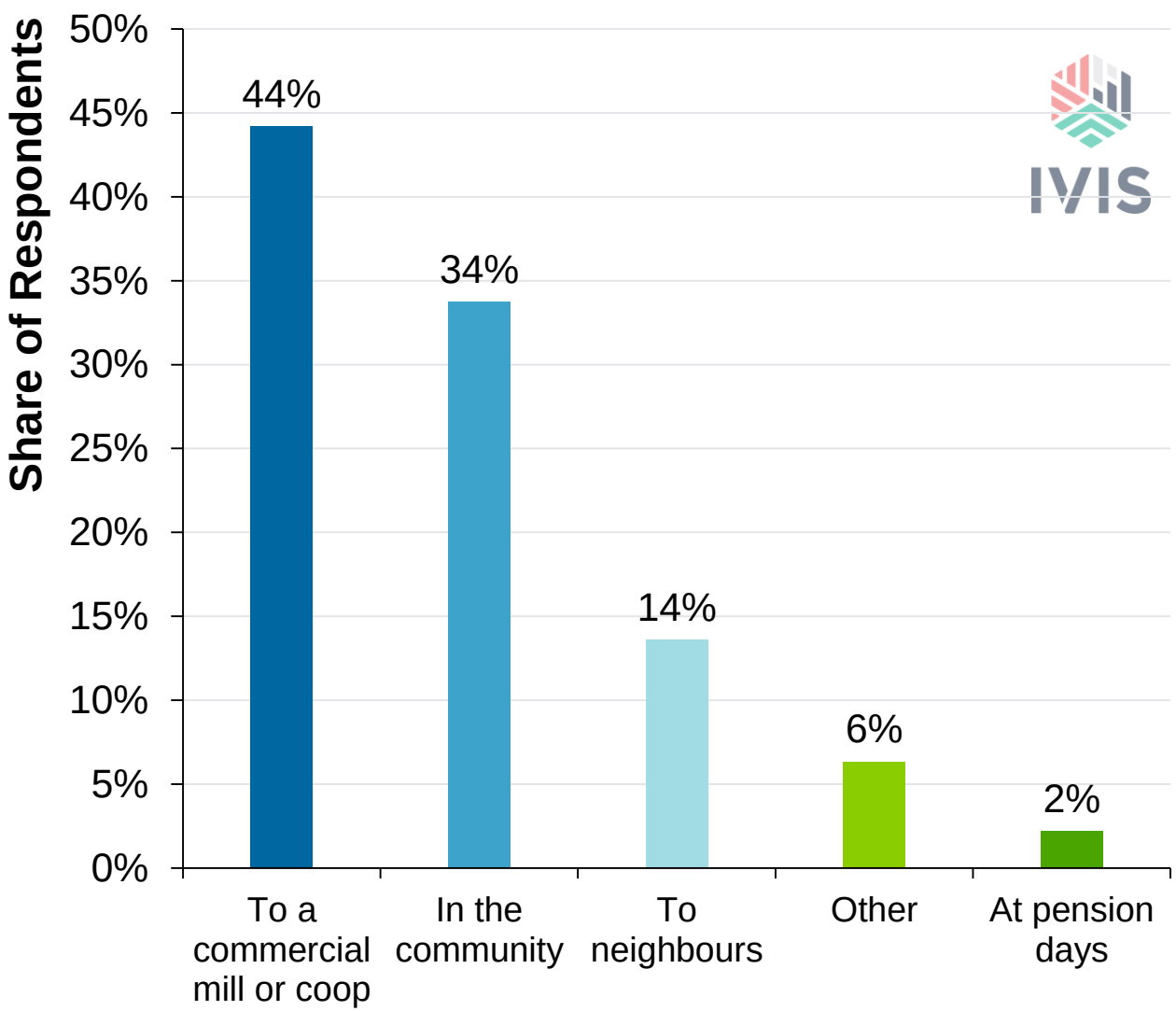


Maize consumption & marketing

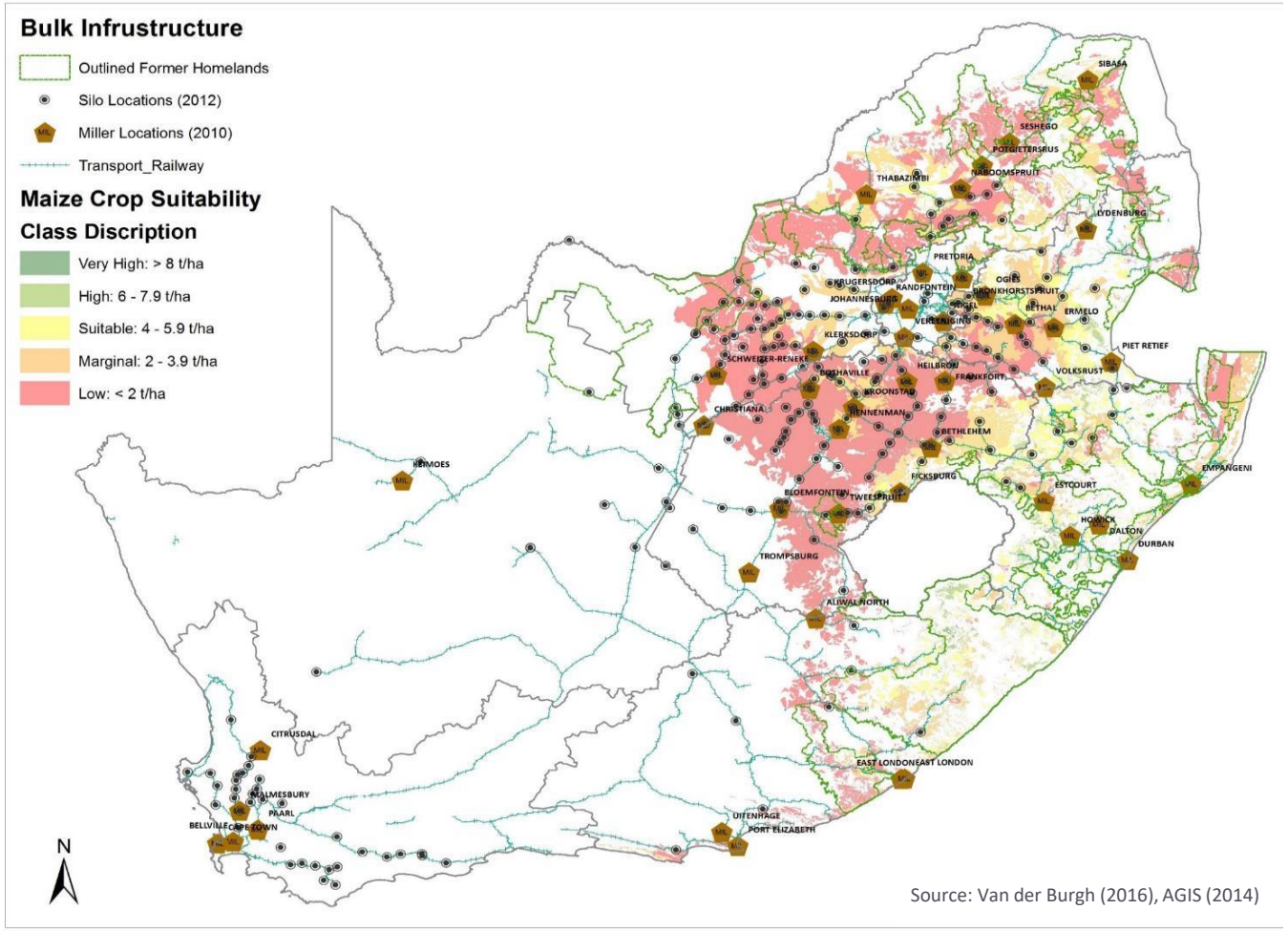
Share of harvest consumed in the household



Where farmers sold their 2016/17 grain

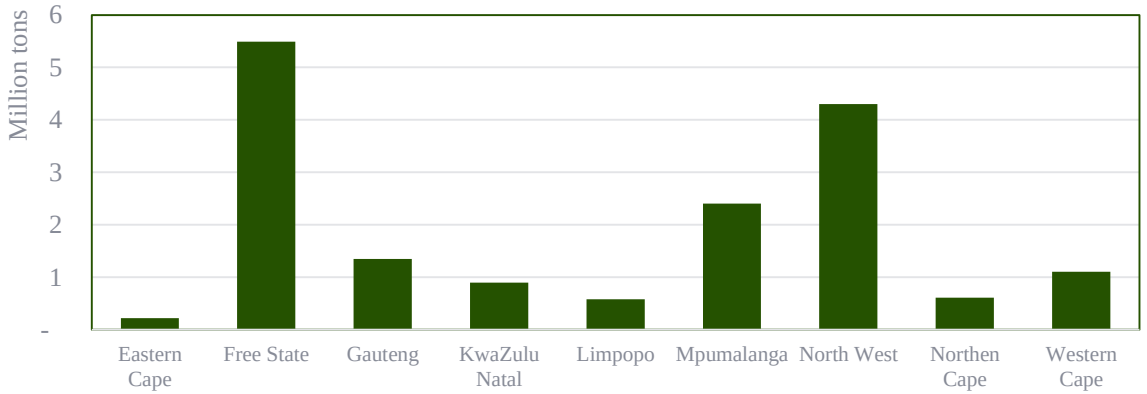


Bulk Infrastructure – Location of silos, rail & millers



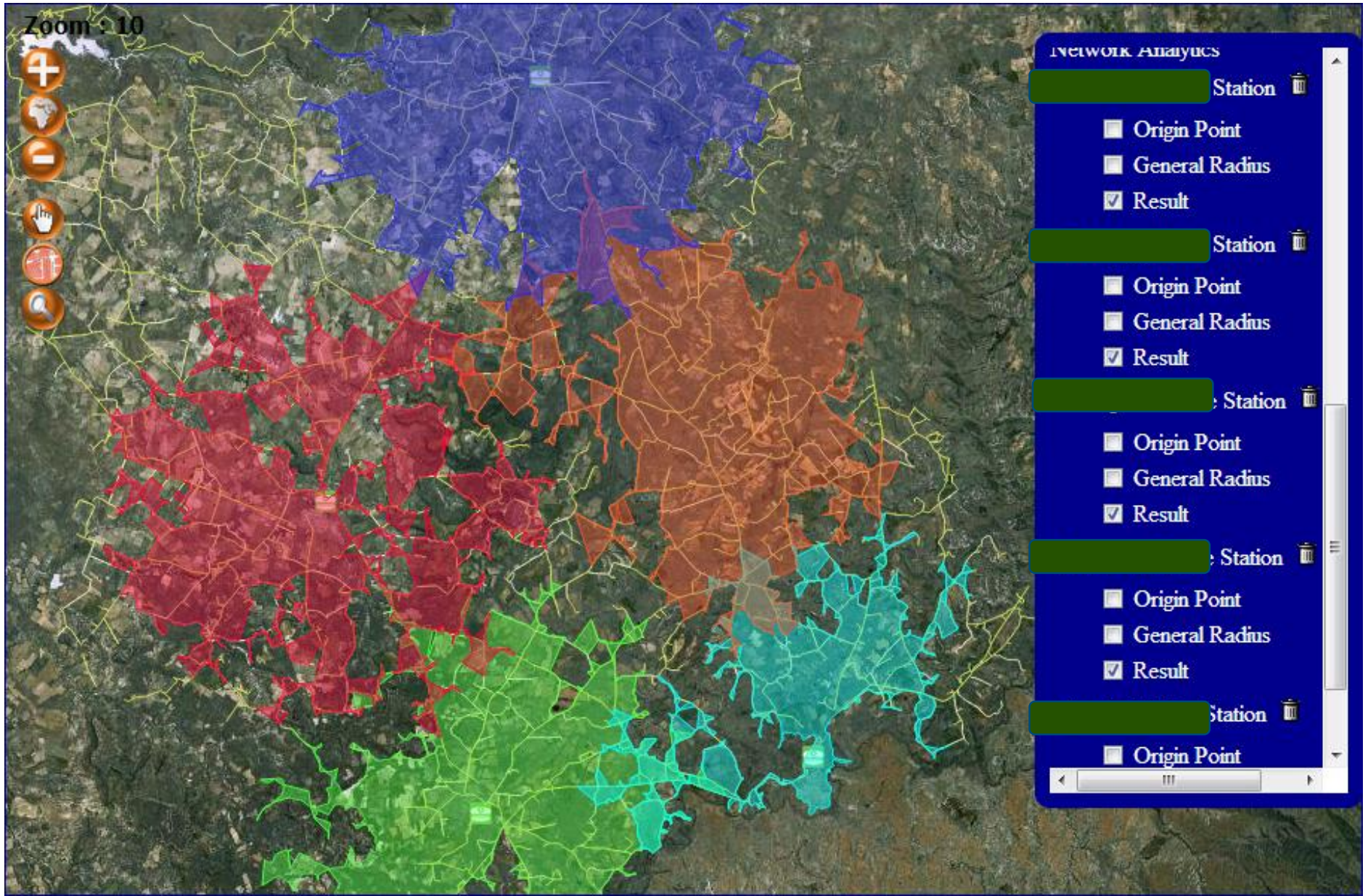
- In 2010, there were 684 commercial storage sites and 146 non-commercial storage sites (Agbiz, 2016). Numerous consignments are also loaded directly from the land to the processor during the harvesting season.
- Millers are concentrated in the areas surrounding Gauteng where the largest consumer base is located.
- There exist potential for infrastructure development such as storage facilities and millers in the Eastern Cape and Kwa-Zulu Natal informal regions which are suitable for maize production. This however is largely dependent on the supply of critical mass production in the regions.
- The problem of post-harvest losses as a result of proper storage techniques remains a key issue in the informal grain producing sector.
- The use of rail in the transportable economy over the past 70 years has decreased signficantly in mining, agriculture and manufacturing sectors (Transnet, 2014). In 2014, approximately 10.8 million tonnes of grain were transported by road oppose to 2.5 million tons by rail.

Storage capacity per province

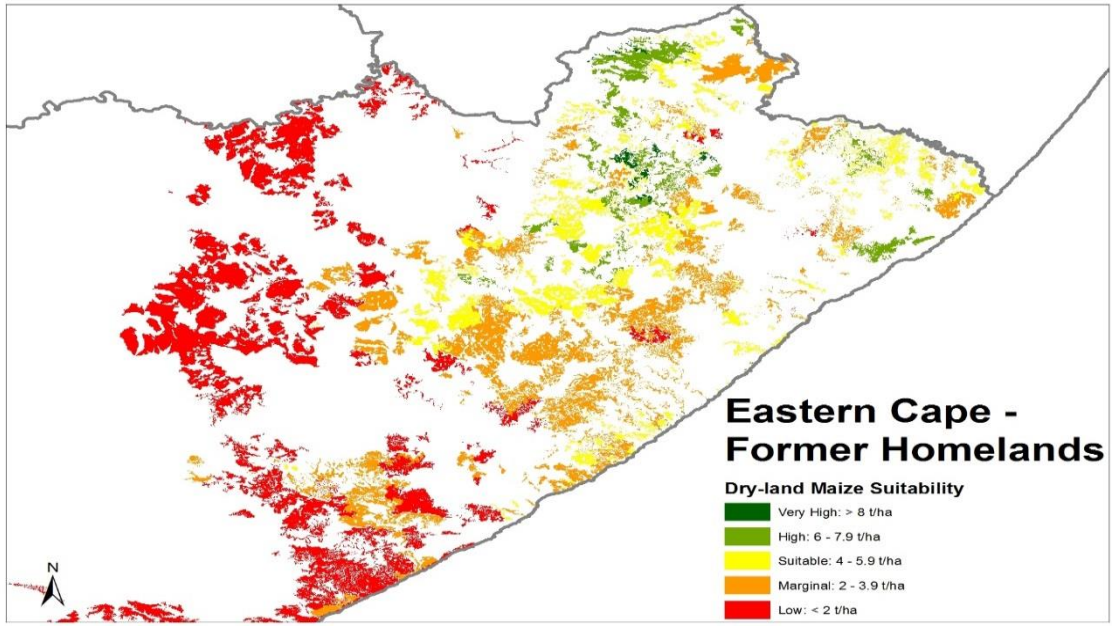


Where is the optimal / most economic route?

IVIS
INTEGRATED VALUE INFORMATION SYSTEM

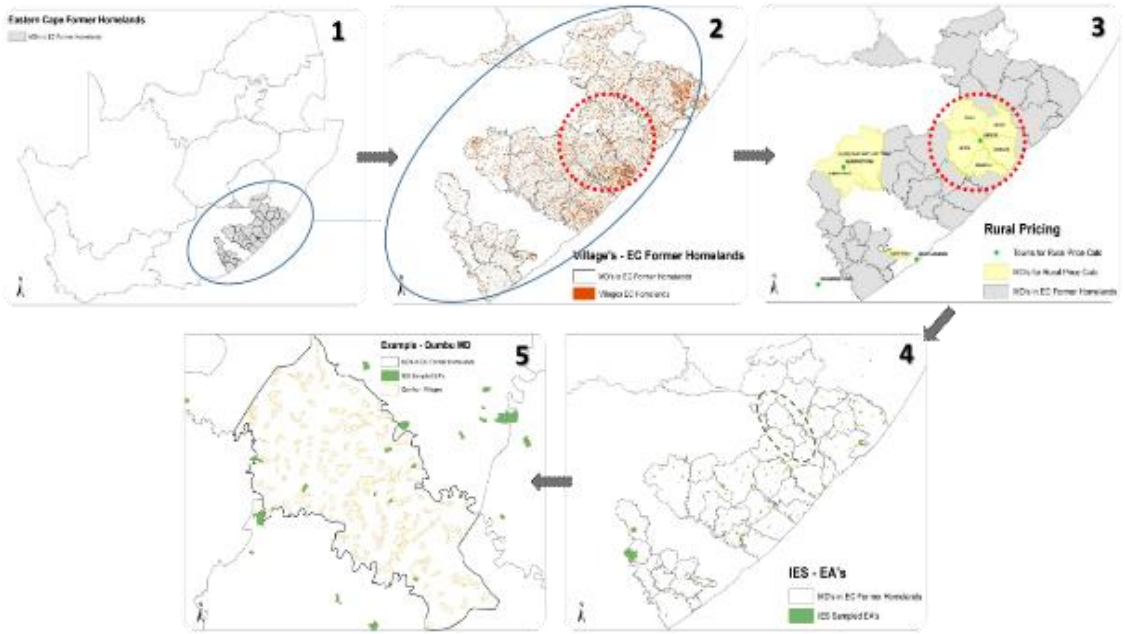


E.g. Opportunities in the Eastern Cape

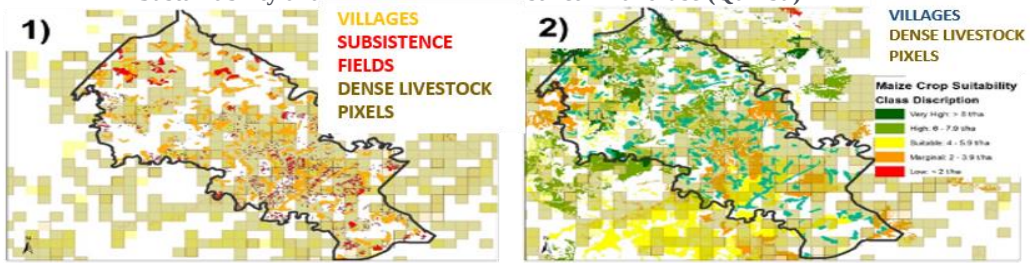


		(1)	(2)	(3)	(4)	(5) = (4)*(3)
Maize Suitability Class		Maize Suitable Land within (FCB)	**Potential/ Allocated** Dryland Grain & Oilseed from Maize Suitable Land	Potential Dryland Maize Hectares	Potential (t/ha) – Lower yield	Average Production Potential (tons)
H	**High**	91 642	31 015	16 533	5.9	97 548
S	**Suitable**	169 404	124 892	93 813	3.9	365 871
M	**Marginal**	319 612	201 490	146 988	2.9	426 264
L	**Low**	114 282	64 144	41 033	2	82 066
Total		694 940	421 540	**298 367**	**3.7**	**971 750**

Rural Demand Framework



Sustainability analysis on a selected district – Land-use (Qumbu)



IVIS
INTEGRATED VALUE INFORMATION SYSTEM

BFAP
DATA DRIVEN INSIGHT

www.ivis.africa

www.bfap.co.za

Thank You

Nico Scheltema

(072) 125 6580

nico@ivis.africa

Gerhard van der Burgh

(082) 427 3738

gerhard@ivis.africa

Lianda Louw

(072) 515 6035

lianda@ivis.africa