Major trends driving the future of Agriculture

FERTASA

John Purchase
CEO: Agbiz

19 April 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 and note
• Technology dynamic – 4th Industrial Revolution: Jobs dynamic NB
• Climate Change – adaptation and mitigation: Western Cape impact?
• Increased regulation of agro-food system: Food safety & health
• Sustainable use of, and rights allocation to, water and land as critical natural resources
• Utilisation of renewable energy sources – energy security
• Trade agreements – “Trade wars are the wars of the future”
• Big Data – mine and analyse to drive efficiency (Not fb way!)
• Human capital and skills – the talent factor NB!
Global Socio-political Developments

- Multi-polar global power dynamic – economic power shift to Asia
- Middle East catastrophe – migration effect to Europe and global destabilisation
- Religious fundamentalism, e.g. ISIS, Boko Haram, Al Qaeda, etc.
- Brexit and European Unity: uncertainty
- Donald Trump dynamic – USA nationalism?
- Ambitions of China & Russia, their geo-political positioning? North Korea nuclear threat real?
- Africa’s demographic ‘dividend’ and food insecurity?
- Globalisation and Interconnectivity still massive driver
- Blockchain and Cryptocurrencies – IMF CEO quote

Dreyfus teams with banks for first agriculture blockchain trade – www.Bloomberg.com

-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. Read more”

More interconnected → greater uncertainty → less control → more risk → greater opportunity!
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 dynamic?
- Manifested in ANC loss of three major Metros, viz. Johannesburg, Tshwane and Nelson Mandela Bay, to opposition coalitions. Cape Town already governed by DA
- DA & EFF viable opposition parties and ruling coalitions? Realignment.
- Major political uncertainty, but not necessarily all bad. Hope springs!
- Lack of GDP growth and Competitiveness decline (WEF), biggest concern
- 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
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Insight Report

The Global Competitiveness Report
2017–2018

The Global Competitiveness Index 2017–2018 Rankings

Covering 137 economies, the Global Competitiveness Index 2017–2018 measures national competitiveness—defined as the set of institutions, policies and factors that determine the level of productivity.
South Africa

The Global Competitiveness Index 2017-2018 edition

Key indicators, 2016

Population millions 55.9
GDP US$ billions 294.1
GDP per capita US$ 5,260.9
GDP (PPP) % world GDP 0.62

Performance overview

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Source: International Monetary Fund; World Economic Outlook Database (April 2017)
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
SA food price inflation decelerates further to 3.5%

Food and non-alcoholic beverages inflation decelerated to 3.5% in March 2018, from 3.9% in the previous month. This is the lowest levels since December 2013 - thanks to last season’s robust crop output, as well as deceleration in meat price inflation. While there might be a slight uptick in the coming months in anticipation of the VAT and sugar tax effect, we expect the food and non-alcoholic beverages price inflation to remain at fairly low levels this year cushioned by a large grain stock from the current marketing year, as well as the expectation of a fairly good summer grain harvest.
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Capital Assets in Agriculture

• Estimated value of capital assets at end 2016: R428 billion

• Estimated value of capital assets a year earlier: R394 billion

  Indicating an increase of 8,6% from 2015 to 2016.

• Total value of capital assets constituted as follows:

  - Land and fixed improvements: R231 billion (53,9%)

  - Livestock: R131 billion (30,6%)

  - Machinery and implements: R65 billion (15,5%)

Source: Abstract of Agricultural Statistics 2017, DAFF.
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

Source: StatsSA

Graph: Agbiz
RSA Agriculture, Forestry & Fisheries GDP: 2005 -2017

Mean GDP growth per annum: 2.07%

Year-on-Year quarter change (RHS)  
Agriculture Gross Value added (R Million): Real 2010 (LHS)

Source: Stats SA and Agbiz Research
Four provinces account for 80% of agricultural production over the past two decades

<table>
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<tr>
<th>Province</th>
<th>Share in 1995</th>
<th>Share in 2015</th>
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<tbody>
<tr>
<td>KZN</td>
<td>29%</td>
<td>30%</td>
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<td>WC</td>
<td>24%</td>
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<td>MP</td>
<td>9%</td>
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<td>LP</td>
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<td>FS</td>
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<td>7%</td>
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<td>NC</td>
<td>6%</td>
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<td>NW</td>
<td>4%</td>
<td>5%</td>
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<tr>
<td>EC</td>
<td>6%</td>
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</table>

Source: Stats SA, Agbiz Research
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Figure 2: Agricultural performance: growth in production (2011-2015) and share of agricultural production value of selected industries (2013-2015)
Field crops

- Maize – major staple, net exports, ~85% GM
- Wheat – also staple food, net imports (~45% of demand)
- Sorghum – declining significance
- Soya – growing importance, cake imports, ~90% GM
- Sunflower – 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...

Source: CEC, SAGIS, Agbiz Research
South Africa’s maize production...

White maize production set to decline, but still above the country’s annual maize needs

Yellow maize production set to decline, but there are large stocks to boost supplies in the new marketing season

Source: CEC, SAGIS, Agbiz Research
SAFEX maize prices to remain pressured in the near term...

Both **white and yellow maize prices** are trading along the export parity levels, as large supplies (large carry over stock of 4.1 million tonnes form the 2017/18 marketing year, as well as expectations of 12.42 million tonnes in the new season) continue to keep prices under pressure.

In 2017, **white and yellow maize prices** averaged R2 161 per tonne and R2 097 per tonne, respectively, down by 51% y/y and 38% y/y, thanks to the record harvest.

In the last week of March 2018, **white and yellow maize spot prices** settled at R1 891 and R1 961 per tonne, respectively, which is 4% and 6% lower than the corresponding period last year.
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>
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<tr>
<th>Year</th>
<th>2012</th>
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<th>2015</th>
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<td></td>
<td>R41.8</td>
<td>R47.6</td>
<td>R53.9</td>
<td>R60.8</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) 23%
- **Horticulture** (R72.6bn) 29%
- **Eggs** (R10.2bn) 4%
- **Poultry** (R38.6bn) 16%
- **Other live animals** (R67.9bn) 28%

### Animal production share over time

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<tr>
<td>Poultry and eggs</td>
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<tr>
<td>Cattle</td>
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<td>Sheep</td>
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<td>Other</td>
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Source: DAFF, Stats SA, RMB Global Markets Research, Agbiz Research
Beef exports

Source: Trade Map and Agbiz Research

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SA Agricultural Trade Balance

Chart 2: South Africa’s agricultural exports
Source: Trade Map and Agbiz Research

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
Chart 1: South Africa’s agricultural jobs
Source: Stats SA, Agbiz Research

Chart 2: South Africa’s agricultural jobs by province
Source: Stats SA, Agbiz Research

Chart 3: Quarter-on-quarter employment by sub-sector
Source: Stats SA, Agbiz Research
Indexed GDP: Agro-processing vs Manufacturing Output

South Africa's Manufacturing Output Index (Seasonally adjusted)

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

Source: Stats SA, Agbiz Research
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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
3. Labour legislation: NMWB + LRAB (Nedlac package)
4. Competition Amendment Bill (In Nedlac now)
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 Agri-food system

1. Consumer trends
2. Consumer activism
3. Rate and impact of technological development, and adoption
4. Increased regulation of agri-food system
5. Climate change, and water availability and cost
6. Improved and transparent communication
7. Sustainable use of land and water
8. Trade agreements
9. Big Data
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 – adapt.

• However, risk creates opportunity, and concentrate on those risks you can manage!
Thank you

www.agbiz.co.za