Bureau for Food and Agricultural Policy
BFAP

National Agricultural Marketing Council
Promoting market access for South African agriculture

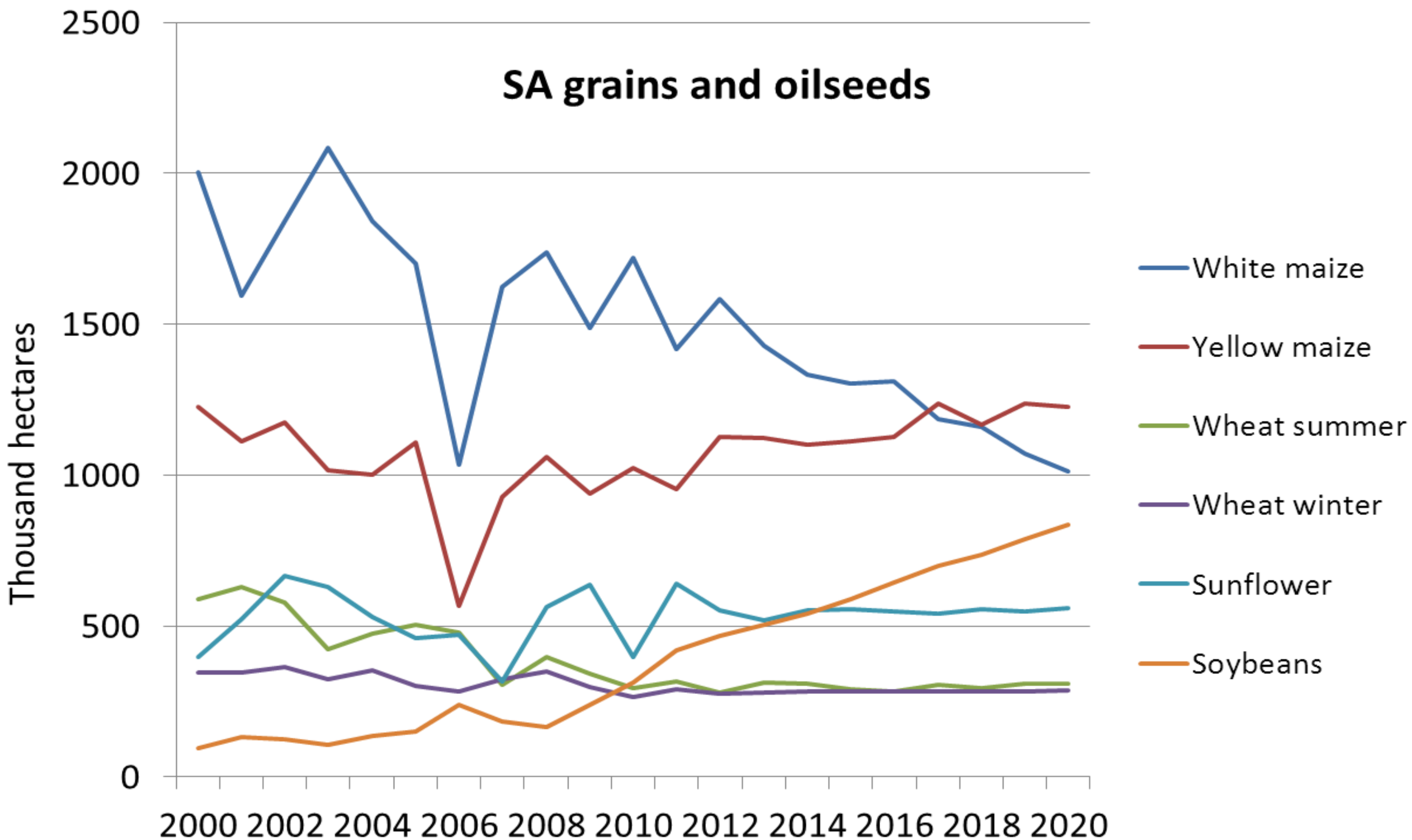
agri benchmark
Cash Crop Conference 2012

Perspectives of agri benchmark in South Africa

Presentation overview

- Why do we want to benchmark?
- The BFAP farm level program & linkage
- What does the future hold?
  - Establishing a national network
  - Expanding into other African countries

Why benchmarking?



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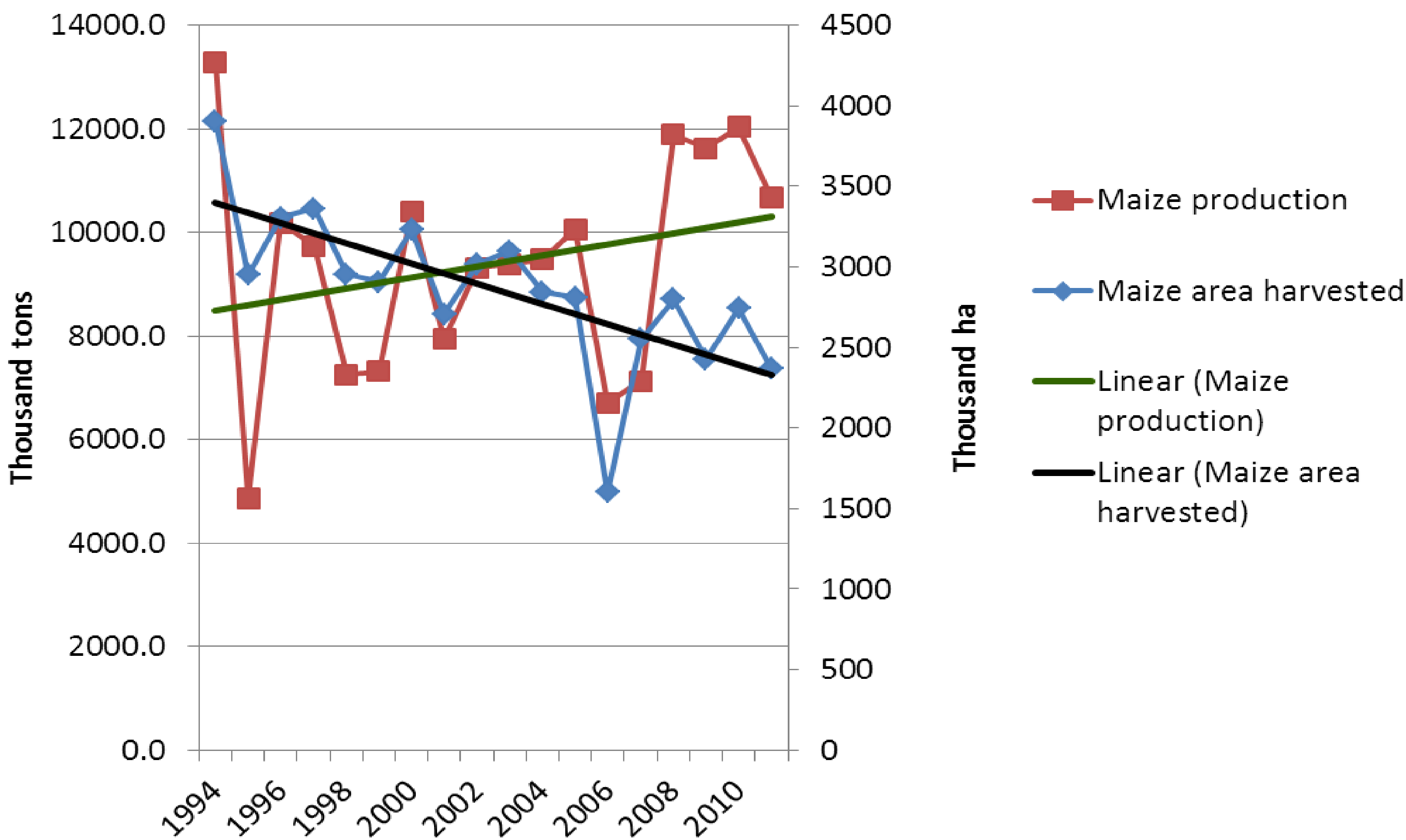
SA Maize Area & Production



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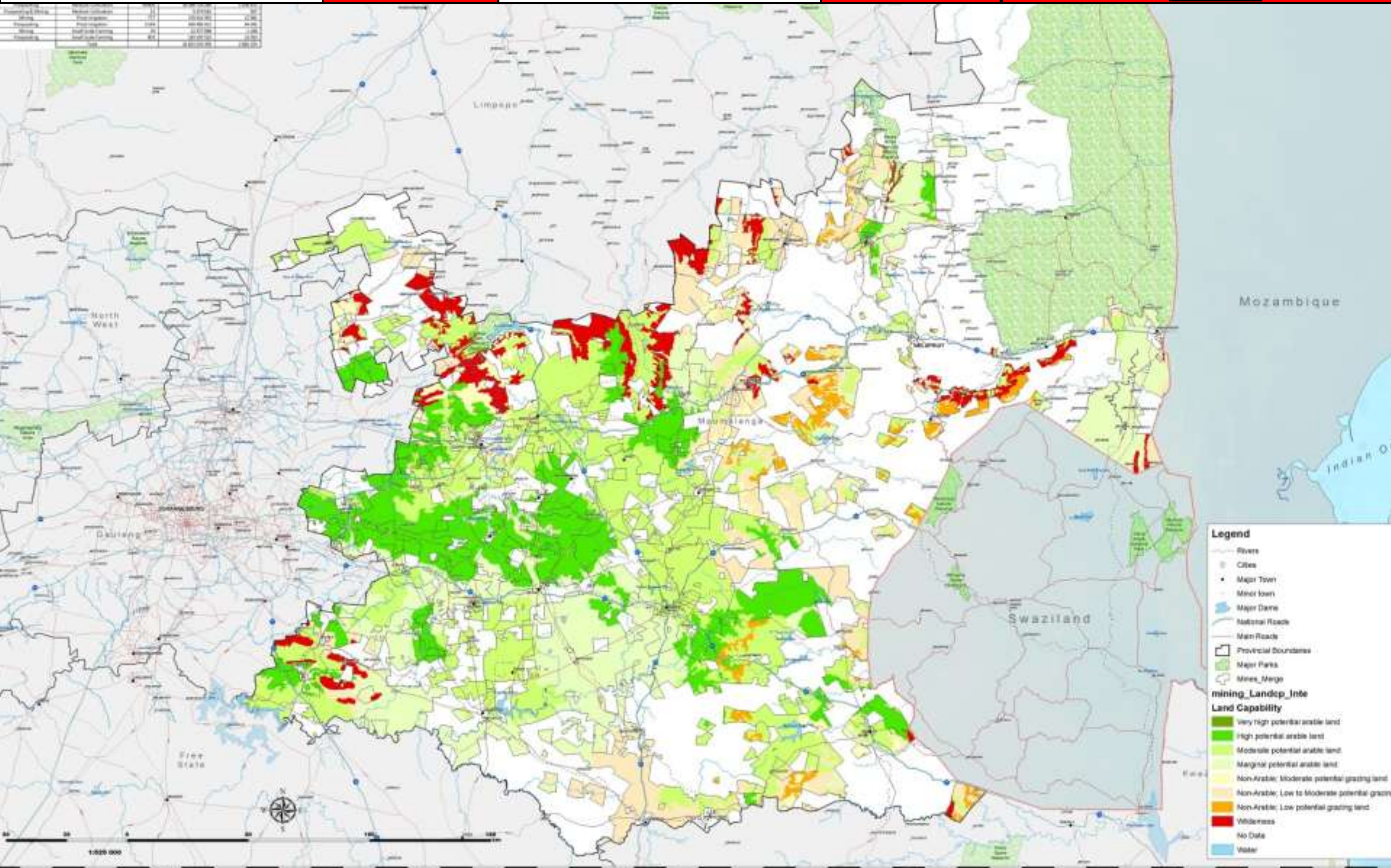
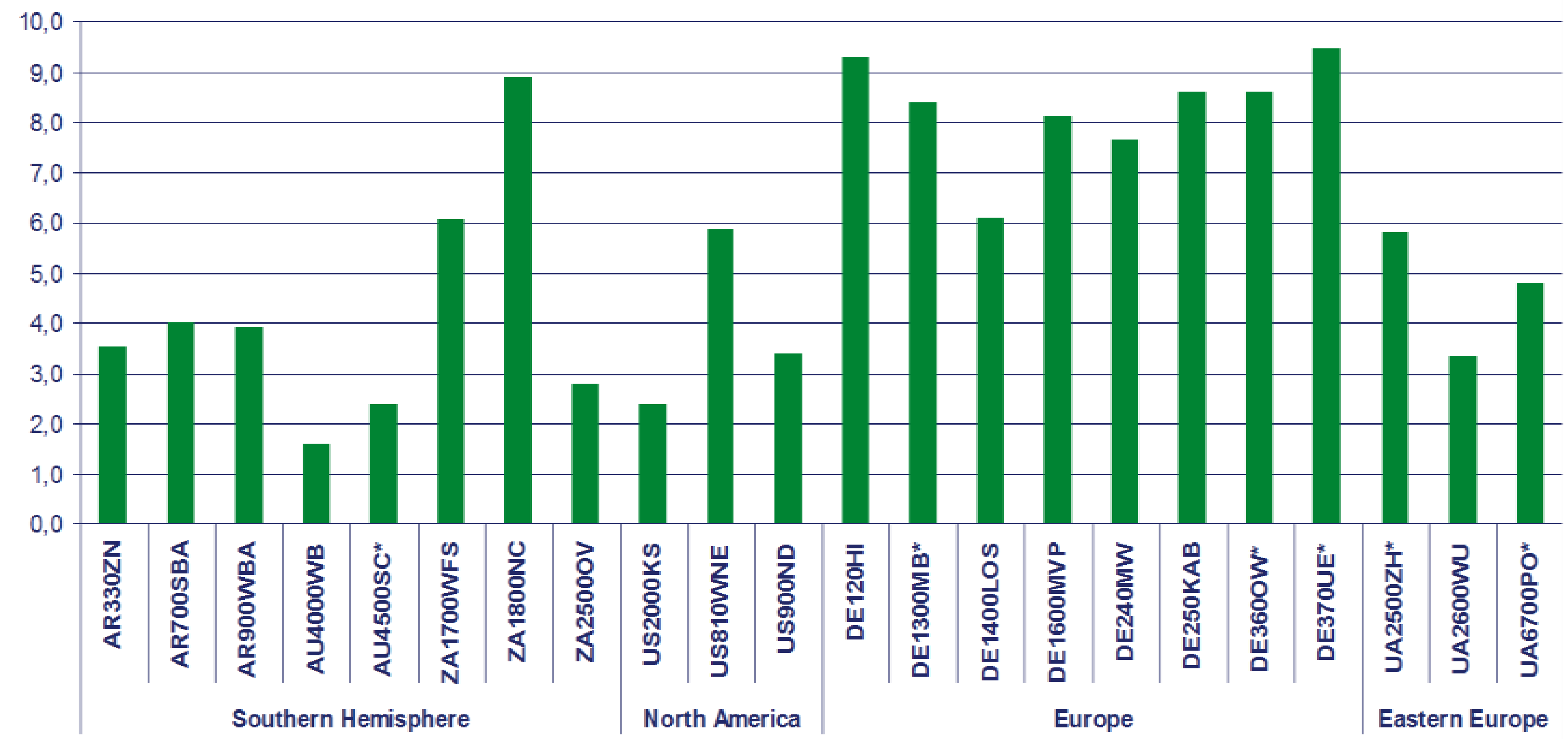
Mpumalanga's potential arable (Agricultural) land, i.e. - land that should be kept in Agriculture		Arable (Agricultural) land that will be taken up by mining in the years to come and currently		Arable land left over if all current & prospecting mining takes place
High potential arable land	872 007	High potential arable land	671 293	200 714
Moderate potential arable land	2 085 727	Moderate potential arable land	1 145 460	940 267
Marginal potential arable land	1 596 609	Marginal potential arable land	871 875	724 734
SUM TOTAL	4 554 344	SUM TOTAL	2 634 629	1 919 715



Why benchmarking?

Wheat yields in t/ha (average 2009-2011)



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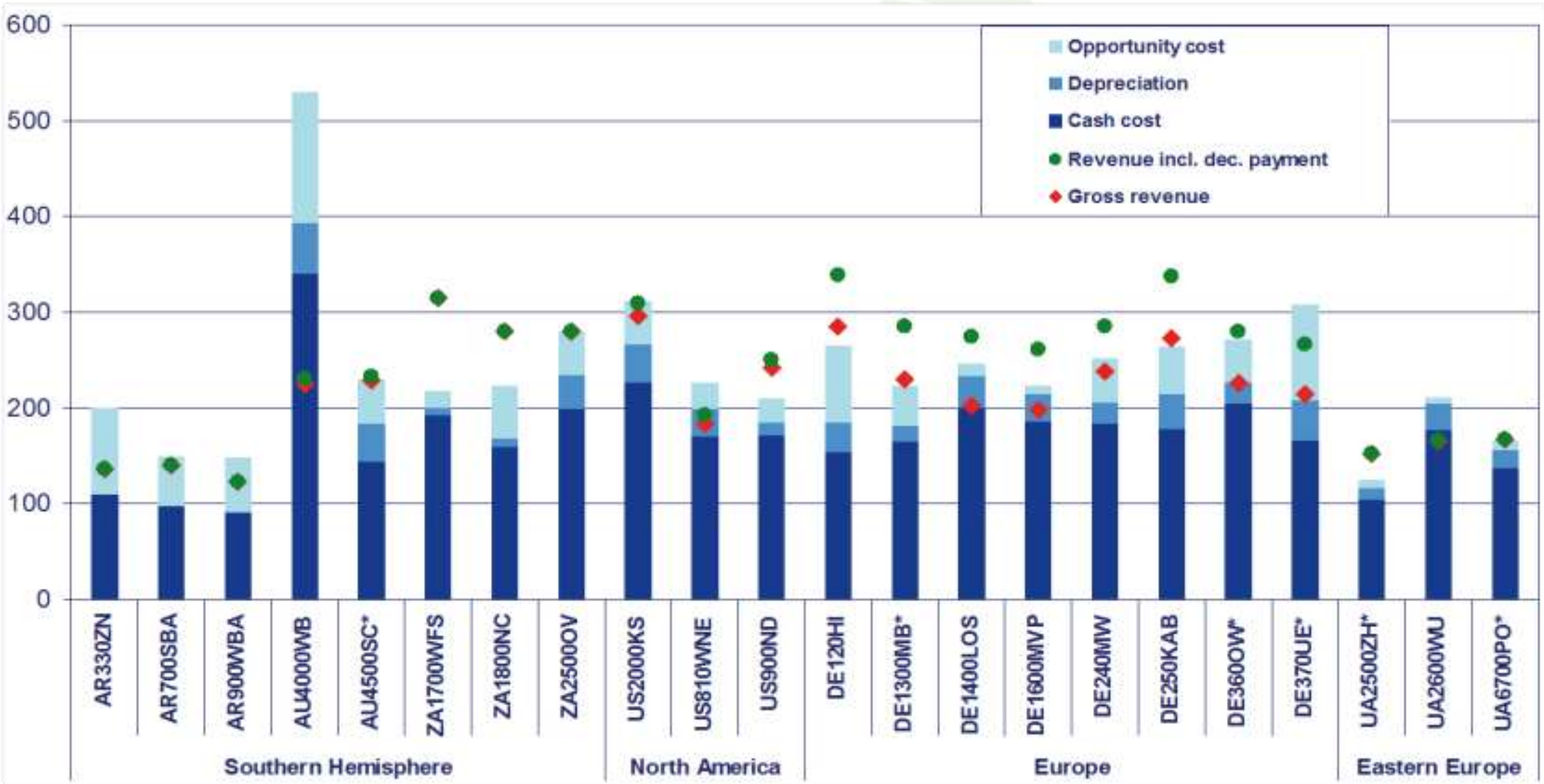
Why benchmarking?

Wheat production: Profitability in US$/t (average 2009-2011)



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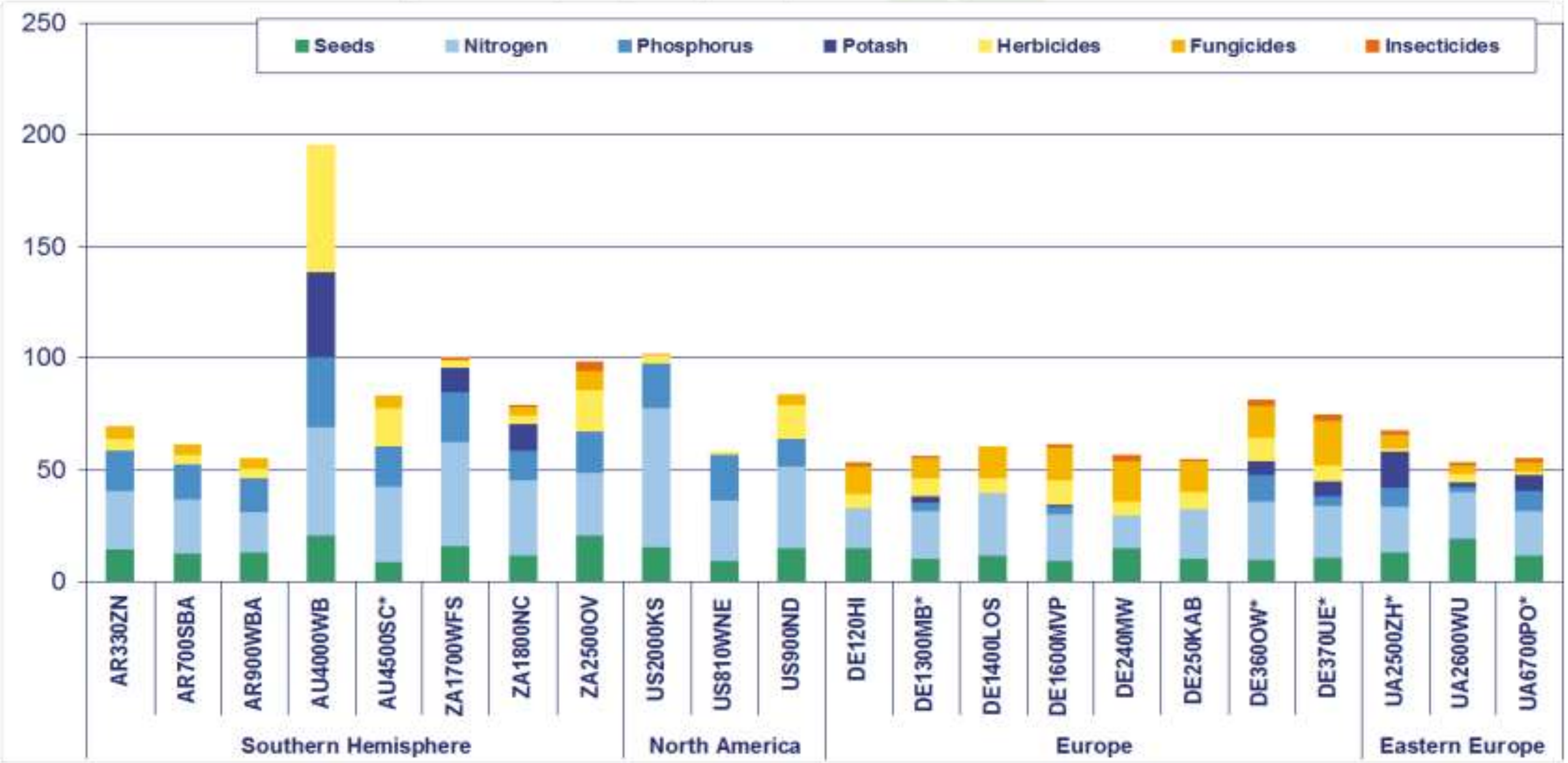
Why benchmarking?

Wheat production: Direct costs in US$/t (average 2009-2011)



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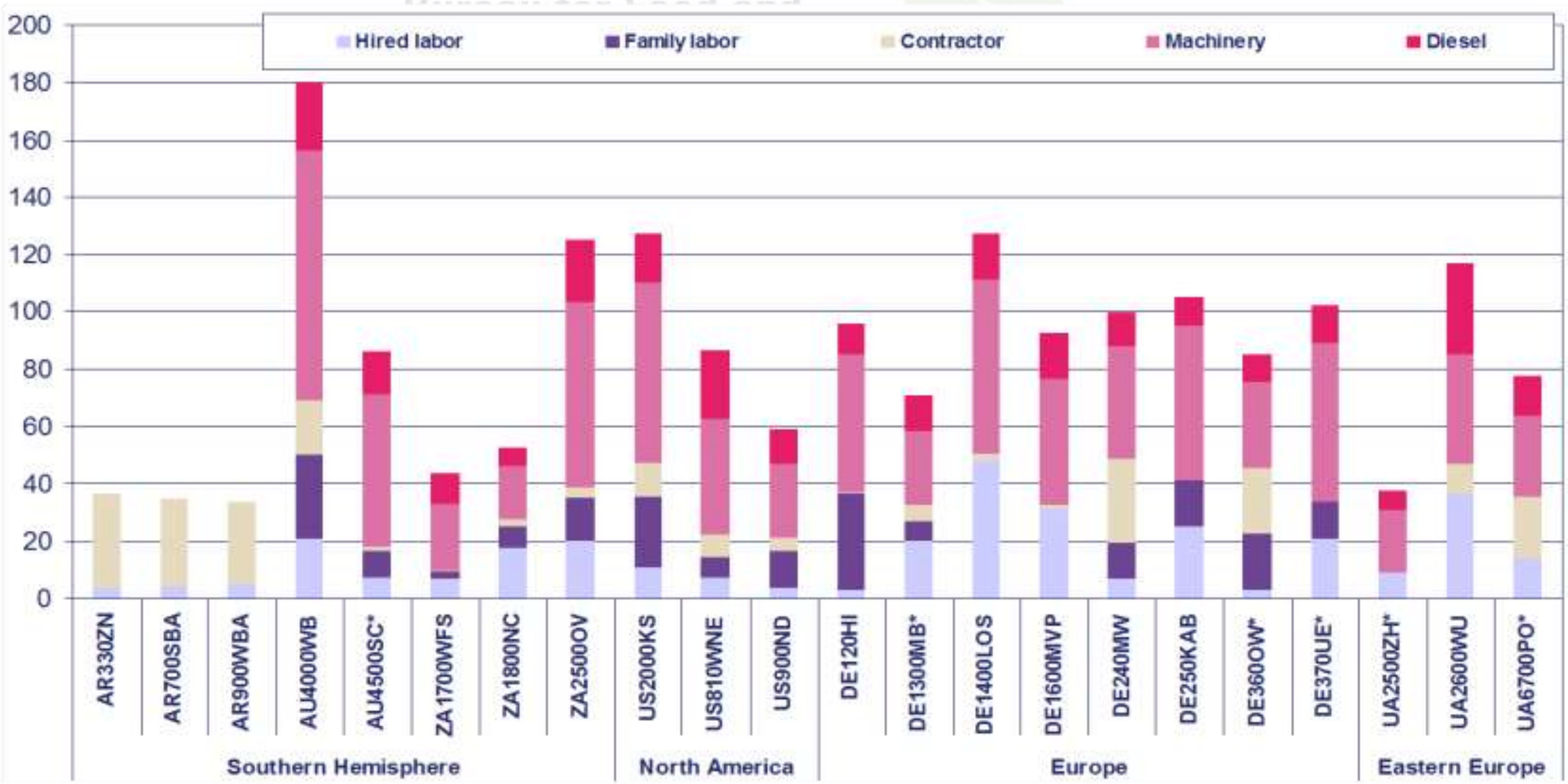
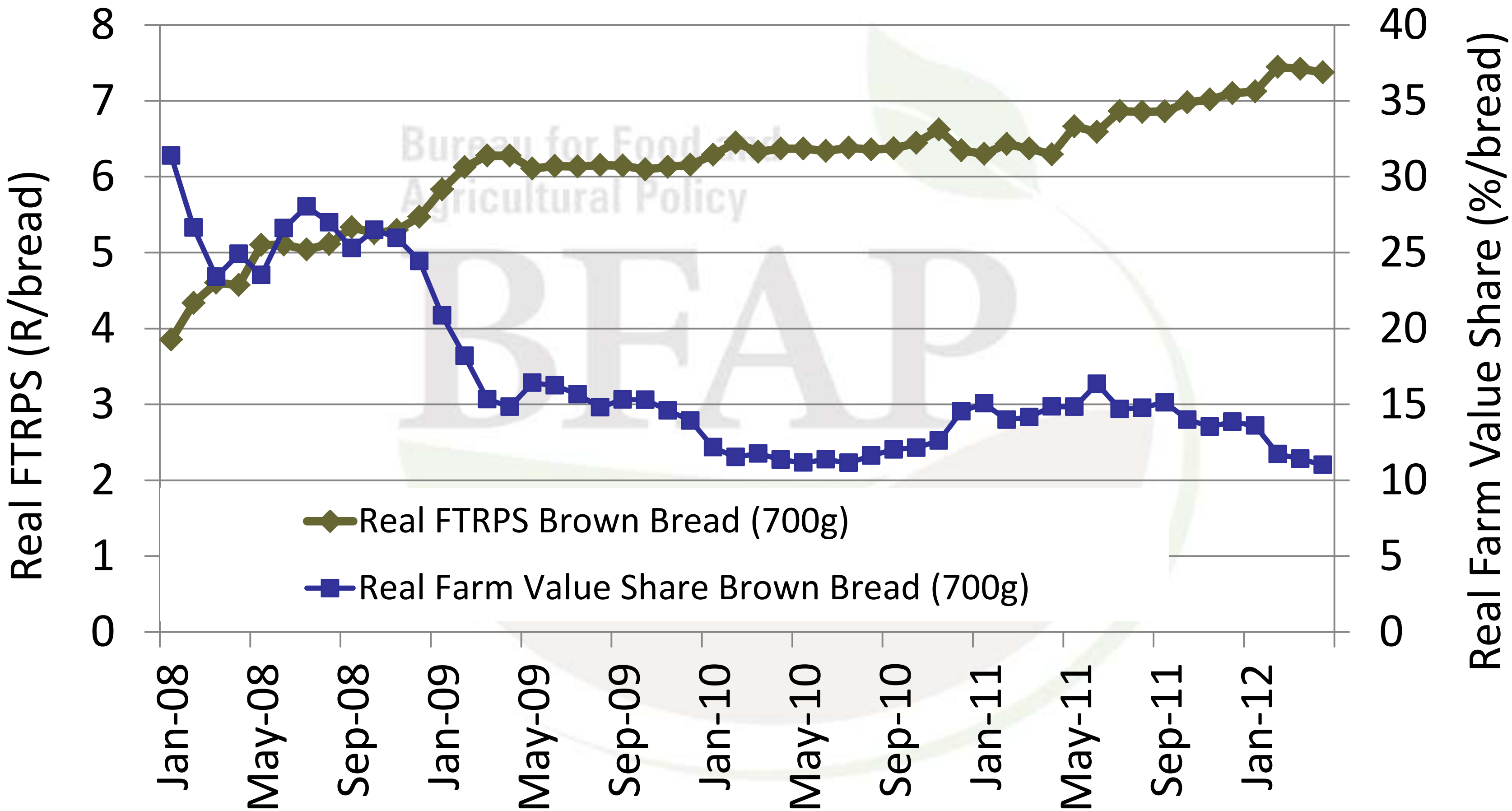
Why benchmarking?

Wheat production: Operating costs in US$/t (average 2009-2011)

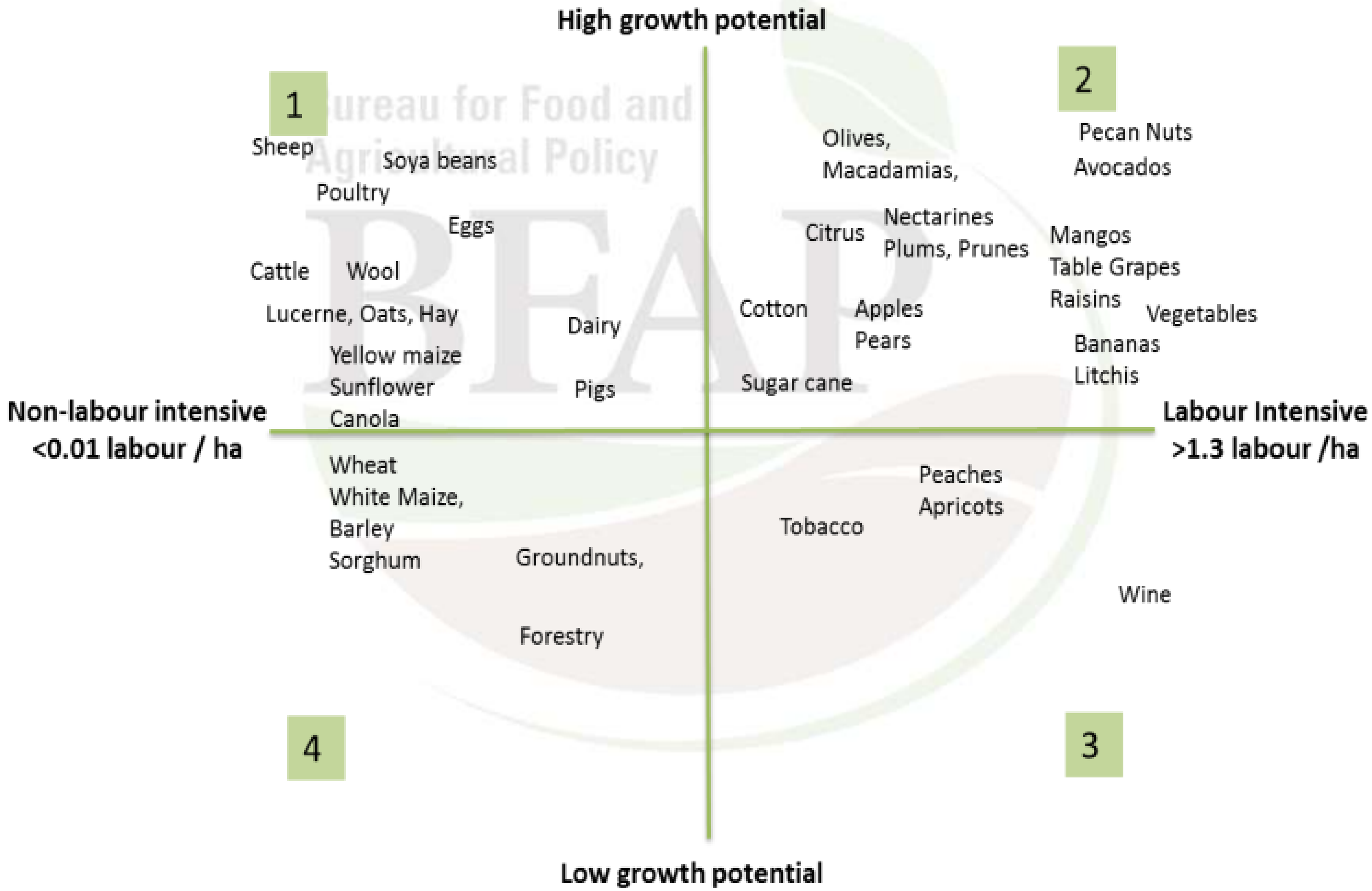


Why benchmarking?



SOURCE: NAMC, June 2012

Why benchmarking?
The employment creation matrix



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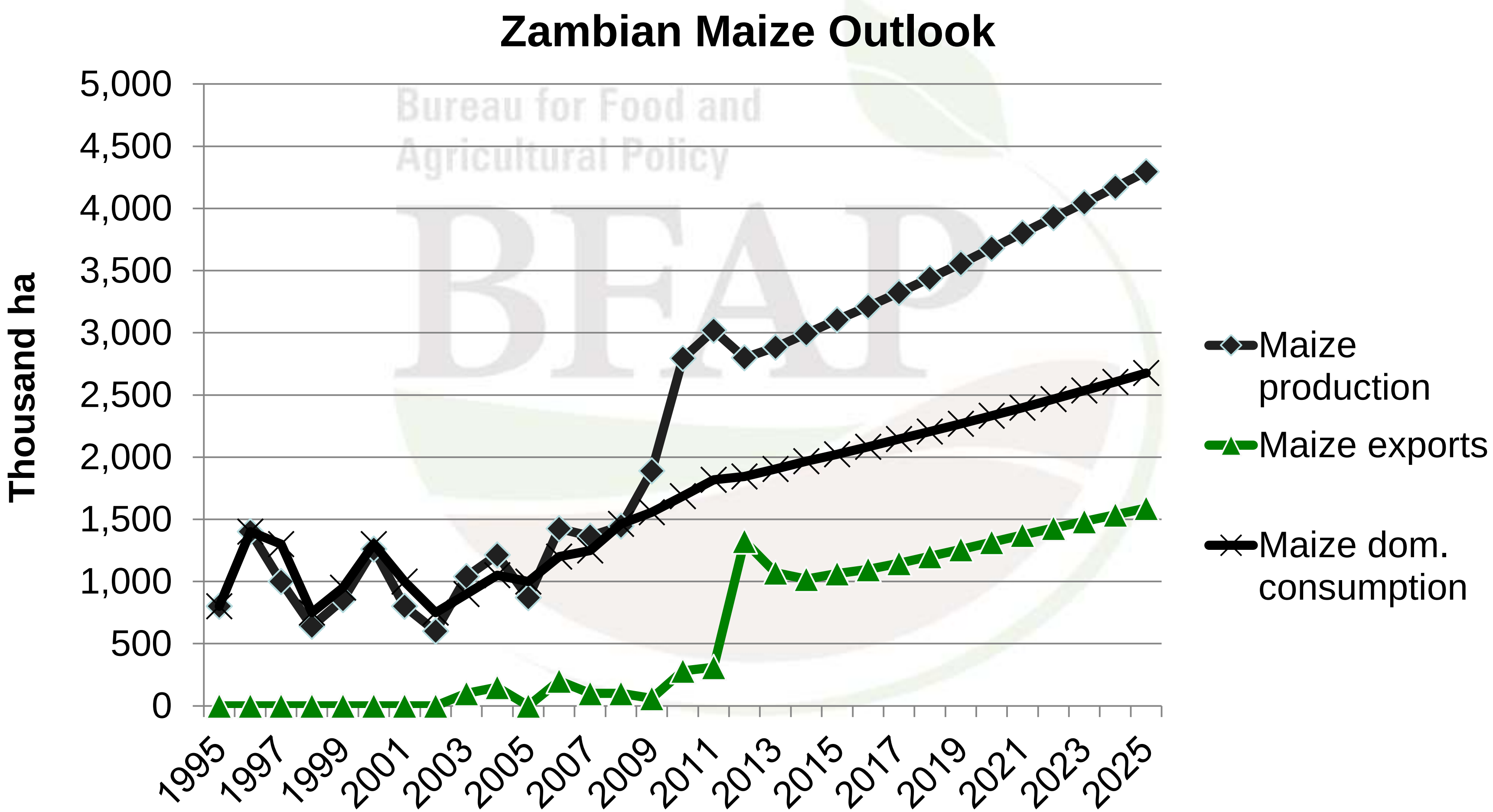
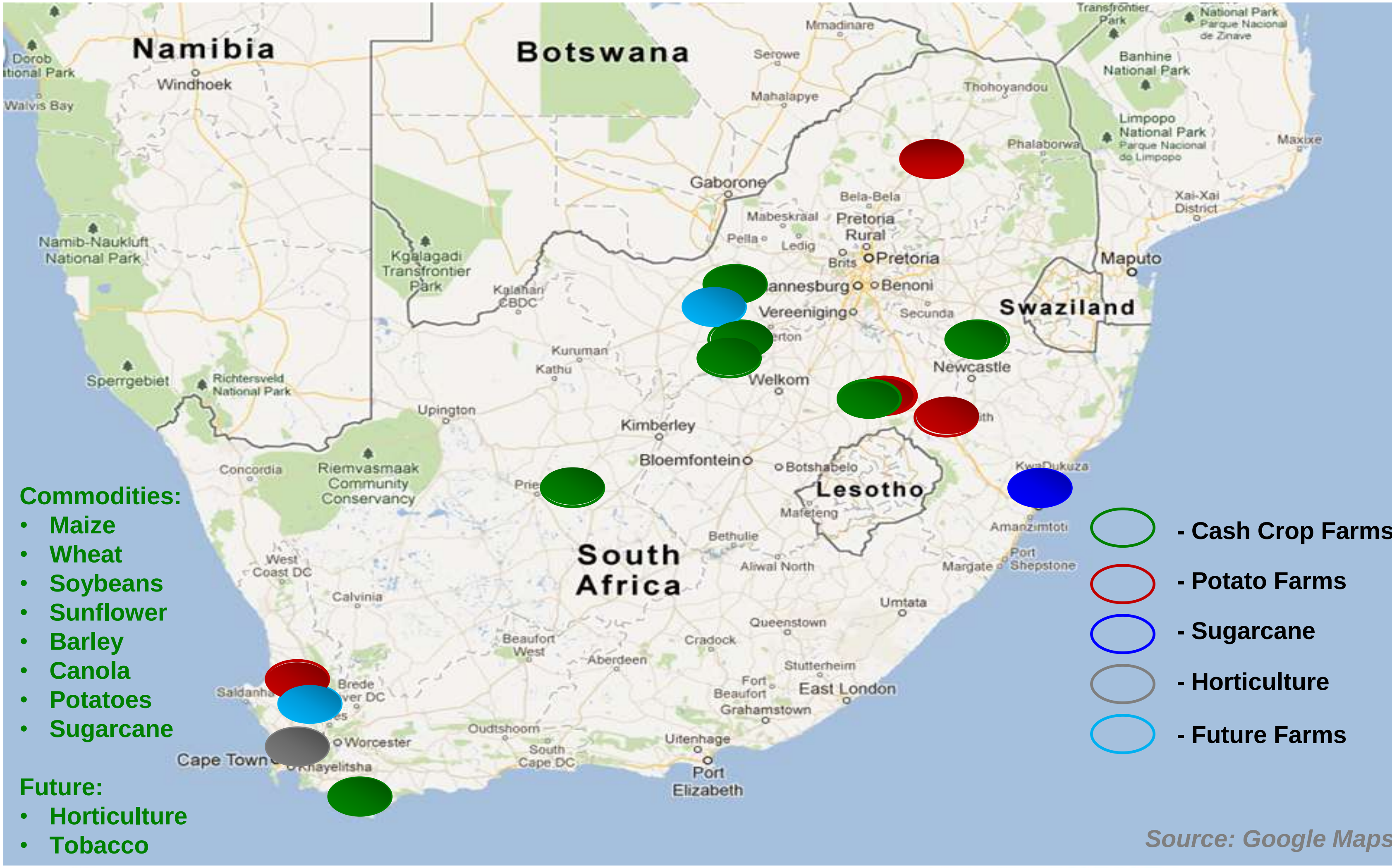
Why benchmarking?



Why benchmarking for SA?

- **Understanding agriculture worldwide**
- **Access to reliable & objective information at international level**
- **Measure a countries' performance relative to other countries**
- **Financial & managerial strategies for profitable & sustainable farming**
- **Create a sound platform on which decisions can be based, impact assessments can be conducted & "what if" questions can be answered (policy reforms, government programs, external economic, climate & biological shocks**
- **Snapshot of the performance of farmers & multi-annual comparisons**

agri benchmark in South Africa



Commodities:

- Maize
- Wheat
- Soybeans
- Sunflower
- Barley
- Canola
- Potatoes
- Sugarcane

Future:

- Horticulture
- Tobacco

- Cash Crop Farms
- Potato Farms
- Sugarcane
- Horticulture
- Future Farms

Source: Google Maps

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agri benchmark in South Africa

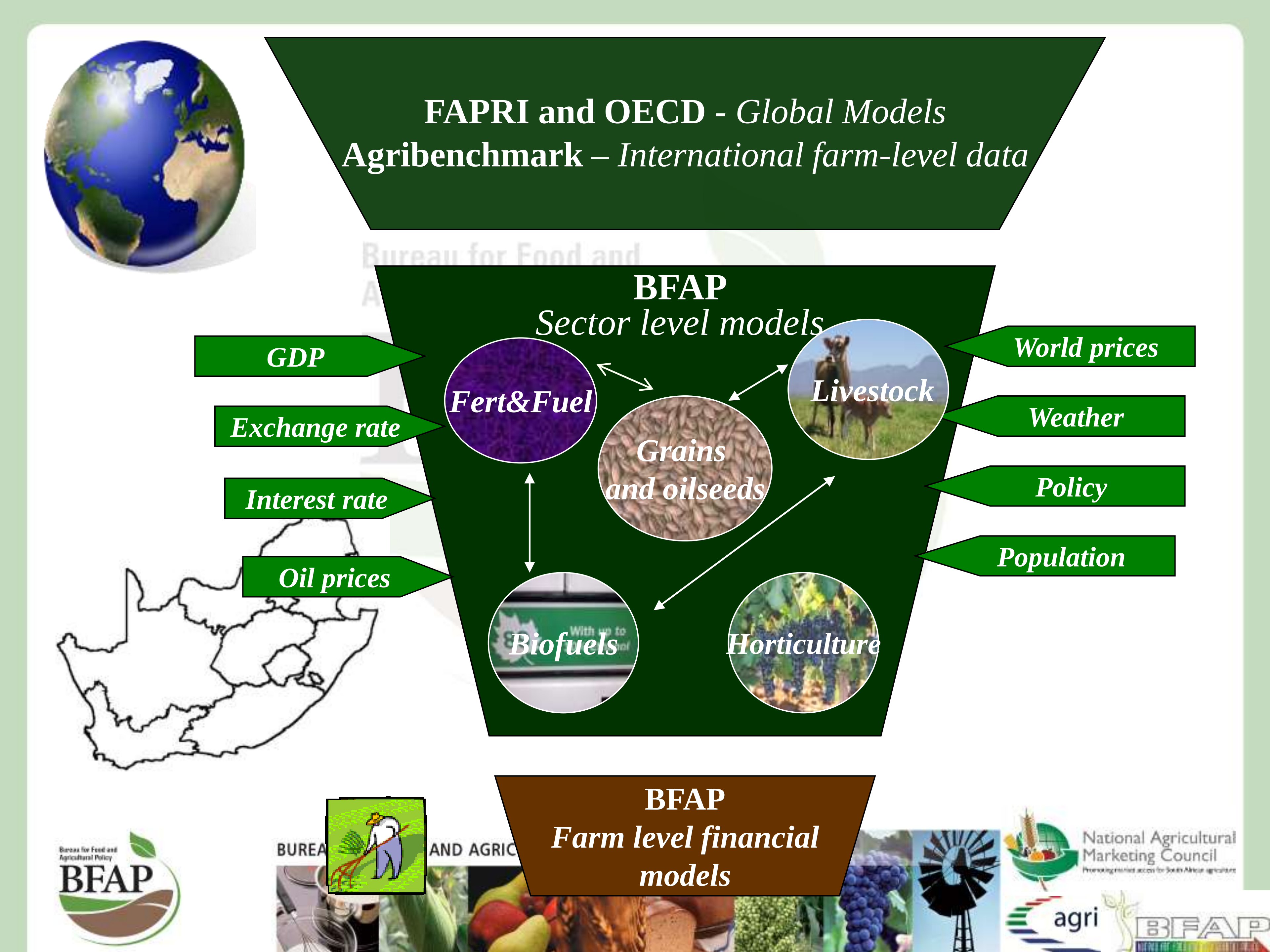
- **Currently 11 farms in the key producing areas of South Africa**
  - **7 grain- and oilseed farms (maize, wheat, soybeans, sunflower, barley & canola).**
  - **3 potato farms in 3 regions with the inclusion of an additional farm in July 2012. Regions: Sandveld, Eastern Free State, Limpopo & KwaZulu-Natal.**
  - **1 sugarcane farm in coastal dryland area of KwaZulu-Natal. The objective is to include two additional farms; Inlands and Mpumalanga irrigation.**
- **Beef and Sheep *agri benchmark* network**

The BFAP farm program & linkage

- *agri benchmark* is an important source of data capturing

- Financial data feed into BFAP Finsim model
  - Linked with BFAP sector model
  - Deterministic vs. Stochastic modelling
  - Stochastic analysis based on past yields, prices, volatile inputs (deflated) etc.
  - Valuable tool to determine/analise scenario planning & "what if" questions

- Illustrative example: Northern Cape irrigation farm
  - Impact of increasing fuel, fertilizer & electricity cost on NFI
  - Stochastic simulation: The minimum, mean & maximum outcome
  - Stoplight Chart: What is the probability that a ROI between 4.66 & 6.21% will realise?



FAPRI and OECD - Global Models
Agribenchmark – International farm-level data
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Sector level models
GDP
Exchange rate
Interest rate
Oil prices
World prices
Weather
Policy
Population
Fert&Fuel
Grains and oilseeds
Livestock
Biofuels
Horticulture
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Farm level financial models
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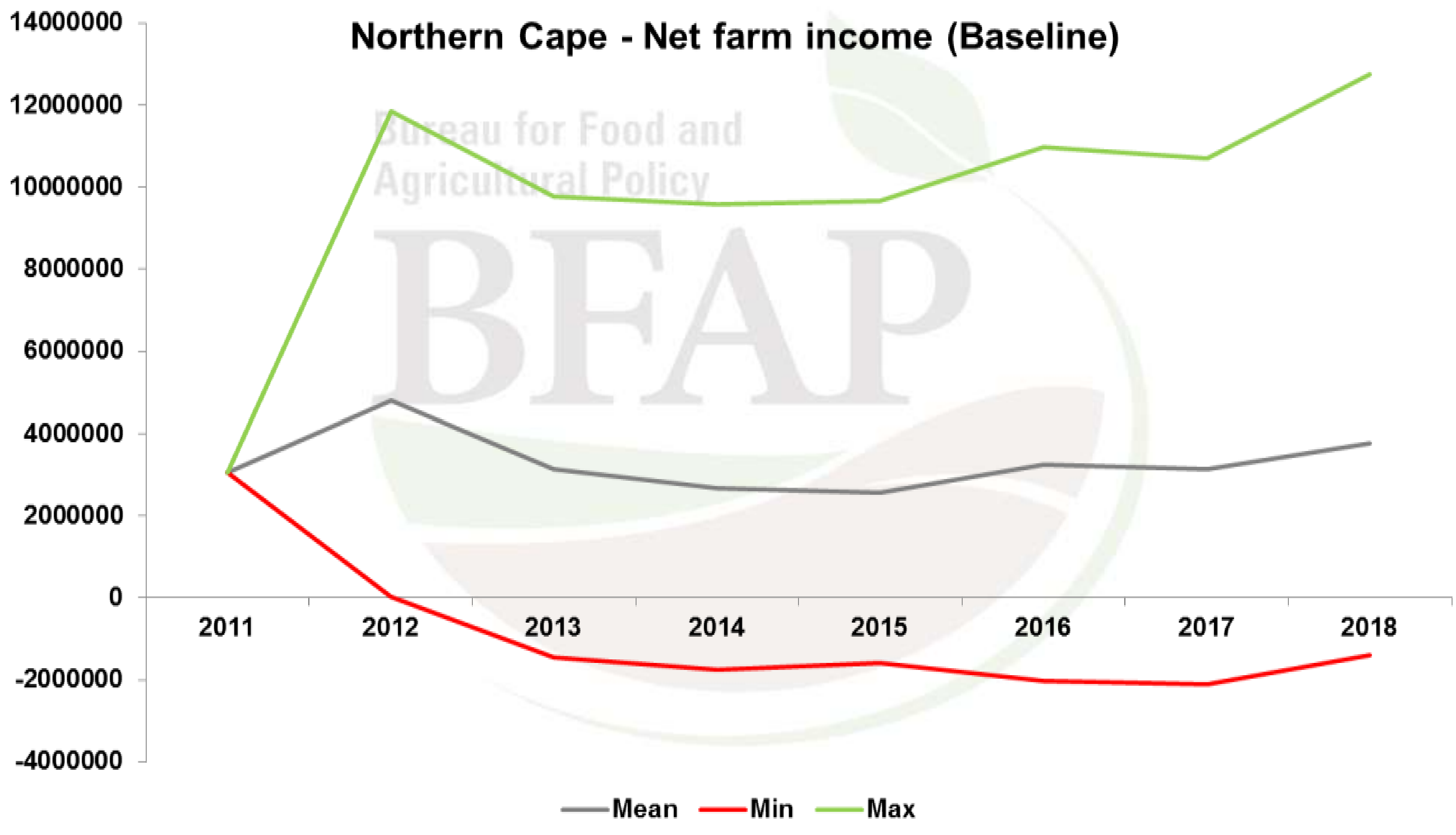
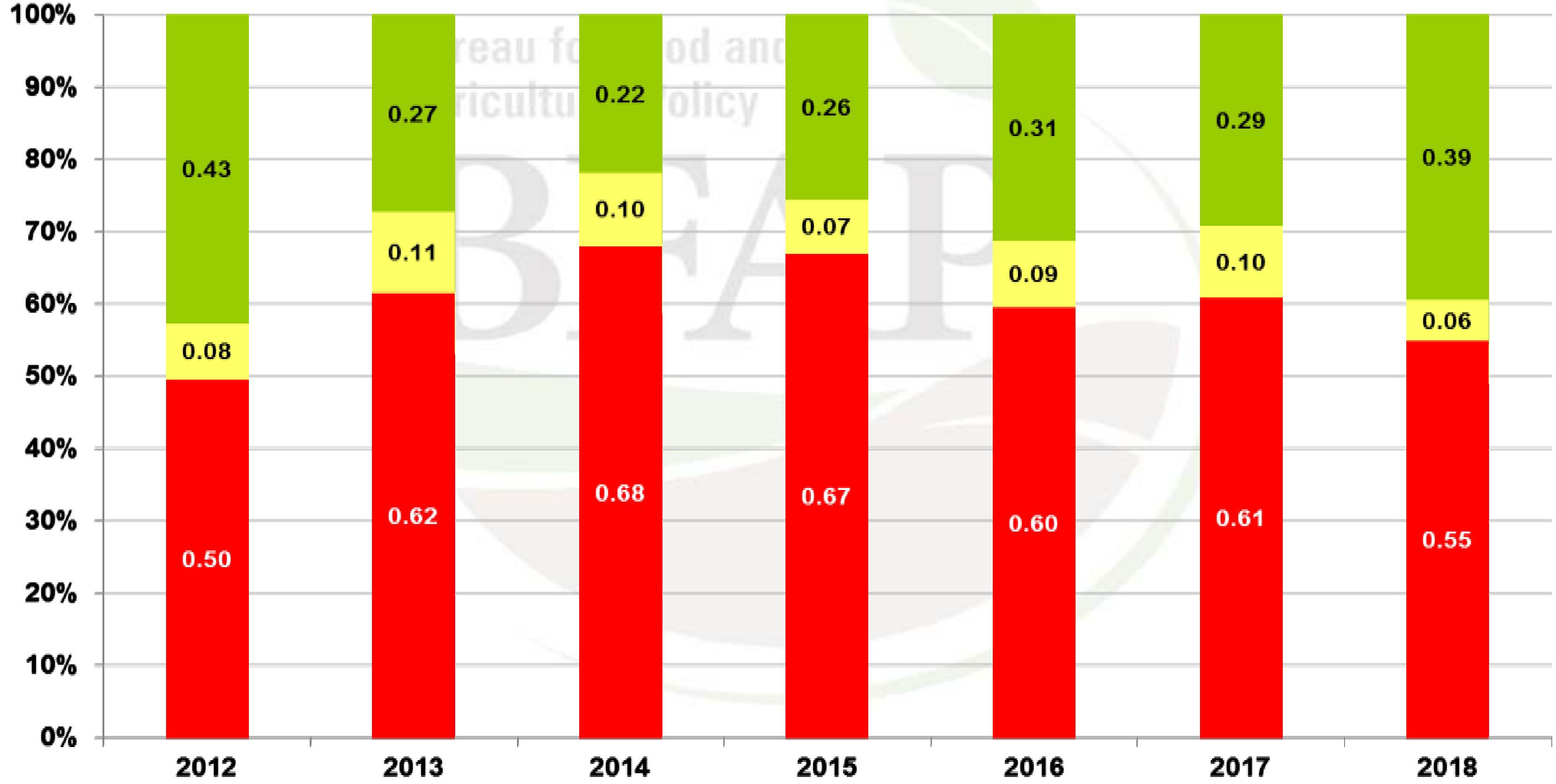
Baseline – Stochastic simulation outcome



Stoplight Chart: Baseline vs. Scenario (ROI between 4.66% and 6.21%)

Baseline result:



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National Network - Concept

Vision:

…***Unlocking the full potential of livestock & cash crop sub sectors*** *which will ultimately result in the expansion of these sub-sectors and thus contribute to increased food security and economic growth, which will in turn create a more food secure population and more employment opportunities in the economy…*

Objective:

…Initiate similar agri benchmark networks in South Africa by including more farms (commercial & emerging/smallholder) that will be ***representative of different agro ecological farming regions, as well as different production systems*** *to optimally reflect the diversity of farming in South Africa*

National Network - Outputs

- **Access to reliable and objective farm level information at the domestic level per agro-ecological region for the sub-sectors included.**
- **Access to tools that can be used for policy analysis and answering “what if”.**
- **Annual reports per sub-sector. Training and capacity building through dedicated training sessions.**
- **A higher level of cooperation and understanding between stakeholders on issues that affect the sub-sectors.**
- ***agri benchmark* will complement the current Computerised Budgeting (Combud) system**

What does the future hold?

- **Maintain current *agri benchmark* network by updating farms on an annual basis & expansion into new key regions (Mpumalanga & Western Cape)**

- **Horticultural Network: Model is currently under development to benchmark horticultural products. Pilot project initiated in 2011.**

- **Pig & Poultry: The addition of pig & poultry to the livestock network. The aim is to benchmark representative farms internationally: Regions: Gauteng, KwaZulu-Natal & the Western Cape.**

What does the future hold?

- **Expansion of potato & sugarcane typical farms into other regions/provinces**
- **Smallholder network: Project initiated in 2011. TypiCrop model currently under development.**
- **Southern Africa: First typical farms for Zambia in 2012**

Thank you!

Please visit our website at

www.bfap.co.za

Your partner in decision making

See you at the Baseline on
8 August

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