South African Agriculture and Agribusiness:
Prospects an Challenges

Free State Agriculture

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CEO: Agbiz

15 August 2018

For today........

1. Challenging and complex environment evolving
2. Food Security and Competitiveness imperative
3. Performance of the sector
4. Some ag-commodity indicators
5. Some Agribusiness indicators
6. Legislative developments in 2018
7. Wrap up
Challenging and complex environment evolving

• Global socio-political environment
• Local socio-political environment
• Consumer trends and activism – need to analyse facts, and act
• Technology dynamic – 4th Industrial Revolution: Jobs dynamic NB
• Climate Change – adaptation and mitigation: Weather variability?
• Increased regulation of agro-food system: Food safety & health
• Sustainable use of, and rights allocation to, water and land as critical natural resources – it will change: how to adapt?
• Utilisation of renewable energy sources – energy security
• “Trade wars are the wars of the future” – now fully with us
• Big Data – mine and analyse to drive efficiency
• Human capital and skills – the talent factor NB!

Global Socio-political Developments

• Multi-polar global power dynamic – economic power shift to Asia
• Ambitions of China & Russia, also India & Japan: Geo-political positioning?
• Middle East catastrophe – migration effect to Europe and global destabilisation
• Religious fundamentalism still a factor, e.g. ISIS, Boko Haram, Al Qaeda, etc.
• Brexit and European Unity: major uncertainty remains, but also opportunity
• Donald Trump dynamic – USA nationalism and protectionism
• Africa’s demographic ‘dividend’ and food insecurity?
• Globalisation and Interconnectivity still massive driver, despite ‘efforts’.
• Blockchain and Crypto-currencies – IMF CEO quote

Dreyfus teams with banks for first agriculture blockchain trade –

Louis Dreyfus Co., one of the world’s biggest foodstuffs traders, teamed up with Dutch and French banks in December for what it says is the first agricultural commodity trade to use the ledger-based digital technology known as blockchain. For blockchain to succeed in helping traders cut costs and deal times, however, industrywide adoption of standardized platforms and systems will be needed. That’s why banks are teaming with the biggest trading houses such as LDC on early blockchain tests.

More interconnected ➔ but greater uncertainty ➔ less control ➔
more risk ➔ greater opportunity though ➔ look for and exploit!
Demographics.....

Either massive opportunity, or a critical risk......!

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Local Socio-political Developments

• ANC still in turmoil – deep divisions and distrust persist. CR/JZ dynamic?
• Manifested earlier in ANC loss of three major Metros, viz. Johannesburg, Tshwane and Nelson Mandela Bay, to opposition coalitions. Cape Town was already governed by DA.
• DA & EFF still viable opposition parties and ruling coalitions? Realignment.
• Major political uncertainty, but not necessarily all bad. Hope springs!
• Biggest concern: Lack of GDP growth and Competitiveness decline (WEF)
• Massive unemployment (~27%), especially amongst the Youth (>50%)
• Inequality - calls for radical economic transformation (RET) will not abate.
• Land & water reform will be at the centre of demands.
• Crime & Security factor, including corruption and farm safety concern.
• General election 2019 – political rhetoric already dominating.

South Africa’s GDP: 294,8 billion USD (2016)
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THE AGRI-COMPETITIVENESS ANALYSIS PROGRAMME (ACAP)
Stellenbosch University

1. Approach and process:
   - Application of New Competitiveness Theory framework – from Comparative Advantage to Competitive Advantages
   - Participative analysis - stakeholders/client inputs
   - Participative strategic planning – industry and or firm level;

2. Funding:
   - Project based: Industry, banking sector (Standard Bank), Government (Western Cape Dept of Agriculture), agribusiness.

3. Dissemination:
   - Industry seminars, annual Agri-Competitiveness Seminars, participation in Strategic Planning sessions (Citrus, Red Meat, Stone Fruit, Dates), publications, papers

4. Selected commodities:
   - 30 value chain groupings; 1600 observations: Deciduous: citrus-stone fruit, wine, dates, grains, dairy, sugar, forestry, meat and game...

5. Team: Johan van Rooyen, BFAP, US (project leader); Johann Boonzaaier, BFAP (PhD student focussing on Value Chain Performance and Farm Level Decision making); Xolille Dikillilli (MSc student, Citrus); Ayabonga Subilali (M student), Sub-Tropical Fruit; M. Fillies (M student)Table Grapes; M. Angula (PhD student) Namibia; T van Schoor, BFAP (PhD student), Agri-value chains
METHODOLOGY AND ANALYSIS:

TRADE BASED MEASURES
- RER and PPP
- RCA and RTA
- Other Indices; EMS, NEI, GL

\[ \text{RCA}_{ij} = \frac{X_{ij}}{X_{ik}} \]

\[ \text{RMA}_{ij} = \frac{X_{ij}}{X_{nk}} \]

\[ \text{RTA}_{ij} = \text{RCA}_{ij} - \text{RMA}_{ij} \]

(Emmans 1966, Vollrath 1991)

Data:
FAO STATS - 1961;
TRADEMAP - 2001

STRATEGIC PARTICIPATIVE ANALYSIS & PLANNING
- Cost Measures
- Profitability
- Productivity and Efficiency
- PORTER DIAMOND; EXEC SURVEYS; LOGFRAMES

Data & Info
Porter (1998)
Vollrath (1991)

SA Agricultural competitiveness - Long term trends (FAO Data)

RTA - Primary Agricultural Products - sustained positive, marginal

Protectionism
War - economy
Sanctions economy
Madiba Magic + Learning by doing
Sustaining Global Comp.
Livestock and Poultry: Primary and Agri-processing

24 of 36 commodities SA a net exporter = 67%

Source: BFAP, 2016
Food Security Imperative

Many definitions to food security, but the one we will use is the FAO definition (World Food Summit 1996):

“A situation that exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life”.

Components of Food Security

**FOOD QUALITY & SAFETY (5)**
- Nutritional standards
- Protein quality
- Food safety, etc.

**FOOD AFFORDABILITY (6)**
- Food consumption as % of DHI
- % of pop under GPL (<$3.10)
- Presence of Food Safety Net Programmes, Etc.

**FOOD AVAILABILITY (8)**
- Sufficiency of supply
- Volatility of agric production
- Agricultural infrastructure
- R&D spend, etc.

Complex concept: Difficult to measure and evaluate.

Stability over TIME

Purchasing power key to access
2017 Global Food Security Index

South Africa ranks 44th

SA Household Food Security a risk: ~20% of households food insecure

Source: Economist Intelligence Unit/DuPont

http://foodsecurityindex.eiu.com
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Gross Domestic Product of AAF

<table>
<thead>
<tr>
<th>Year</th>
<th>Total value added R' million</th>
<th>Contribution of agriculture to value added R' million</th>
<th>Contribution of agriculture as percentage of total value added %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>2 494 860</td>
<td>52 001</td>
<td>2.1</td>
</tr>
<tr>
<td>2011</td>
<td>2 724 400</td>
<td>55 478</td>
<td>2.0</td>
</tr>
<tr>
<td>2012</td>
<td>2 932 879</td>
<td>59 934</td>
<td>2.0</td>
</tr>
<tr>
<td>2013</td>
<td>3 183 433</td>
<td>63 321</td>
<td>2.0</td>
</tr>
<tr>
<td>2014</td>
<td>3 418 061</td>
<td>70 755</td>
<td>2.1</td>
</tr>
<tr>
<td>2015</td>
<td>3 625 467</td>
<td>72 235</td>
<td>2.0</td>
</tr>
<tr>
<td>2016*</td>
<td>3 878 164</td>
<td>94 408</td>
<td>2.4</td>
</tr>
</tbody>
</table>

*Note: Figures are for agriculture, forestry and fisheries

Source: DAFF, 2017
Agriculture’s share in the economy is small and has declined over time...

SA economic growth: Tradable goods sectors lag the non-tradable goods sectors
RSA Agriculture, Forestry & Fisheries GDP: 2005 - 2016

Mean GDP growth per annum: 1.62%

Source: Agbiz Research and Stats SA

SA agricultural economy contracted by 24.2% q/q in the first quarter of 2018

The negative effects of the Western Cape drought are evident in the first quarter GDP data, which showed that South Africa's agricultural economy contracted by 24.2% q/q. This far exceeds our expectations of a modest contraction of about 11% q/q. The bulk of the winter crops such as wheat, barley and canola, together with summer fruits (stone and grapes) are typically harvested in the period between November and March, which somewhat coincides with the first quarter GDP data. These crops are dominantly produced in the Western Cape and took a huge knock in the recent harvest due to drought, which ultimately explains the negative GDP reading this morning.

Source: Western Cape Department of Agriculture and ECD

Chart 2: Western Cape’s agricultural production (major crops only)
Four provinces account for 80% of agricultural production over the past two decades

Share of agriculture production by province in 1995

- KZN: 29%
- WC: 6%
- MP: 9%
- LP: 6%
- FS: 6%
- GP: 10%
- NC: 4%
- NW: 4%

Share of agriculture production by province in 2015

- KZN: 30%
- WC: 24%
- MP: 9%
- NC: 5%
- NW: 5%
- EC: 5%
- GP: 6%
- FS: 7%
- LP: 9%

Source: Stats SA, Agbiz Research
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Field crops

- Maize – major staple, net exports, ~85% GM
- Wheat – also staple food, net imports (~50% of demand)
- Sorghum – declining significance
- Soya – growing importance, cake imports, ~90% GM
- Sunflower – stable to growing importance, S/D in balance
- Canola – growing importance in Western Cape
- Groundnuts – net exports, but declining
- Dry beans – net imports, mostly from China
- Gross value of crop production in 2016 : R57.4bn
South Africa’s total maize production showing good growth...

Horticulture

- Viticulture & Wine – major export industry. Drought-hit now with 20% decline
- Citrus – SA’s biggest ag-export, growing but CBS issue & FCM....?
- Deciduous fruit – major net exports
- Table grapes – major net exports
- Sub-tropical fruit – net exports, and growing....
- Vegetables – S/D balance, some imports/exports
- Nut industries – significant growth off low base

Gross income from Horticulture (R bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Gross Income</th>
</tr>
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<tbody>
<tr>
<td>2012</td>
<td>R41.8</td>
</tr>
<tr>
<td>2013</td>
<td>R47.6</td>
</tr>
<tr>
<td>2014</td>
<td>R53.9</td>
</tr>
<tr>
<td>2015</td>
<td>R60.8</td>
</tr>
<tr>
<td>2016</td>
<td>R72.6</td>
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Animal production
Accounts for just under half of total agriculture production: R116.73bn (2016)

Agricultural production by sub-sector

- Field crops (R57.4bn) 29%
- Horticulture (R72.6bn) 29%
- Poultry (R38.6bn) 16%
- Other live animals (R67.9bn) 28%
- Eggs (R10.2bn) 4%
- Crops (R57.4bn) 29%
- Horticulture (R72.6bn) 29%
- Poultry (R38.6bn) 16%
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Animal production share over time

Source: DAFF, Stats SA, RMB Global Markets Research, Agbiz Research

Distribution of cattle by province

Distribution of cattle by province August 2017 (%)
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SA Agricultural Trade Balance

Source: International Trade Centre, 2017
Graph: Agbiz, 2017

Trends in South Africa’s agricultural exports per region

Source: International Trade Centre, 2017
Graph: Agbiz, 2017
Risk to collateral, “expropriation without compensation”

- Total agriculture farm debt

Source: DAFF, Agbiz Research

Capital Assets in Agriculture

- Estimated value of capital assets at 30/6/2016: **R421 billion**
- Estimated value of capital assets a year earlier: R384 billion
  Indicating an increase of 9,6% from 2015 to 2016.
- Total value of capital assets constituted as follows:
  - Land and fixed improvements: **R219 billion** (52,1%)
  - Livestock: R137 billion (32,7%)
  - Machinery and implements: R64 billion (15,2%)
Indexed GDP: Agro-processing vs Manufacturing Output

Agro-processing: ~25% of MO and ~3.5% of GDP
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Fields of legislation

1. Credit legislation: Reg. 19 (Credit bureaus) + National Credit Amendment Bill
2. Carbon Tax Bill: Trade exposure important. Gazetted for comment
4. Competition Amendment Bill (Nedlac Report signed off)
5. Water rights:
   - NWRS + Water Masterplan – New Water Bill & ELU
   - Water licence application regulations & Water tariffs
6. Land reform:
   - Expropriation without Compensation
   - Regulation of Agricultural Landholdings Bill
   - Draft Property Valuation Regulations (Property Valuation Act)
   - Communal Land Tenure Bill
   - Communal Property Association Amendment Bill
   - Preservation & Development of Agricultural Land Framework Bill
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10 Factors determining the future of Agro-food system 
1. Consumer trends & activism 
2. Rate and impact of technological development, and adoption 
3. Increased regulation of agro-food system 
4. Climate change 
5. Water availability and cost 
6. Sustainable and efficient use of land and water 
7. Trade agreements/trade wars (WTO role?) 
8. Big Data and innovation 
9. Improved and transparent/credible communication 
10. Skills and talent factor
Wrap up

- Relatively healthy and robust agro-food industry: **open, competitive markets driving efficiencies**
- Relatively technologically advanced, globally competitive sector (Rand factor)
- **Challenges:** Investment environment, Agro-logistics, water availability and quality, environmental sustainability, R&D, crime and security, labour relations & legislation, land reform, climate change, trade agreements, sustainable transformation, etc.
- **Opportunities:** Growing population, consumer spending trends, new markets (especially to Africa and the East), new technologies & improved productivity, etc.
- Major contributor to Food Security, growth and employment in RSA.
- We live in uncertain times – many risks and variables, some controllable, others not or less so. The playing field and rules of the game are changing – need to adapt.
- However, risk creates opportunity, and concentrate on those risks you can manage!

Thank you

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