

Grain mapping the future

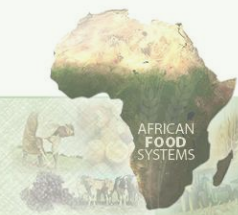
Grain SA Congress

Ferdi Meyer

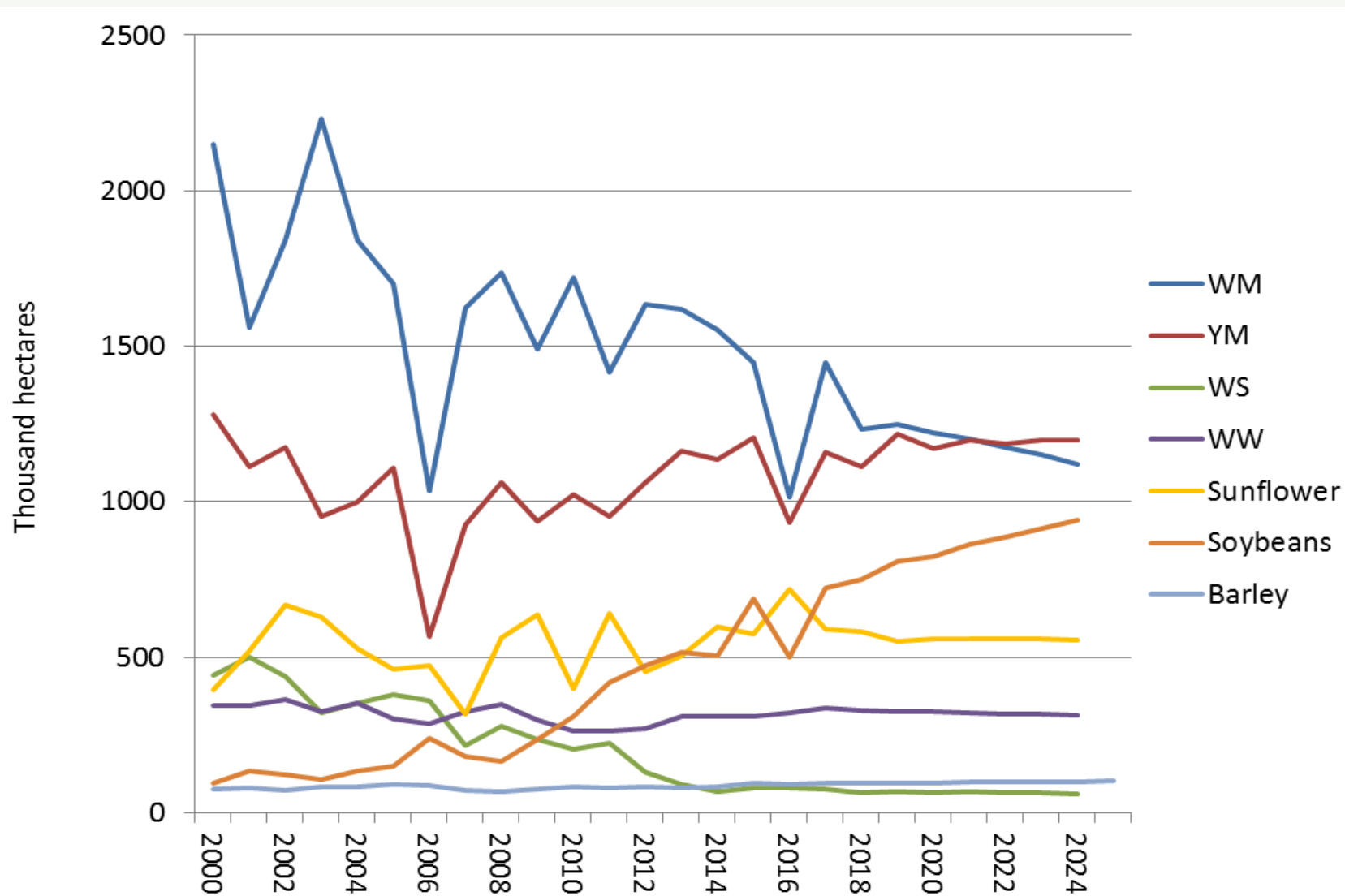
Bureau for Food and Agricultural Policy (BFAP)

University of Pretoria

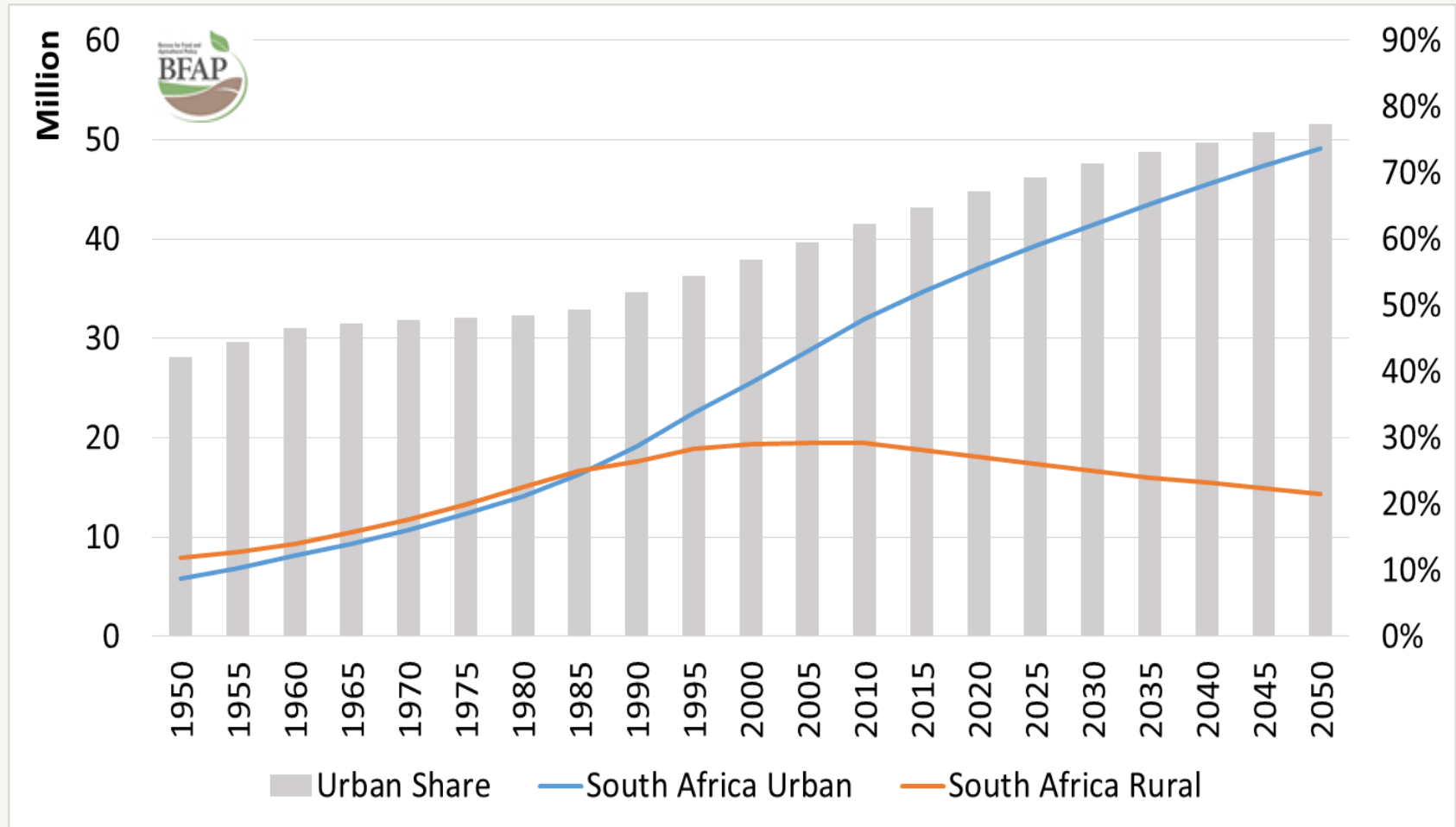
7 March 2017



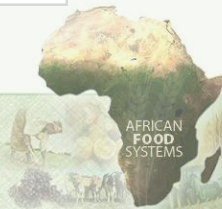
Mapping the grain area



SA challenge: Urbanization & rural unemployment



Source: United Nations, 2016



NDP vision - growth & jobs

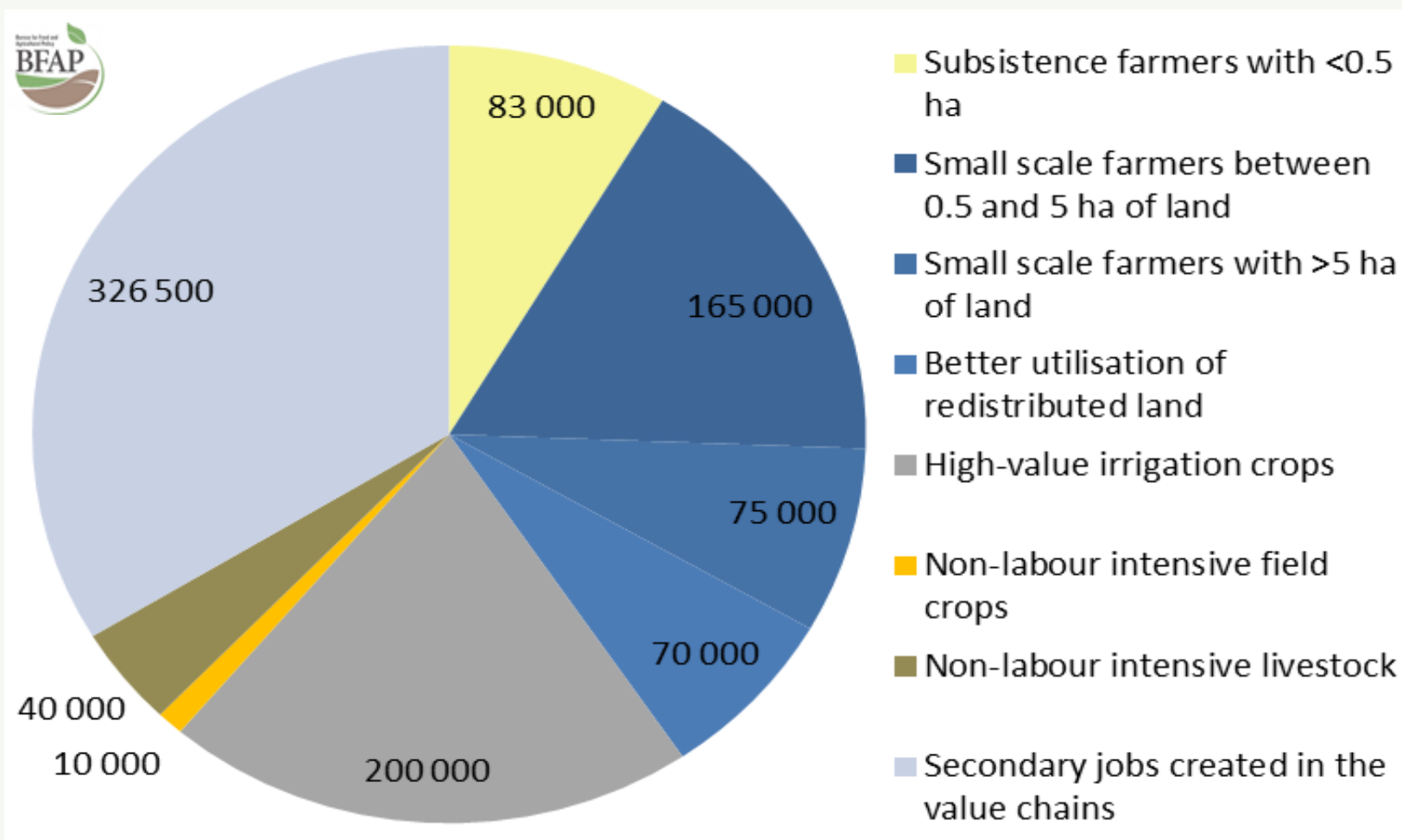
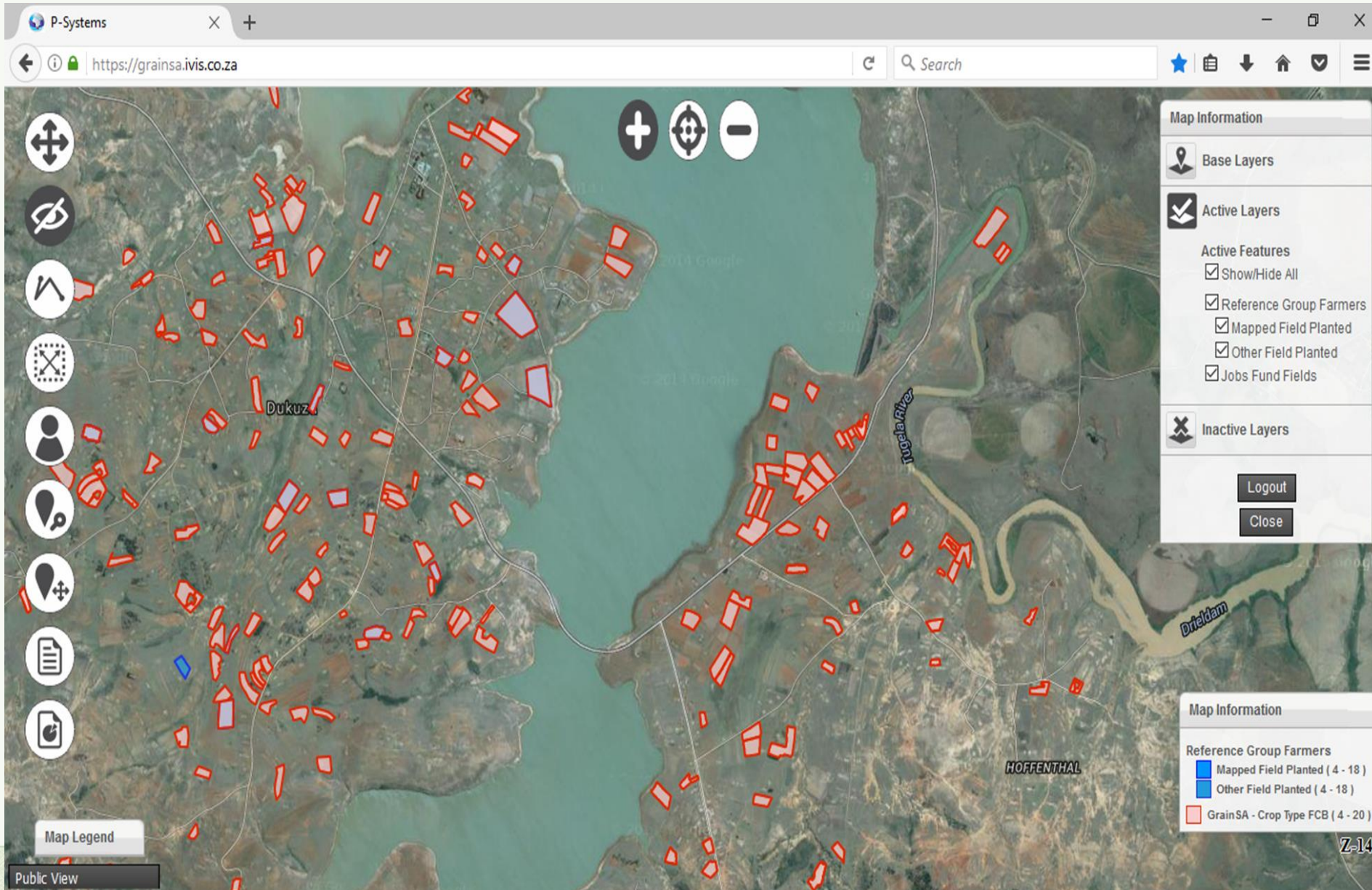


Figure 10: The million jobs
Source: NPC, 2012

Revitalizing the rural areas – Dukuza (KZN)

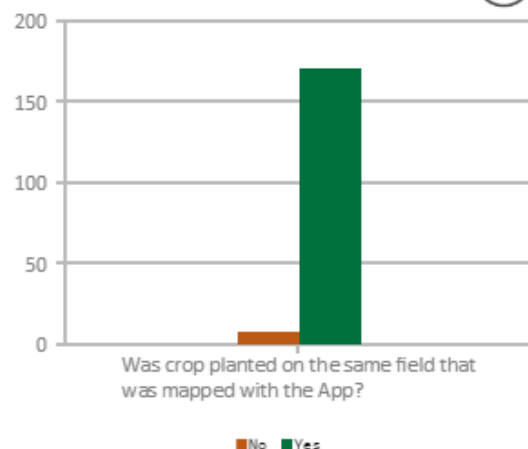


Revitalizing the rural areas

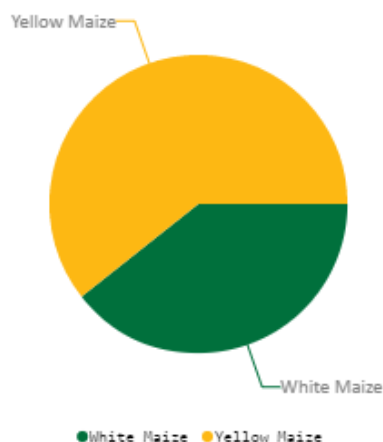
Progress Report - January 2017

Crop 2017

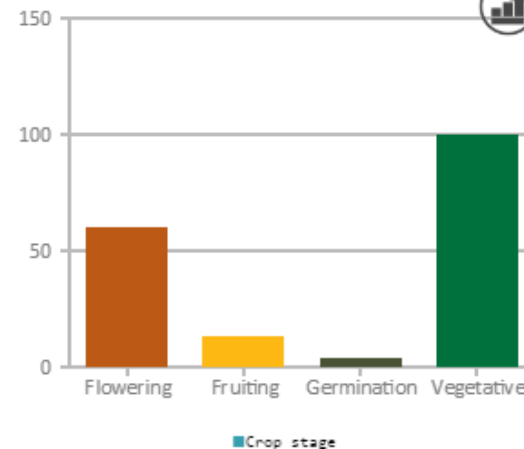
Was the crop planted on the mapped field?



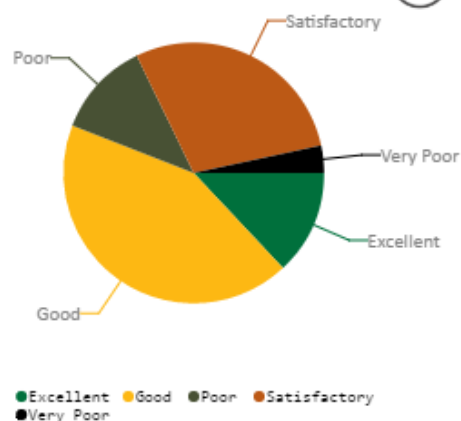
Crop Planted



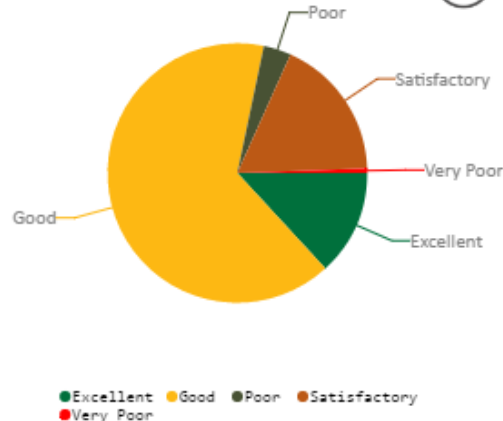
Crop Stage



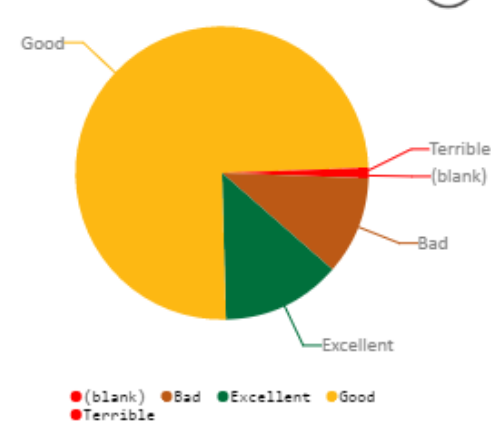
Weed Management



Pest Management



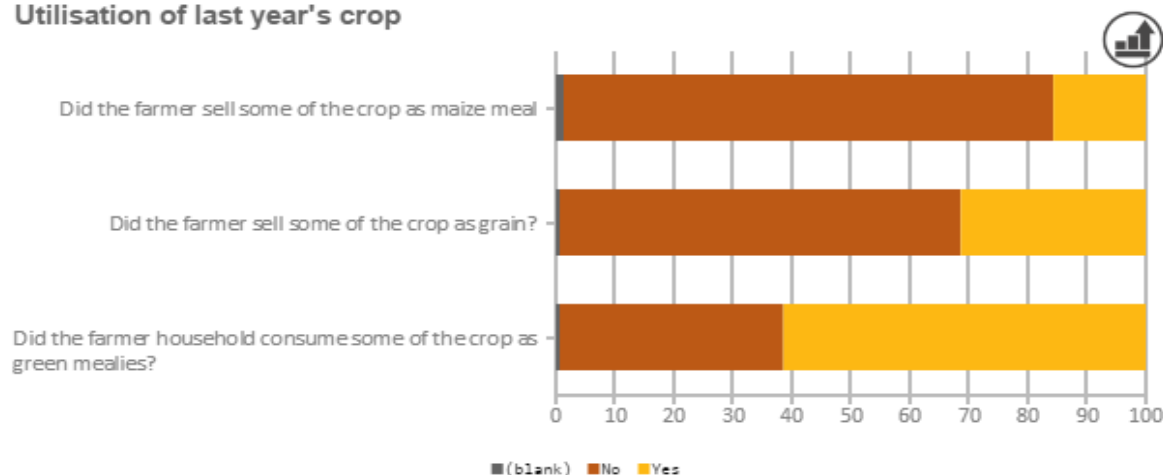
Overall Crop Condition



Revitalizing the rural areas

Crop 2016

Utilisation of last year's crop



Household Characteristics

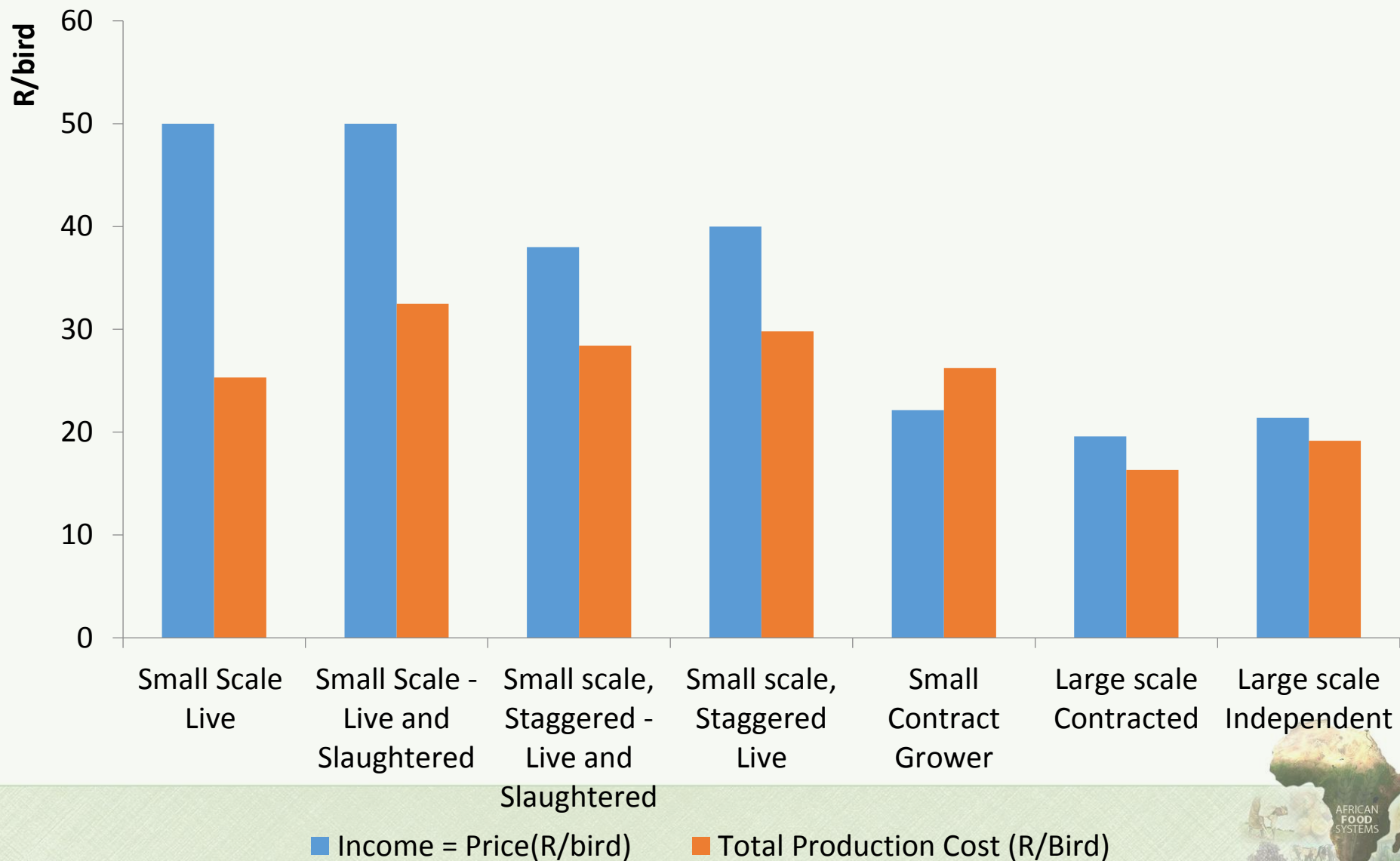
Main Source of Income



Number of Dependents

	Number of people in the household (people staying at least 4 nights per week on average)
(blank)	1
1	1
2	3
3	9
4	16
5	23
6	18
7	14
8	24
9	14
10	15

Local broiler market & competition



Scoping the opportunity

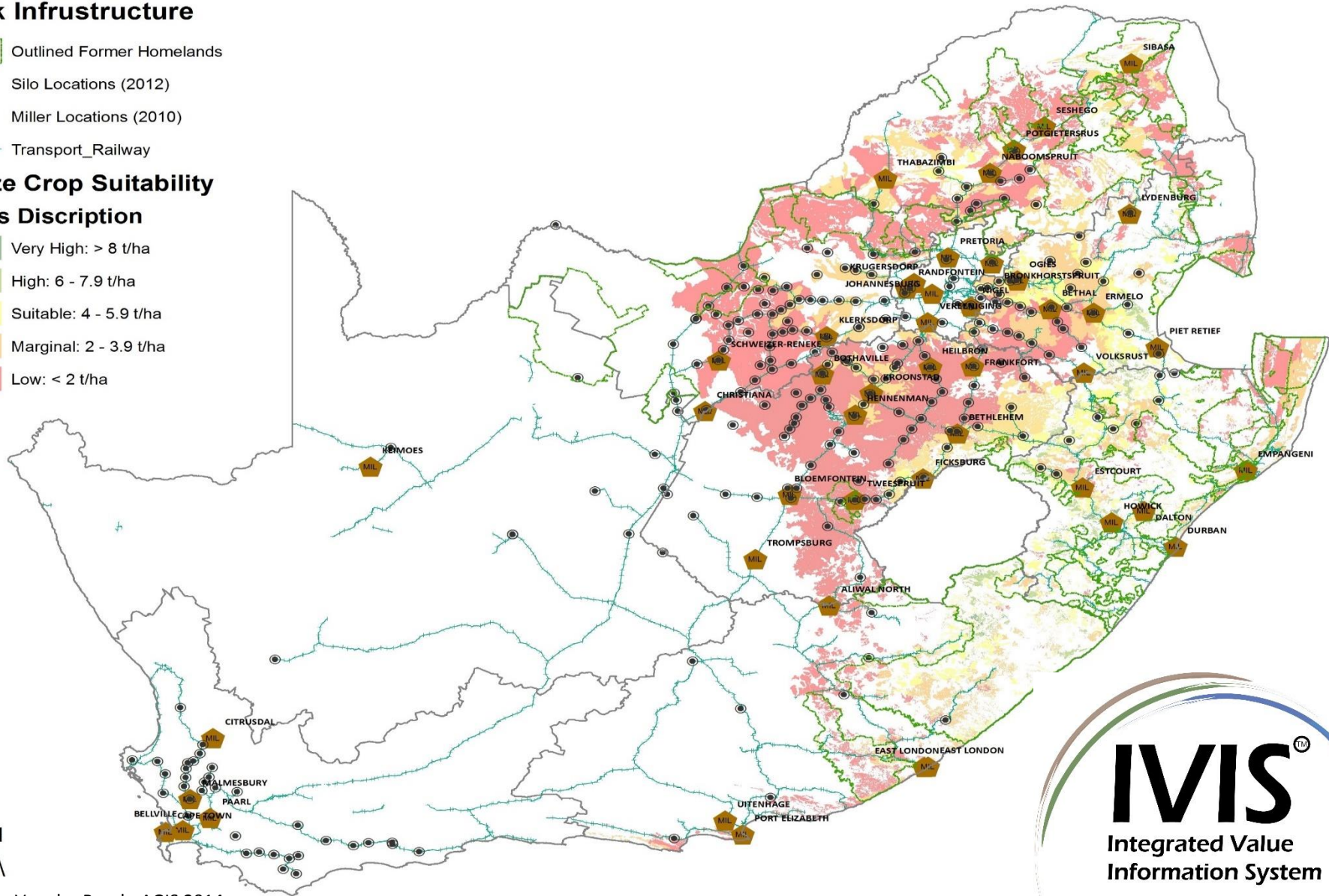
Bulk Infrastructure

-  Outlined Former Homelands
-  Silo Locations (2012)
-  Miller Locations (2010)
-  Transport_Railway

Maize Crop Suitability

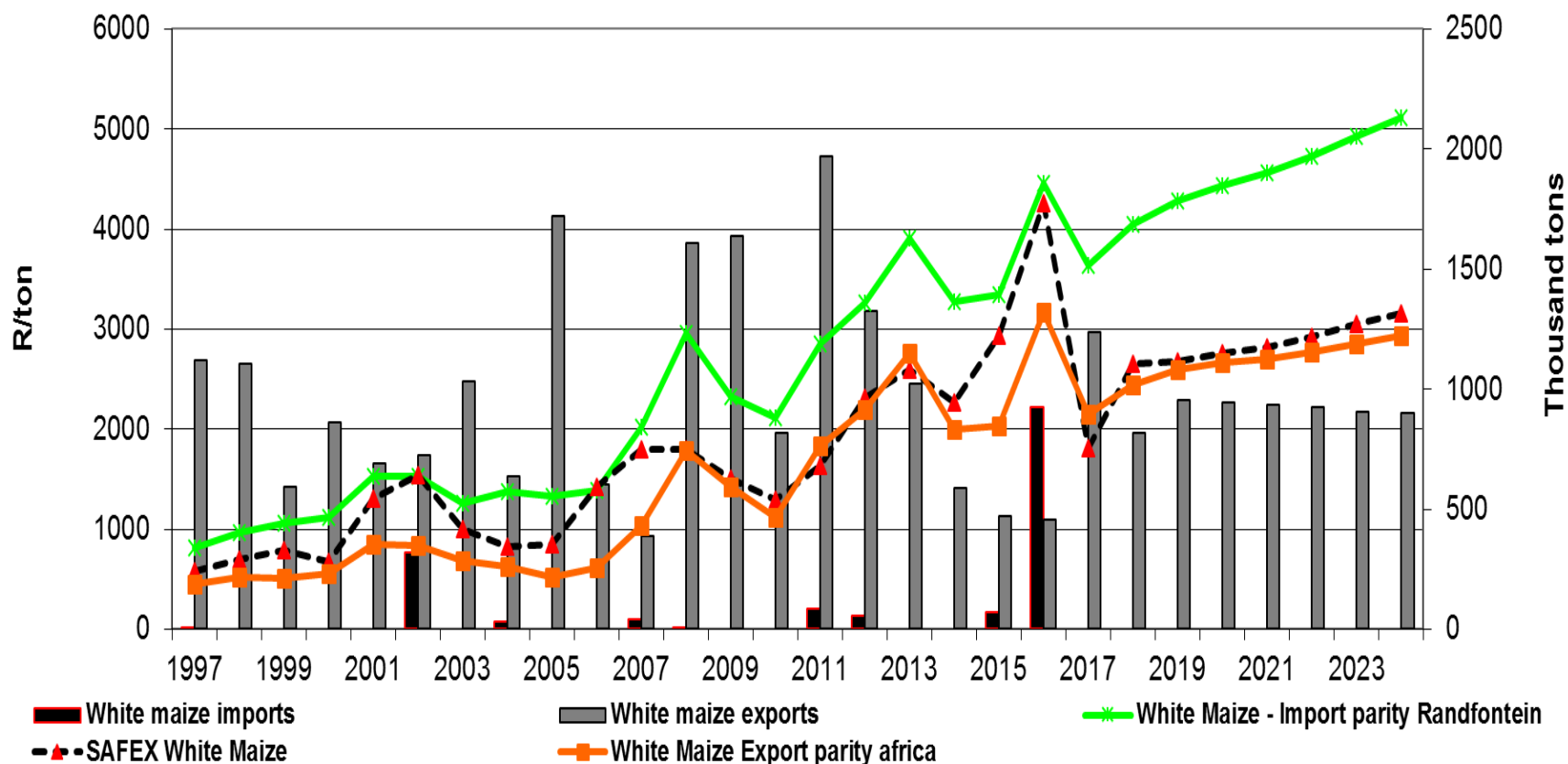
Class Discription

-  Very High: > 8 t/ha
-  High: 6 - 7.9 t/ha
-  Suitable: 4 - 5.9 t/ha
-  Marginal: 2 - 3.9 t/ha
-  Low: < 2 t/ha

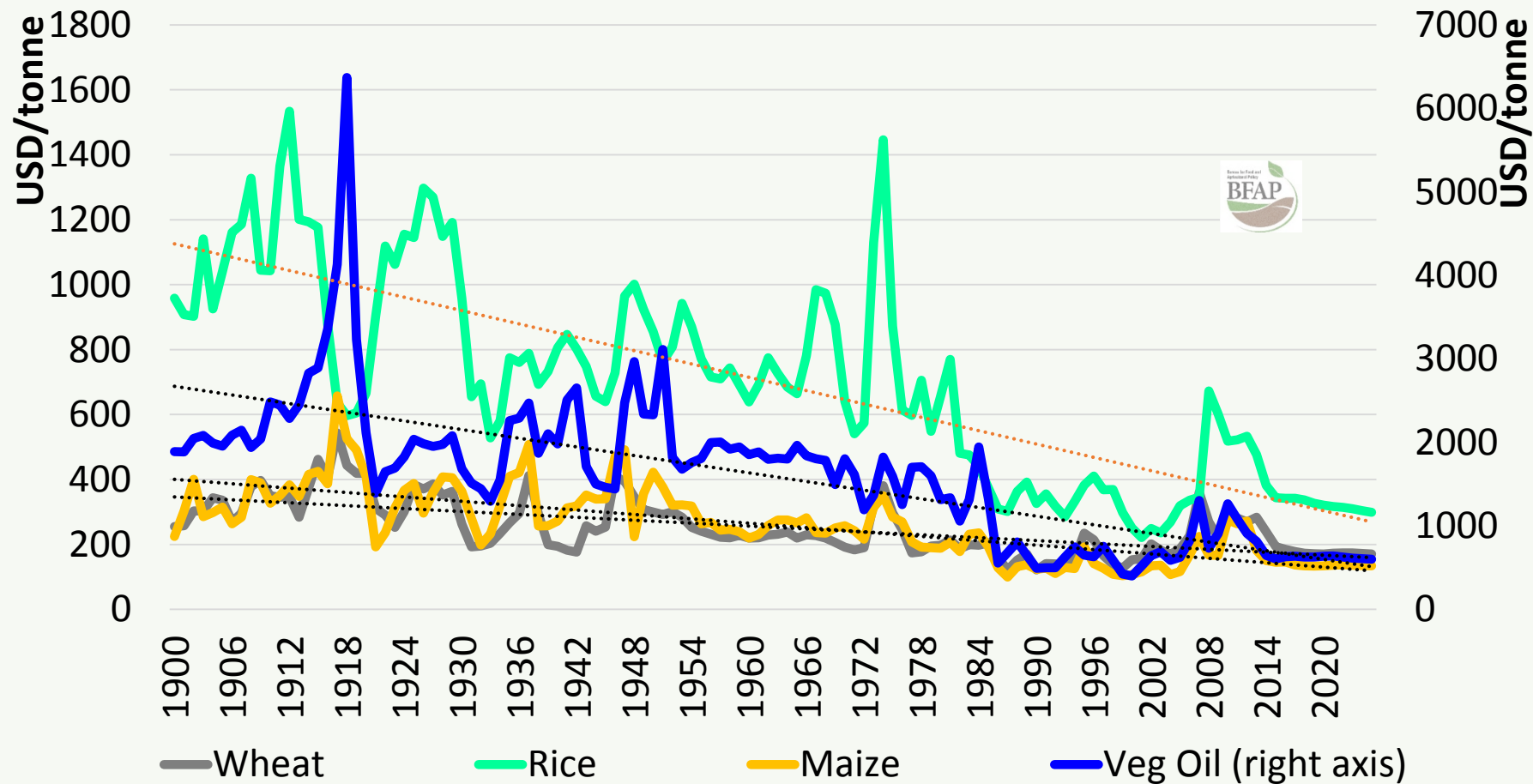


White maize outlook

White maize



Real agricultural prices declining



Per-capita use of grains and oilseeds

World



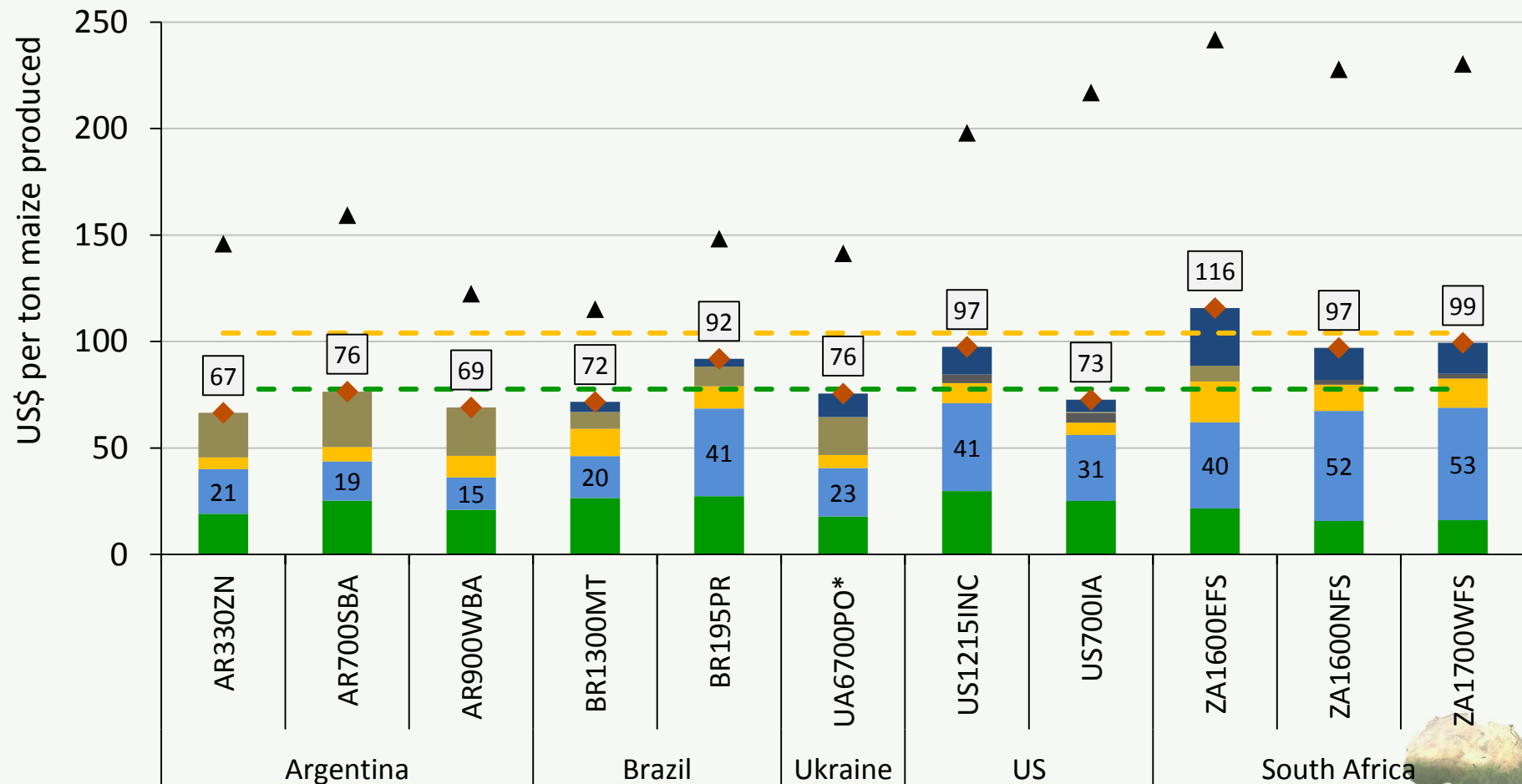
World less China, ethanol



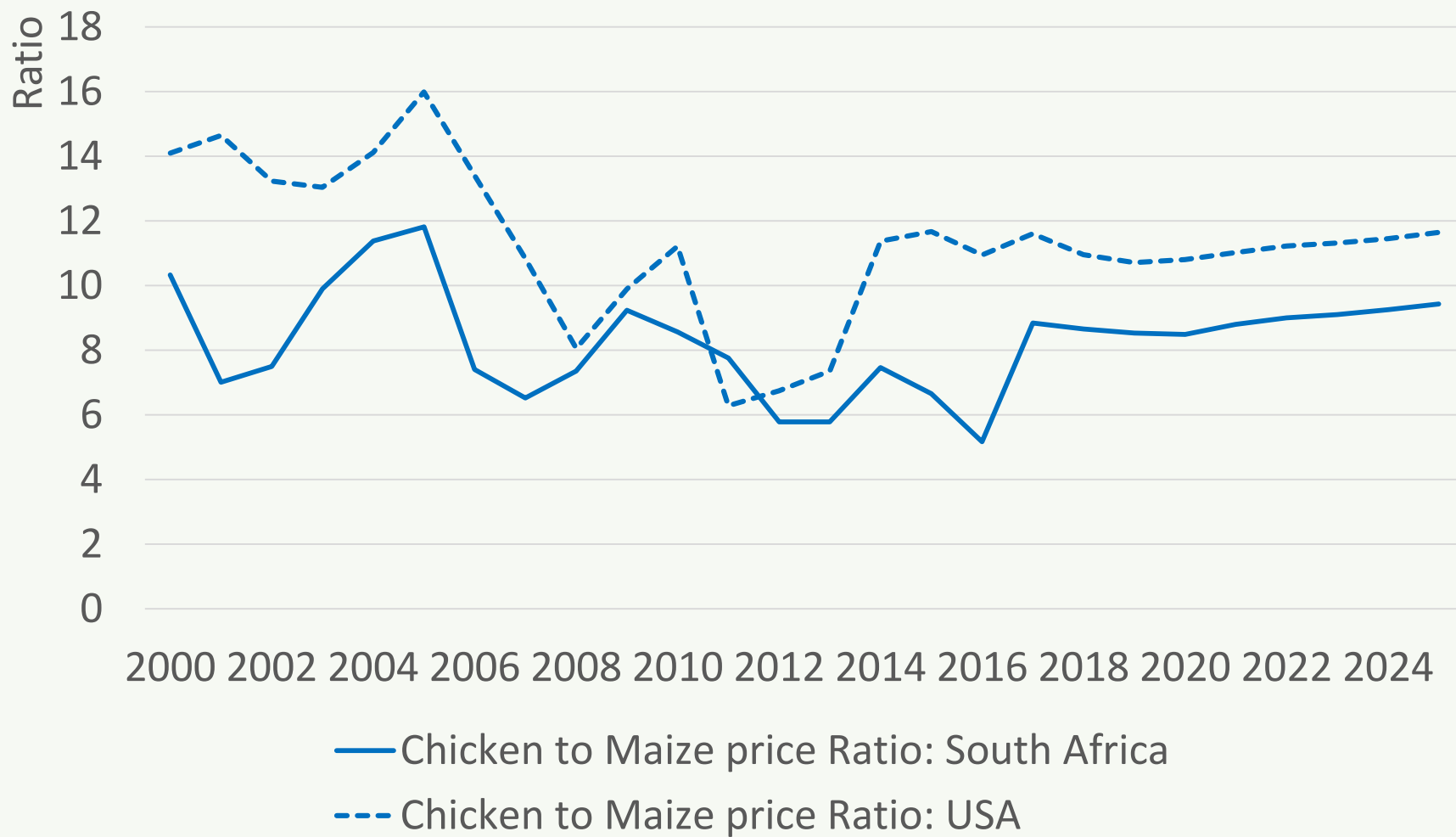
Source: Author calculations based on June 2016 USDA PSD Online data for 9 grains and 5 oilseeds and U.S. Census Bureau population estimates

Production cost comparison

- Seed
- Crop Insurance
- Total establishment cost
- Crop revenue
- Fertilizer
- Contractor
- Average: South Africa
- Plant protection
- Diesel
- Sample average

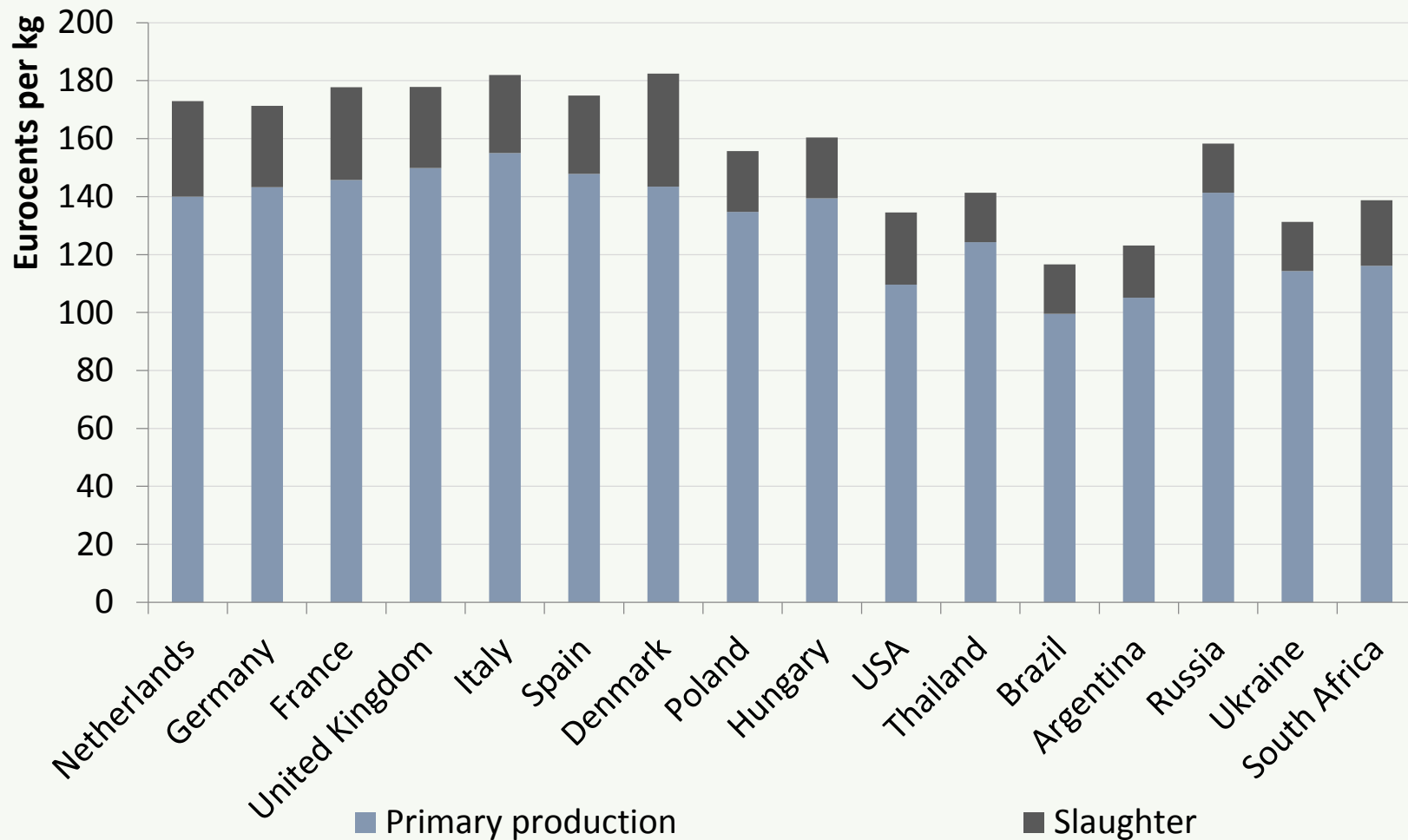


Benchmarking value chains

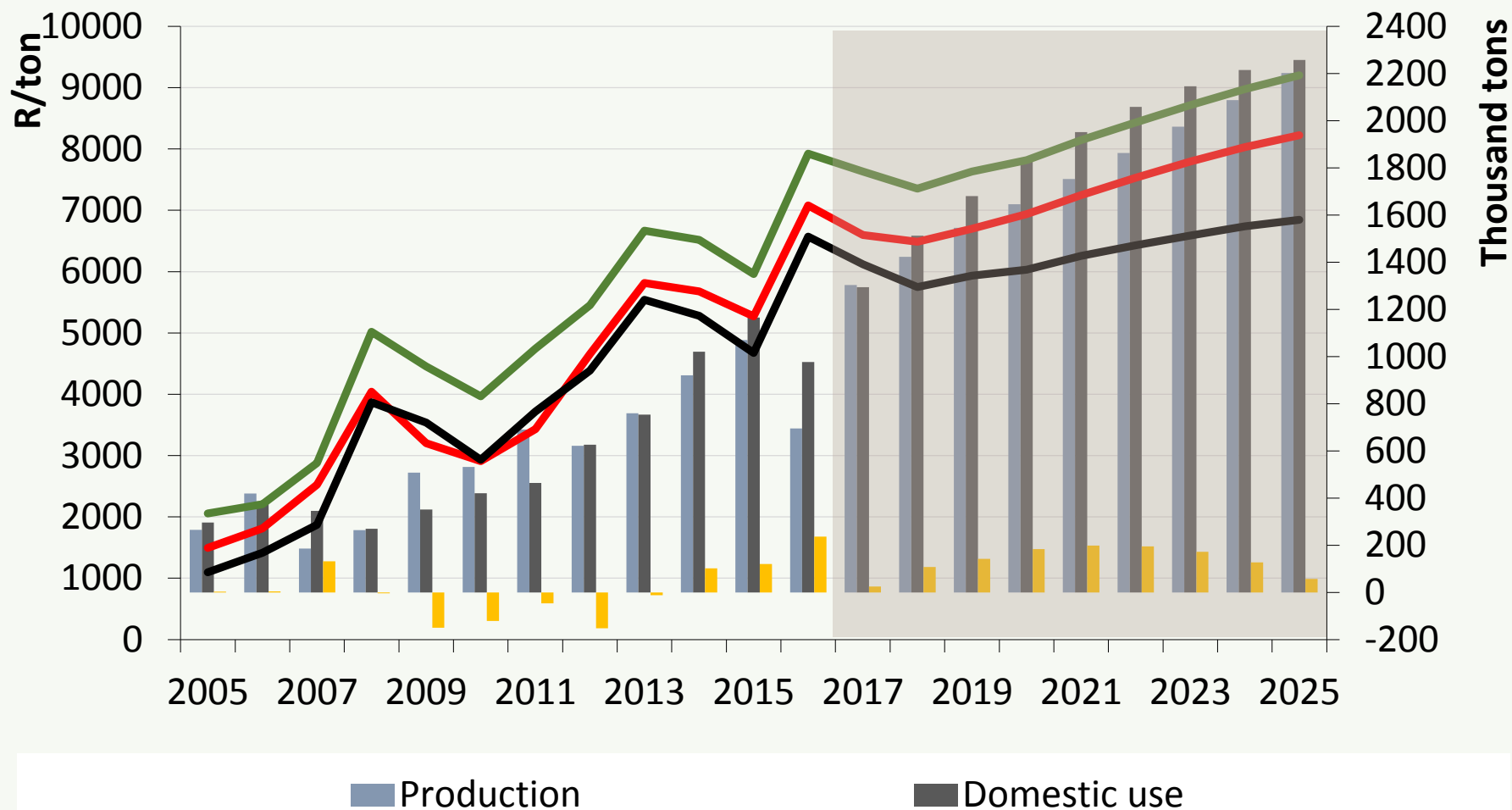


Poultry – free and fair??

SA lower cost producer than EU



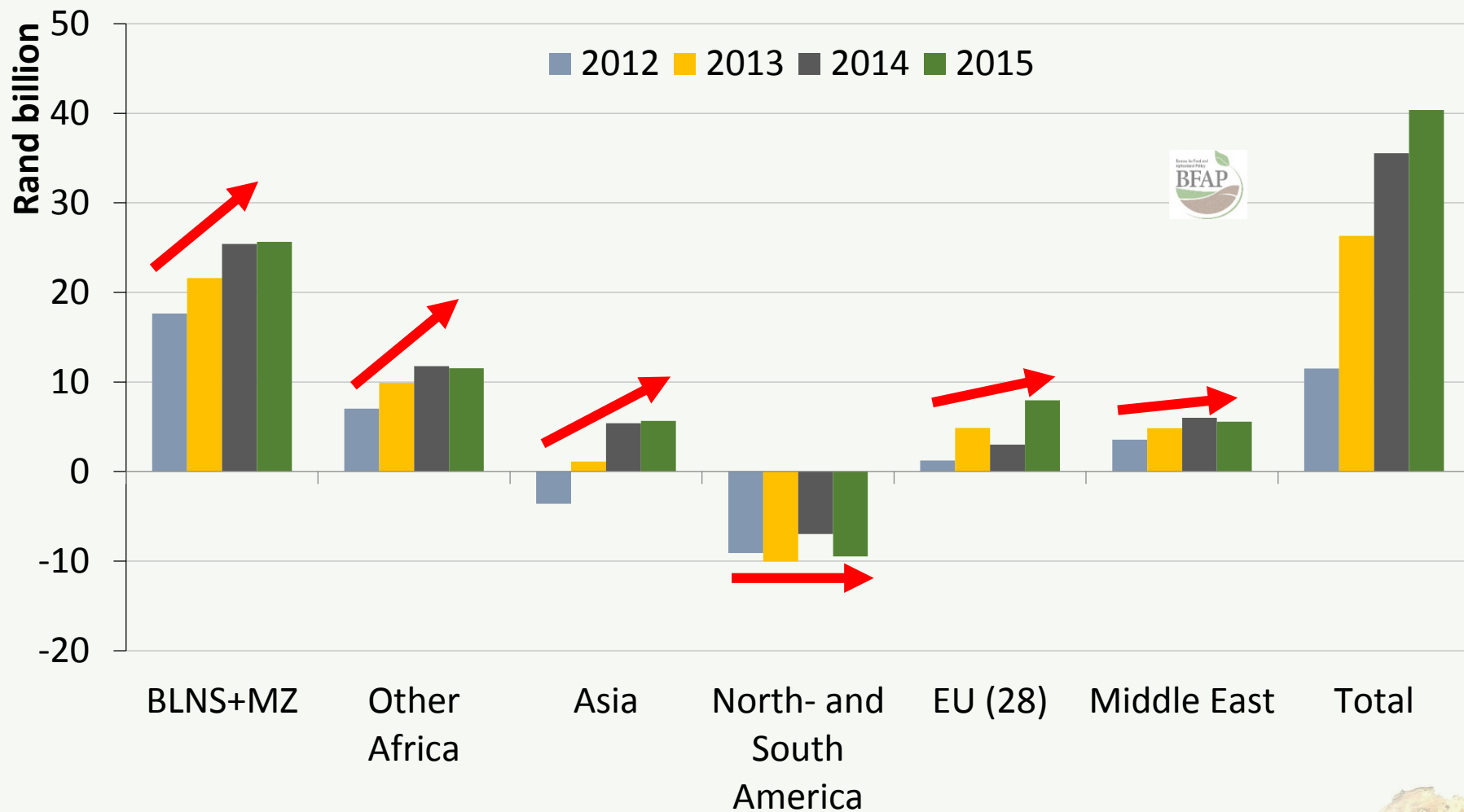
Agro-processing: Soyabean game changer



Low margins – high volumes

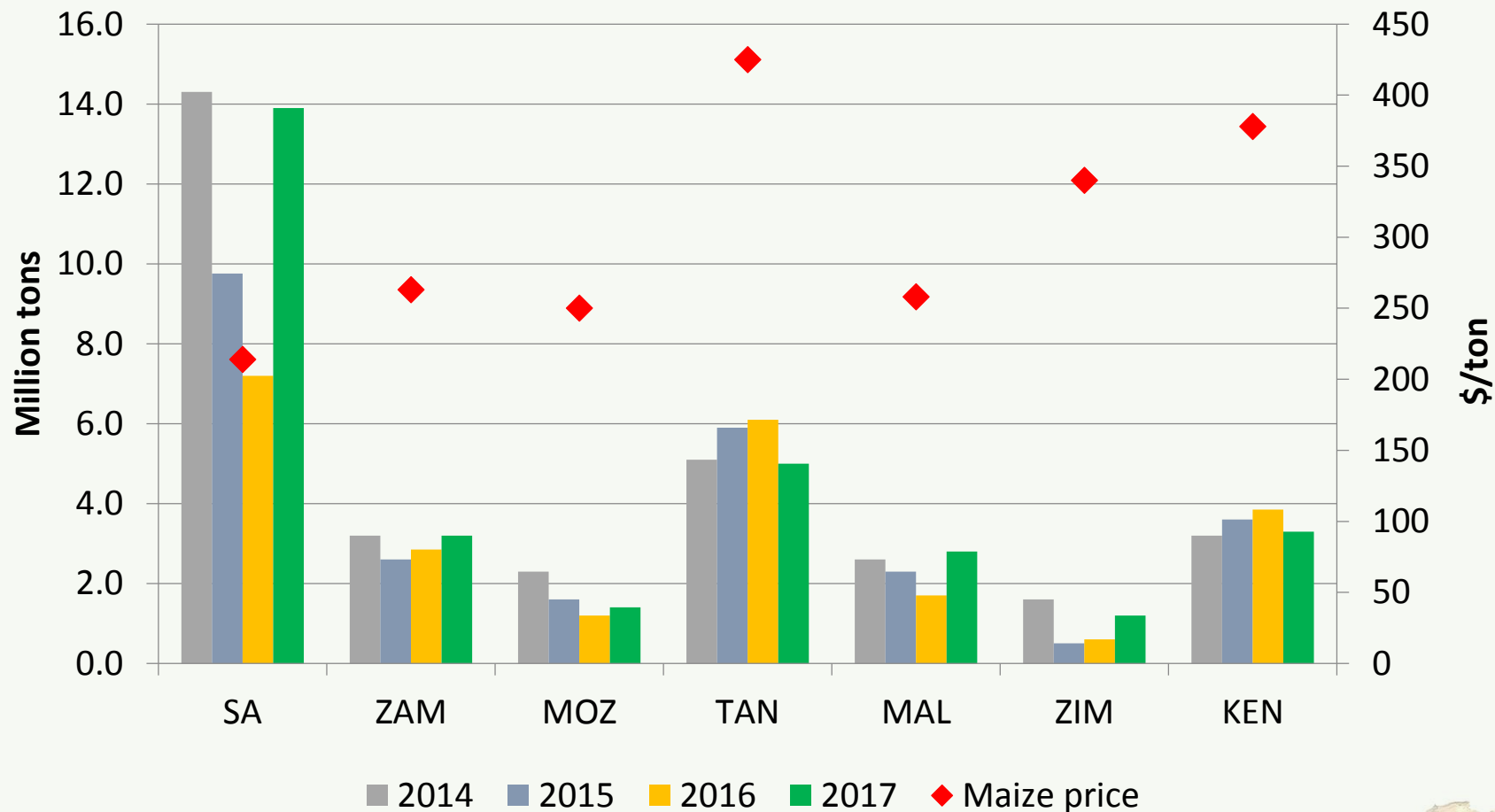


SA agric net exports: Open markets



El Nino (2015/16) & La Nina (2016/17)

Maize production



Source: ReNAPRI, 2017

The Road from DAR to Lusaka



Putting plans into action!

KEY ELEMENTS OF DRIVING SUSTAINABILITY

- Nothing replaces consistent and focused R&D
 - Future model for SA lies in partnerships
 - Globally a shift to private sector research with government providing catalyst investment.
 - Academia – We have to ask the “So what” question!!
 - **Action: Coordination and focus.**
- Training and education
 - Major challenge to maintain quality
 - Developing a consistent supply chain of skills
 - Partnership with schools, universities, colleagues etc.
 - **Action: Don't try to fix everything at once!**



Putting plans into action!

KEY ELEMENTS OF DRIVING SUSTAINABILITY

- **Public and private sector investment**
 - Comprehensive databases and information
 - Strategic planning
 - Coordinated action and delivery!!
 - Water infrastructure – this can be the make or break of our country!!
 - Road, rail and ports –needs to be maintained and expanded
- **The politically stable environment**



End!

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