Key developments in global agro-food system and lessons for South Africa

SAGIS

John Purchase

CEO: Agbiz

19 July 2018

For today…….

1. **Challenging and complex environment evolving**
2. Food Security and Competitiveness imperative
3. Perspectives on global trade & impact on agricultural trade
4. International Food & Agribusiness Management Association (IFAMA) Forum 2018
5. Agbiz Congress: Prof Marcos Fava Neves perspectives
6. Wrap up

Challenging and complex environment evolving

- Global socio-political environment
- Local socio-political environment
- Consumer trends and activism – need to analyse and act
- 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 wars are the wars of the future" – now fully with us
- 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 still a factor, e.g. ISIS, Boko Haram, Al Qaeda, etc.
- Brexit and European Unity: major uncertainty remains
- Donald Trump dynamic – USA nationalism and protectionism
- Ambitions of China & Russia, their geo-political positioning?
- Africa's demographic 'dividend' and food insecurity?
- Globalisation and Interconnectivity still massive driver
- Blockchain and Crypto-currencies – IMF CEO quote

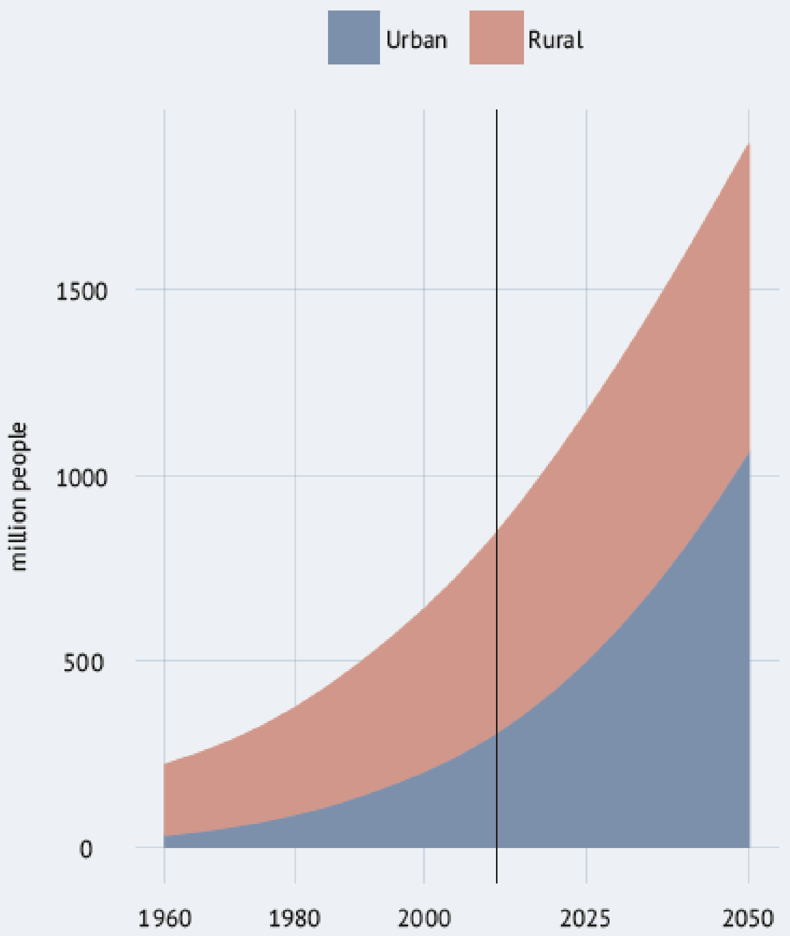
Dreyfus teams with banks for first agriculture blockchain trade – www.Bloomberg.com

-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 ➔ but greater uncertainty ➔ less control ➔ more risk ➔ greater opportunity!

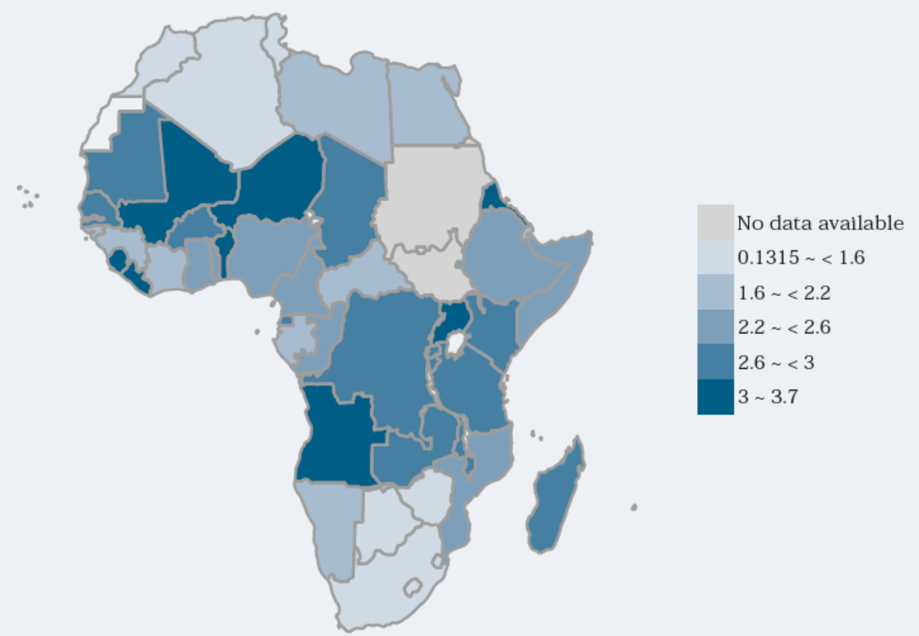
Demographics…..

CHART 1: **Africa rural and urban population (1960-2050)**



Source: United Nations Population Division.
Data after 2011 are projections.

MAP 1: **Population annual growth (percent, 2000-2012)**



Either massive opportunity, or a critical risk……!

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 still a factor, e.g. ISIS, Boko Haram, Al Qaeda, etc.
- Brexit and European Unity: major uncertainty remains
- Donald Trump dynamic – USA nationalism and protectionism. Impact?
- Ambitions of China & Russia, their geo-political positioning?
- 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 → but greater uncertainty → less control → more risk → greater opportunity!

Local Socio-political Developments

- ANC still in turmoil – deep divisions and distrust persist. CR/JZ dynamic?
- Manifested 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.

For today…….

1. Challenging and complex environment evolving
2. **Food Security and Competitiveness imperative**
3. Perspectives on global trade & impact on agricultural trade
4. International Food & Agribusiness Management Association (IFAMA) Forum 2018
5. Agbiz Congress: Prof Marcos Fava Neves perspectives
6. Wrap up

COMMITTED TO IMPROVING THE STATE OF THE WORLD

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

61st / 137

The Global Competitiveness Index 2017-2018 edition

WORLD ECONOMIC FORUM

Key indicators, 2016

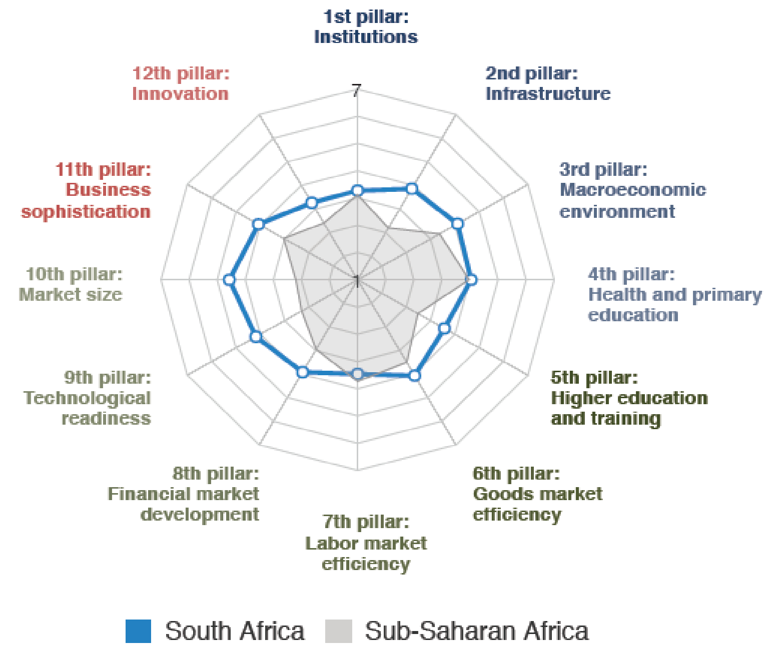
Source: International Monetary Fund; World Economic Outlook Database (April 2017)

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

Performance overview

Index Component	Rank/137	Score (1-7)
Global Competitiveness Index	61	4.3
Subindex A: Basic requirements	92	4.3
1st pillar: Institutions	76	3.8
2nd pillar: Infrastructure	61	4.3
3rd pillar: Macroeconomic environment	82	4.5
4th pillar: Health and primary education	121	4.5
Subindex B: Efficiency enhancers	52	4.4
5th pillar: Higher education and training	85	4.1
6th pillar: Goods market efficiency	54	4.5
7th pillar: Labor market efficiency	93	4.0
8th pillar: Financial market development	44	4.4
9th pillar: Technological readiness	54	4.6
10th pillar: Market size	30	4.9
Subindex C: Innovation and sophistication factors	39	4.1
11th pillar: Business sophistication	37	4.5
12th pillar: Innovation	39	3.8

Edition	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Rank	52 / 144	53 / 148	56 / 144	49 / 140	47 / 138	61 / 137
Score	4.4	4.4	4.4	4.4	4.5	4.3



THE AGRI-COMPETITIVENESS ANALYSIS PROGRAMME (ACAP) Stellenbosch University (part of BFAP)

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,
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 (M Sc 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

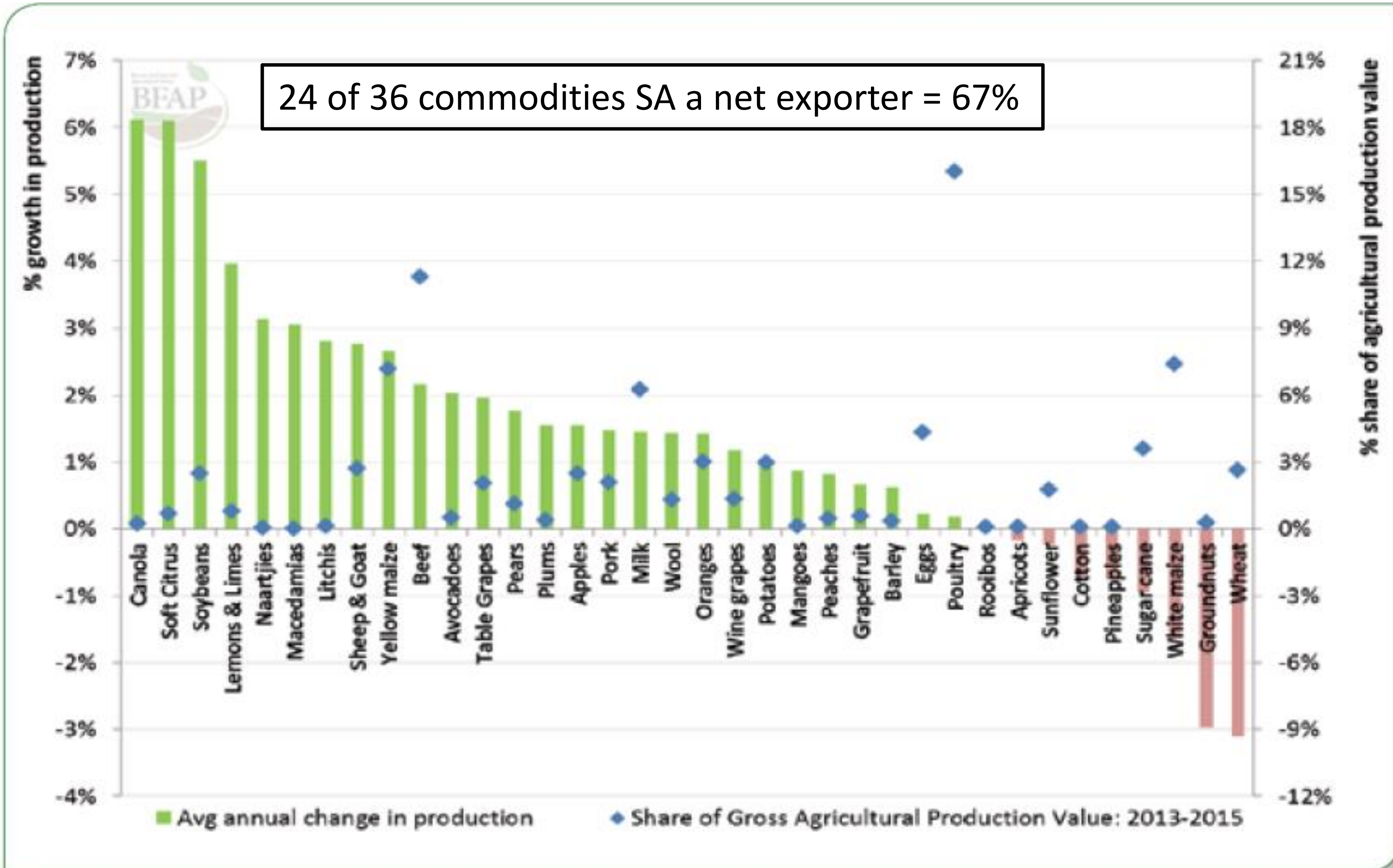


Figure 2: Agricultural performance: growth in production (2011-2015) and share of agricultural production value of selected industries (2013-2015)

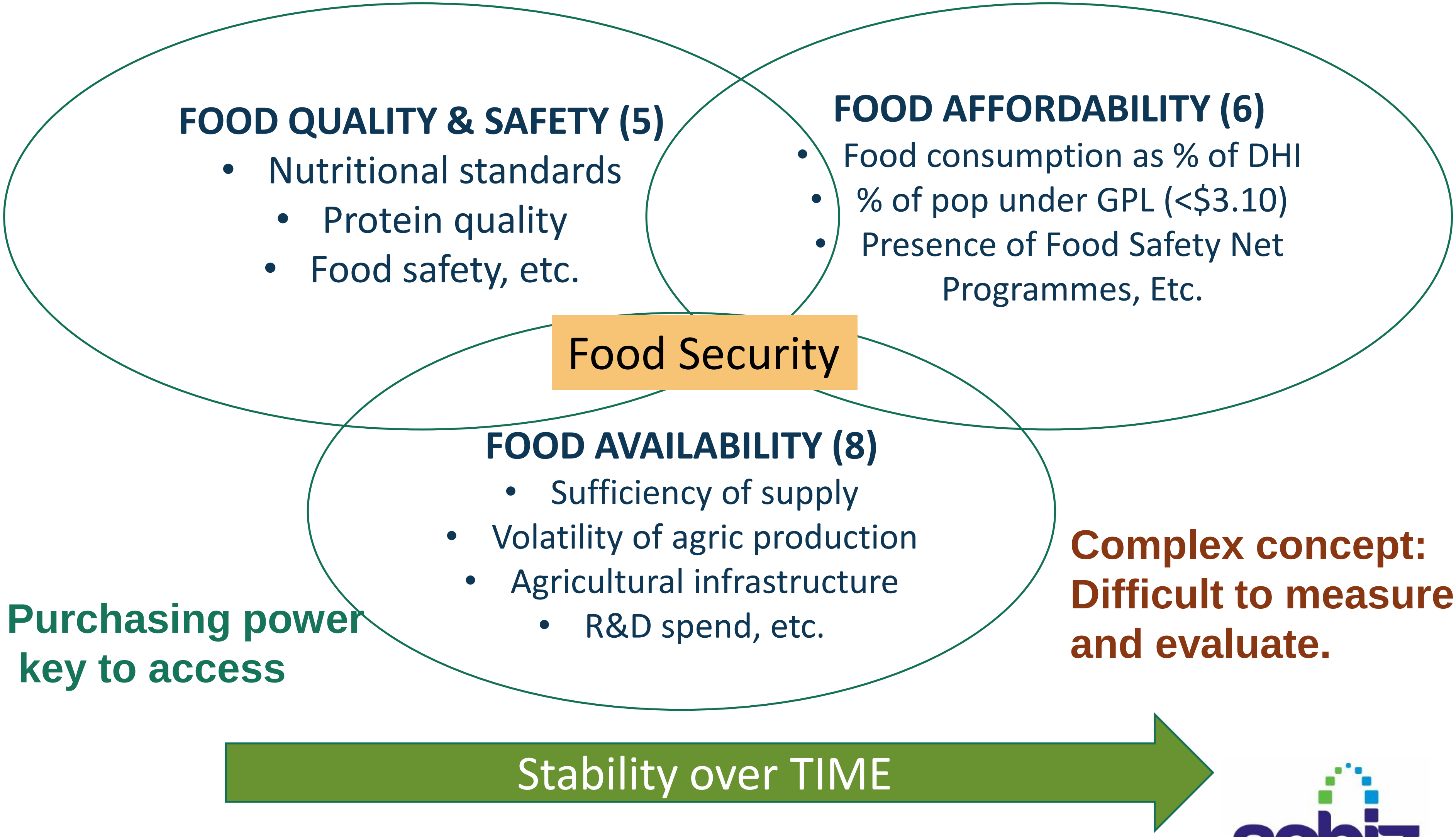
Source: BFAP, 2016

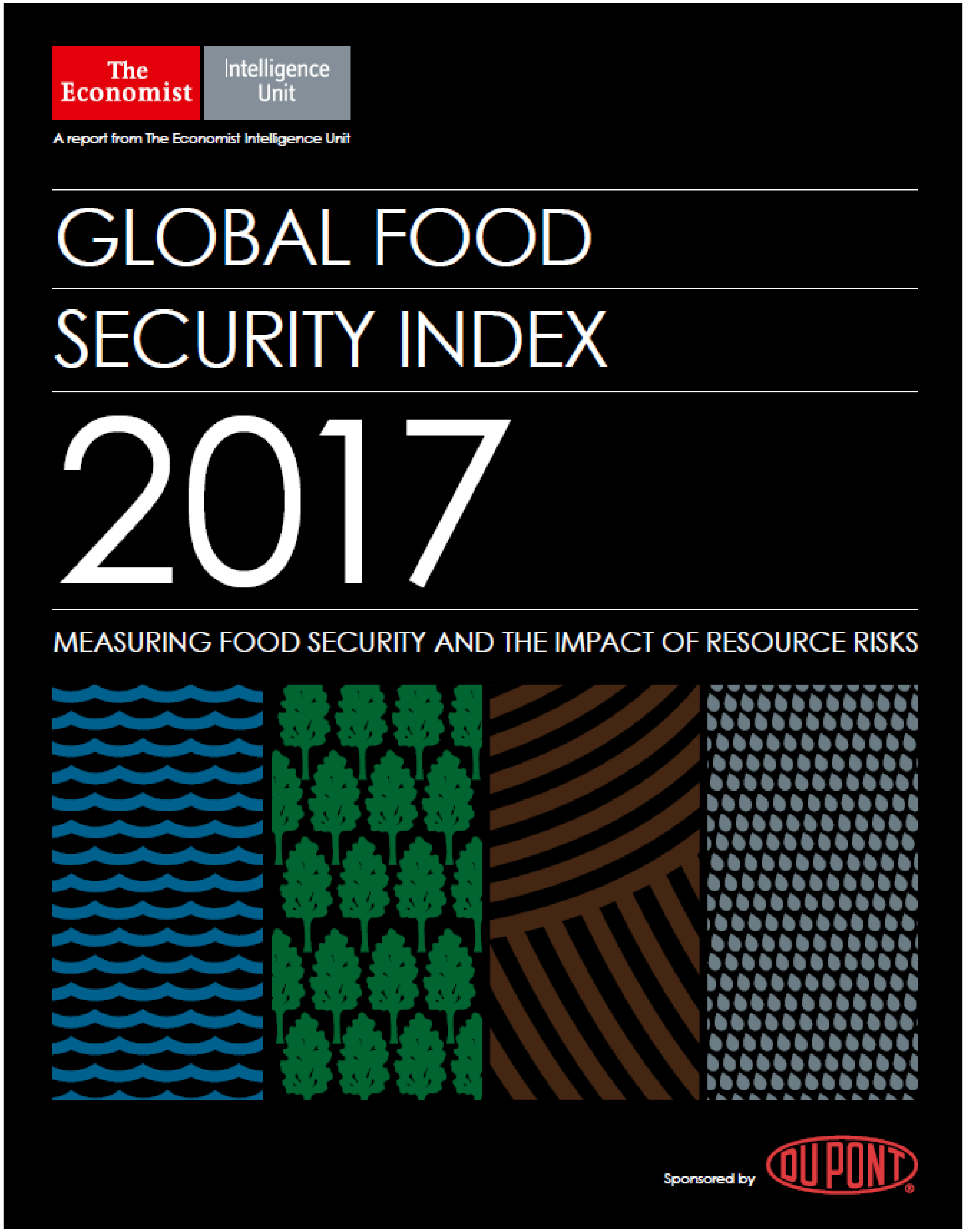
Food Security Imperative

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




The Economist Intelligence Unit

A report from The Economist Intelligence Unit

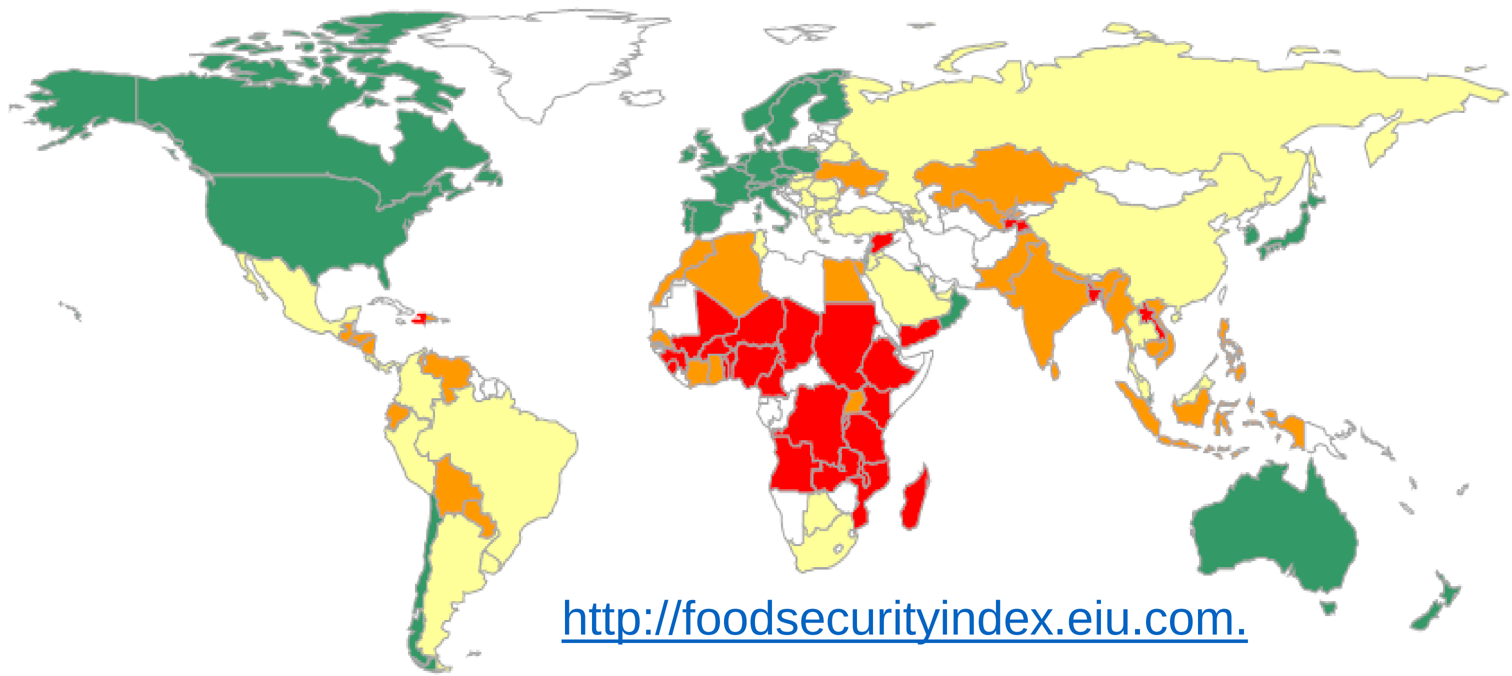
GLOBAL FOOD SECURITY INDEX 2017

MEASURING FOOD SECURITY AND THE IMPACT OF RESOURCE RISKS

Sponsored by DUPONT

agbiz

2017 Global Food Security Index



http://foodsecurityindex.eiu.com.

Score = Score in 2017, 0-100 where 100=best

Δ = Change in 2017 score compared with 2016

Green= score improved this year

Red = score deteriorated this year

South Africa ranks 44th

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

VERY GOOD (TOP QUARTILE)	GOOD (3RD QUARTILE)	MODERATE (2ND QUARTILE)	WEAK (BOTTOM QUARTILE)
Score Δ	Score Δ	Score Δ	Score Δ

Source: Economist Intelligence Unit/DuPont

For today…….

1. Challenging and complex environment evolving
2. Food Security and Competitiveness imperative
3. **Perspectives on global trade & impact on agricultural trade**
4. International Food & Agribusiness Management Association (IFAMA) Forum 2018
5. Agbiz Congress: Prof Marcos Fava Neves perspectives
6. 10 Factors determining the future of the Agro-food system
7. Wrap up

The World Trade Organisation:

a relevant functioning body?

12th Agribusiness Africa Conference

John Purchase

CEO: Agbiz

18 & 19 July 2018

Global trade: Quo vadis?

11th WTO Ministerial Conference in Buenos Aires in December 2017

- No substantative outcomes at MC11, no consensus on a ministerial declaration.
- No mention of Doha Development Round in communique
- Minor progress on fishing subsidies and e-commerce, as well as TRIPS non-violation and situation complaints, and work programme on small economies.
- Joint Statement on Trade in Food and Agricultural Products:

  Call on all Members to strengthen the implementation of the WTO SPS Agreement by reinforcing the work of relevant international standards organizations and ensuring the scientific basis of SPS measures is sound.

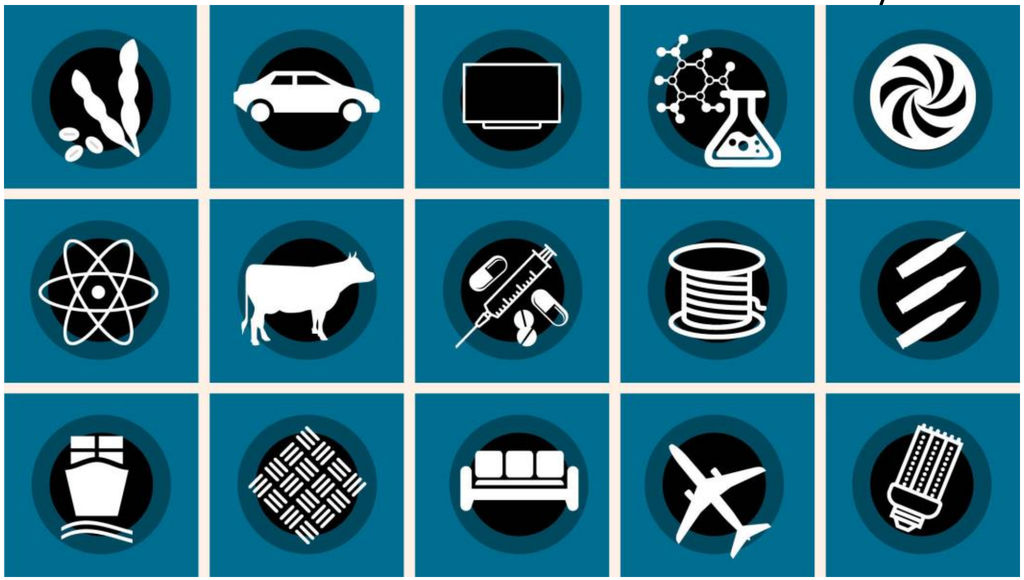
Global Trade: Quo vadis?

- As relates food and agriculture trade, no substantive progress on
  (i) domestic support,
  (ii) market access,
  (iv) public stockholding (India issue primarily),
  (v) special safeguard mechanism,
  (vi) export prohibition and restrictions, and
  (vii) cotton.
- Very clear that there were very divergent positions between major power players, among others USA, EU, China, India, Cairns Group, Developing Nations Group, Africa Group and others.
- Additionally, appointments to the appellate body of the disputes resolution mechanism of the WTO have been blocked by the USA, essentially rendering it ineffective.
- The Big Question**: Death of real multilateralism in trade?**

FINANCIAL TIMES

What’s at stake in US-China trade war: the full list

Explore the more than 1 500 items threatened by new tariffs



Joanna S Kao, Ed Crooks, Jane Pong, Robin Kwong and Tom Hancock Tuesday, 19 June 2018

- China and the US are on the brink of a full-scale trade war.
- Tariffs announced three weeks ago would affect a combined **$100bn worth** of trade between the world's two largest economies. China and the US have both already imposed tariffs on steel, aluminium and some agricultural goods.
- On Monday June 18, President Donald Trump ordered his administration officials to draft plans for tariffs on a **further $200bn** in Chinese imports if Beijing follows through on its threat to retaliate against US duties on imports announced last week.

New York Times: Editorial Board

Chinese Tariffs Are Already Hitting Trump Voters

- In Iowa, where farmers raise 40 million to 50 million pigs annually, President Trump's tariffs on steel and aluminium from Mexico have already cost producers $560 million, according to an Iowa State University economist. How can that be, you ask. Mexico has threatened countervailing tariffs that include a 20 percent tariff on American pork. That prospect alone sent hog prices tumbling.
- Soybean growers throughout the Midwest are nervously watching as China, which buys a quarter of American soybeans, takes aim at their crop in response to the Trump administration's announcement that it will move ahead with $50 billion in tariffs on "industrially significant technologies" in more than 1,000 categories.
- Threatening an all-out trade war, insulting our next-door neighbour and ally, will not change the nature of our economy, only damage it. In Wisconsin and Iowa, Nebraska and Kansas, farmers who need to maintain access to foreign markets are **hoping that Mr. Trump's bluster is just that, a negotiating tactic, and that cooler heads will eventually prevail.**

USA lawmakers and farm lobby response

- **Tariffs have drawn pushback from US lawmakers** from both major political parties, along with industry representatives from multiple sectors, including agriculture.
- For example, **Farmers for Free Trade** issued a statement on Friday 15 June regarding the White House's earlier tariff announcement, saying that **"American farmers demand that elected officials support them by ending this trade war."**
- **Farmers for Free Trade** is a coalition that names among its supporters a variety of farmer associations, including **corn and wheat growers, pork producers, the American Farm Bureau**, and other organisations.
- The coalition has reacted specifically to the prospect of Chinese tariffs on imported farm goods, in response to the US' Section 301 actions.

Latest developments…….

- Donald Trump warned the WTO on 2 July that "we'll be doing something" if the US is not treated properly. "The WTO has treated the US very, very badly and I hope they change their ways."
- US-EU trade talks to kick off. Further tariff imposition on cars and car parts….? Using guise of national security for 'protectionism', despite warnings from US motor manufacturers themselves.
- NAFTA restart on the cards, but long way to go……!
- Dynamic of new leftist Mexican President, as well as Canadian position, will be critical.
- **Trump has not yet laid out a clear vision of success for the trade fights he is engaging in.**

So, what's the end game in this……?

- Trump's trade disruption not limited to China and steel products, but attacking allies and foes alike.
- NAFTA clearly in the crosshairs, as are other multilateral trade agreements. Future for multilateral trade agreements, also TTIP and TPP?
- Will China and EU team up at WTO on multilateralism reform - is this possible, and if so, what time horizon?
- Donald Tusk, EU President, says it is the duty of the EU & China, but also the US and Russia, not to destroy the global trade order.
- Greater protectionism in agriculture through NTM's and NTB's? Makes credible dispute resolution mechanism more important.
- So where does this take us in the agriculture and agribusiness environment, and our vision of a food secure world by 2050?
- **Need a serious conversation on this matter!**

SA Agricultural Trade Balance

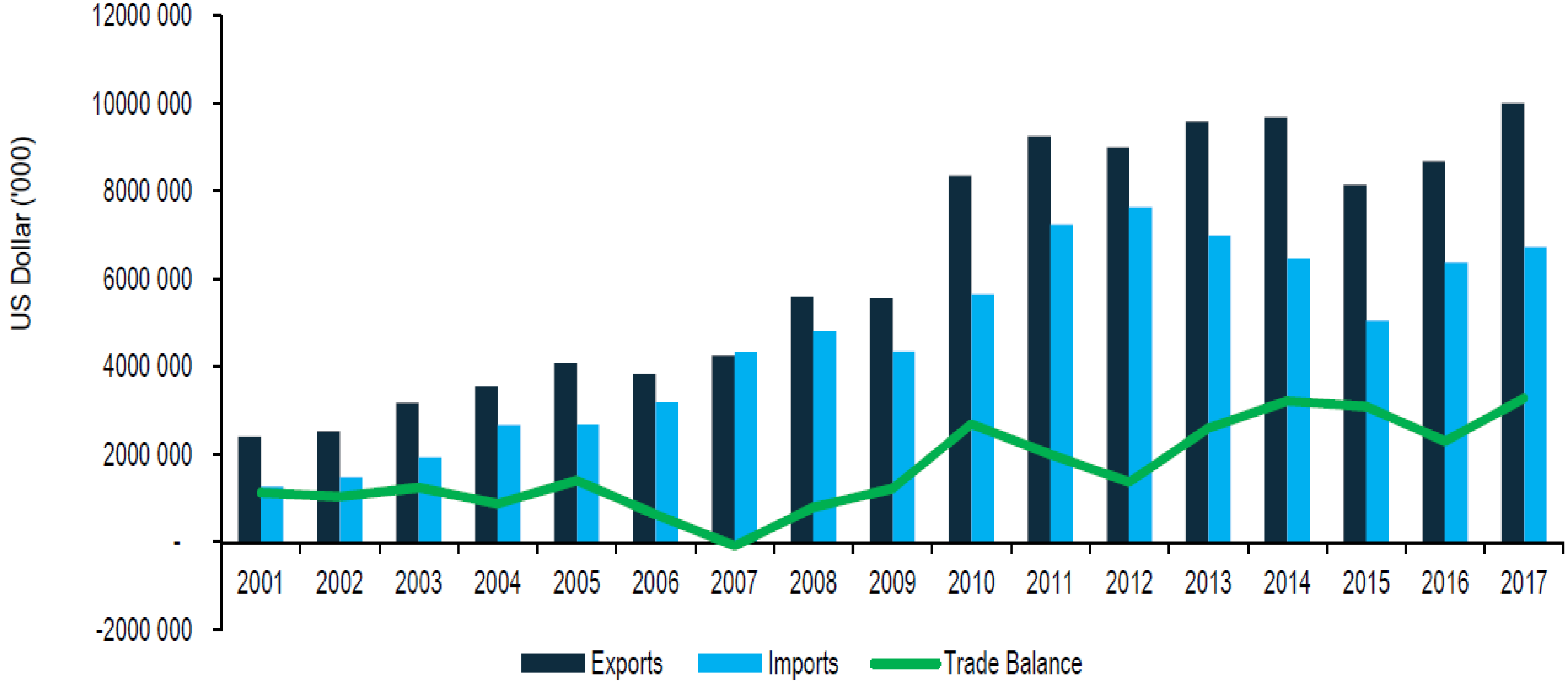
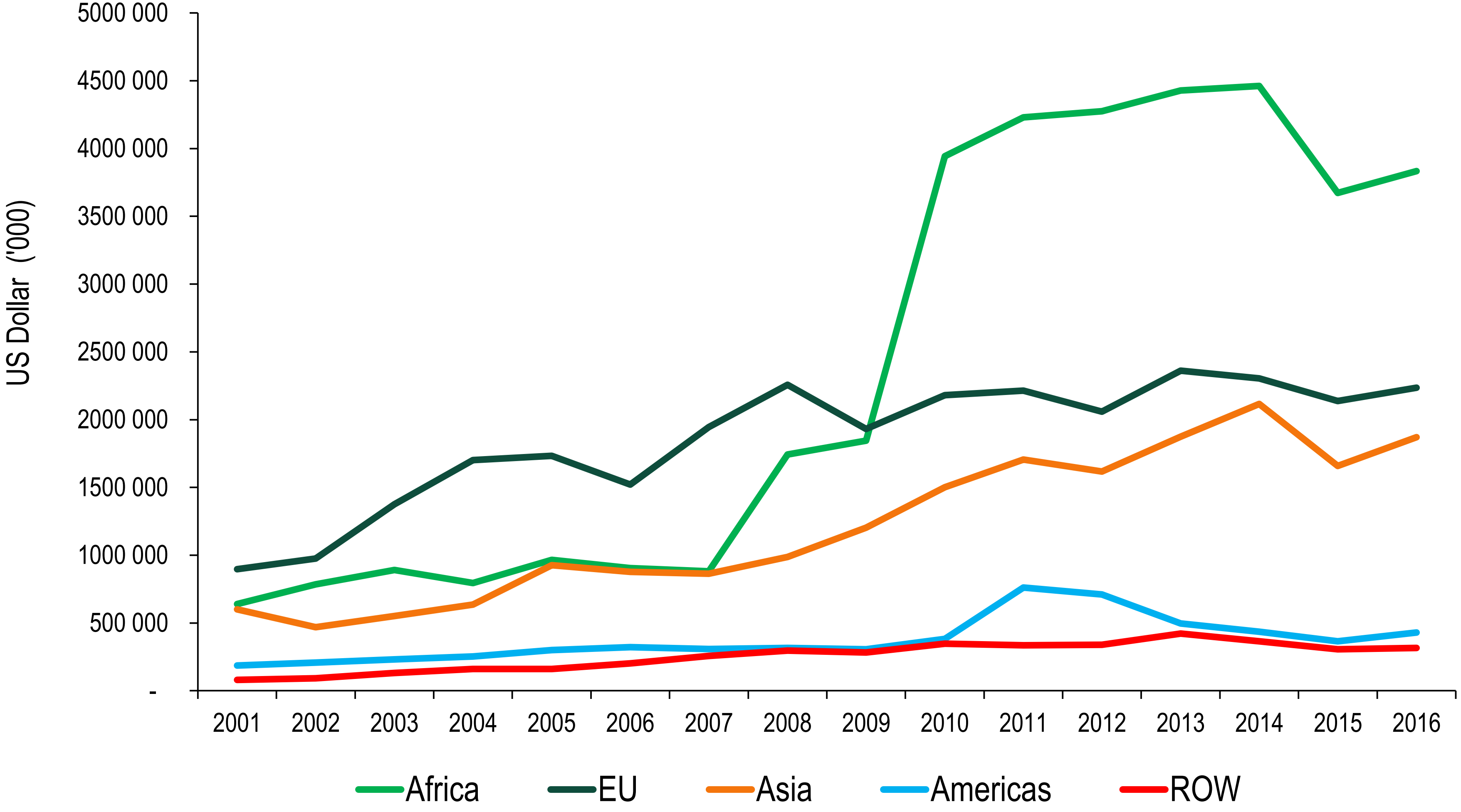


Chart 2: South Africa's agricultural exports

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

For today…….

1. Challenging and complex environment evolving
2. Food Security and Competitiveness imperative
3. Perspectives on global trade & impact on agricultural trade
4. **International Food & Agribusiness Management Association (IFAMA) Forum 2018**
5. Agbiz Congress: Prof Marcos Fava Neves perspectives
6. 10 Factors determining the future of the Agro-food system
7. Wrap up

1. Forum

A high quality, thought-provoking Forum with international speakers from businesses, public sector and academia. Major topics covered included:

- Financial Innovation (including agriculture insurance innovation)
- Large Farm Strategies
- Agri-food sustainability in Europe
- Industrial convergence in new start-ups
- Organizational innovation Los Grobos (major Argentinean agribusiness)
- Disruptive innovation in African agribusiness (Sifiso Ntombela a panel member)
- Innovation in Fruit Regional Value Chains
- Future of meat
- Urban agriculture
- Food and Health
- E-commerce impact on agribusiness
- Emerging hot issues in trade (John Purchase facilitated very relevant session, given recent ‘trade war’ developments)

For today…….

1. Challenging and complex environment evolving
2. Food Security and Competitiveness imperative
3. Perspectives on global trade & impact on agricultural trade
4. International Food & Agribusiness Management Association (IFAMA) Forum 2018
5. **Agbiz Congress: Prof Marcos Fava Neves perspectives**
6. 10 Factors determining the future of the Agro-food system
7. Wrap up

International speaker

Prof Marcos Fava Neves
Sponsored by Afgri

AFGRI
Together we make it possible

agbiz

Global Agribusiness Outlook

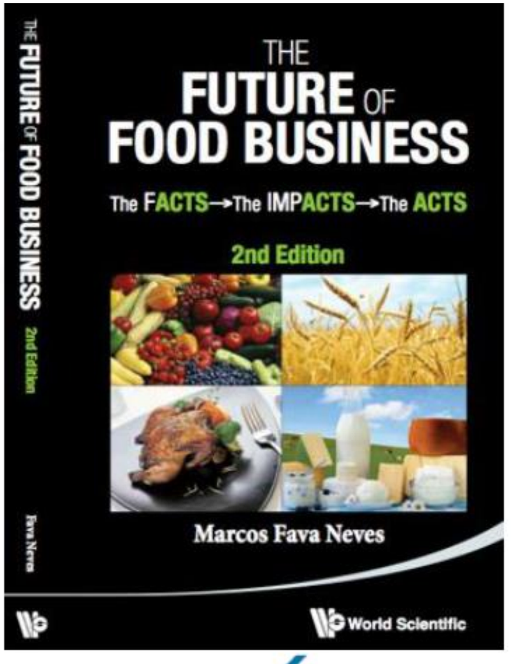
AGBIZ CONGRESS 2018 - PORT ELIZABETH – June 07, 2018

SOUTH AFRICA

Prof. Dr. Marcos Fava Neves
University of São Paulo - School of Business - Ribeirão Preto, since 1995
FGV School of Business – São Paulo, since 2018
Purdue University, since 2013
University of Buenos Aires, since 2006

Agribusiness Strategic Planning

Lecture 1034 (BRAZIL 777/OUTSIDE 257 in 22 countries)



fea·RP

PURDUE UNIVERSITY | Center for Food and Agricultural Business

agbiz

REVENUES OF THE CHAIN (MILLIONS US$) 44,893.4

GDP OF THE CHAIN (MILLIONS US$) 18,744.55

Number of sows 1,720,255

WAGE BILL (MILLION US$) 1,000.43

TAXES (MILLION US$) 5,751.31

Animals Slaughtered 39,263,964

BEFORE THE FARMS (Million US$)

4,240.17

Genetics	**135.94**
Boar	20.64
Sows	66.20
Grandparents	35.59
Semen	7.06
Importation of Live Pigs	1.03
Materials for Artificial Insemination	5.42
Drugs and Vaccines	**182.80**
Vaccines	50.58
Endoparasiticide	0.77
Ectoparasiticide	0.40
Endectocide	0.71
Antimicrobial	62.82
Therapeutic	6.02
Supplement	1.41
Products of Environmental Use	3.59
Additives of Performance	15.96
Other	40.56
Animal Feed	**3,706.24**
Corn	1,618.03
Soy Bran	1,166.45
Other Concentrated	368.73
Amino Acids	118.32
Dairy	87.29
Premix	347.42
Overhead Costs	**78.88**
Electricity	34.58
Fuel	12.23
Repairs and Maintenance	32.07
Infrastructure	**135.66**
PPU	84.74
Finishing	51.46

ON THE FARMS (Million US$)

4,828.40

Slaughter Pigs	**4,826,14**
Piglets 6 kg	84,68
Piglets 22 kg	1.000,06
Live Animals Exported	**2,25**

INDUSTRIAL INPUTS (Million US$)

737.15

Electricity	138.39
Fuel for Boilers	19.47
Chemical Products for Cleaning	15.10
Oils and Greases	2.53
Water Filters	0.06
Refrigerant Gases	0.26
Parts and Maintenance Equipment	103.40
PPEs	12.29
Packaging	445.68

FACILITATING AGENTS (Million US$)

548.6

Genealogical Registry	1.19	Technical Assistance	21.45	Management Software	2.84
Transport	499.71	Port Costs	23.40		

SLAUGHTER INDUSTRY (Million US$)

12,092.19

Slaughterhouses	**12,092.19**
External market	**1,279.00**
Domestic market	**10,813.19**
Whole carcass	185.36
Half carcass	247.15
In Natura Products	**2,695.48**
Leg (ham)	539.86
Pork Carré	479.37
Pancetta	323.56
Pork spine	246.95
Loin	244.62
Rib	246.05
Boston butt	185.83
Pork Shoulder	113.93
Filet	92.84
Jowl	24.25
Pork belly	8.78
Pork Scraps	3.53
Other	185.89
Processed Products	**7,685.20**
Fresh sausage	1,739.08
Bacon	1,187.20
Smoked sausage	851.94
Seasoned products	1,336.15
Ham	658.10
Luncheon meat	428.61
Salami	414.73
Salted products	360.31
Capicola (Coppa)	219.85
Rib	96.74
Tenderloin	108.10
Large Pork Sausage	47.08
Mortadella	31.77
Sausage	1.71
Other	203.83

DISTRIBUTION (Million US$)

Distributor/Wholesale: 4,889.1 Retail: 17,557.8

Wholesale	
Fresh meat	768.77
Processed meat	4,120.33
Retail	**17,557.81**
Fresh meat	4,354.62
Processed meat	13,203.19
Food Service	**N/A**

FINAL CONSUMER

agbiz

Global Demand for Food Is Rising. Can We Meet It? 4/13/18, 8:54 AM

Harvard Business Review

GOVERNMENT

Global Demand for Food Is Rising. Can We Meet It?

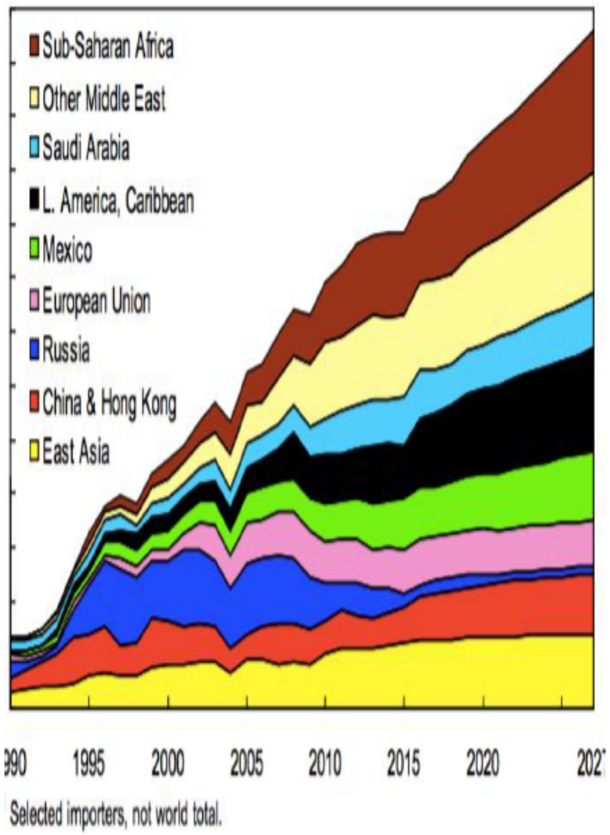
by Maarten Elferink and Florian Schierhorn

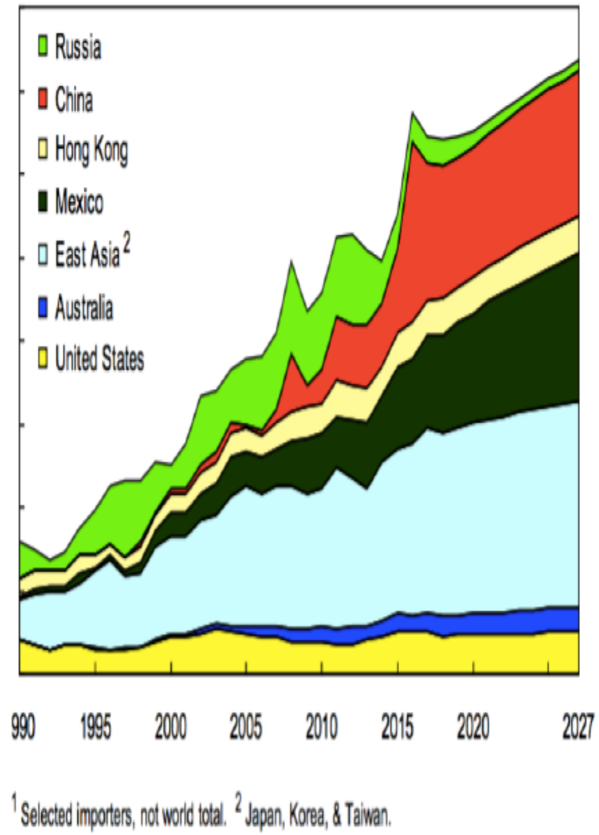
APRIL 07, 2016

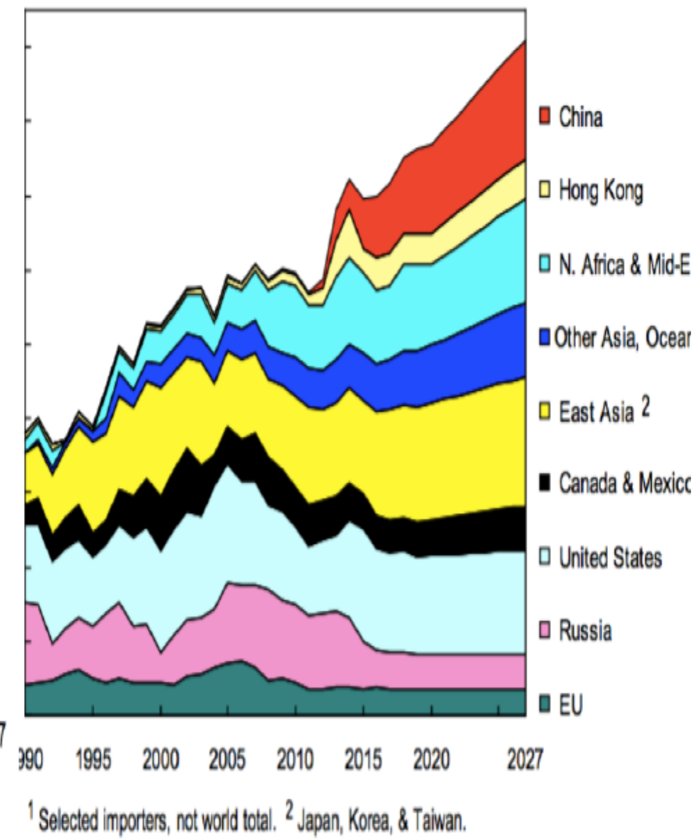
Food demand is expected to increase anywhere between 59% to 98% by 2050. This will shape agricultural markets in ways we have not seen before. Farmers worldwide will need to increase crop production, either by increasing the amount of agricultural land to grow crops or by enhancing productivity on existing agricultural lands through fertilizer and irrigation and adopting new methods like precision farming.

Poultry, Pork and Beef Global Imports

(USDA, million ton)



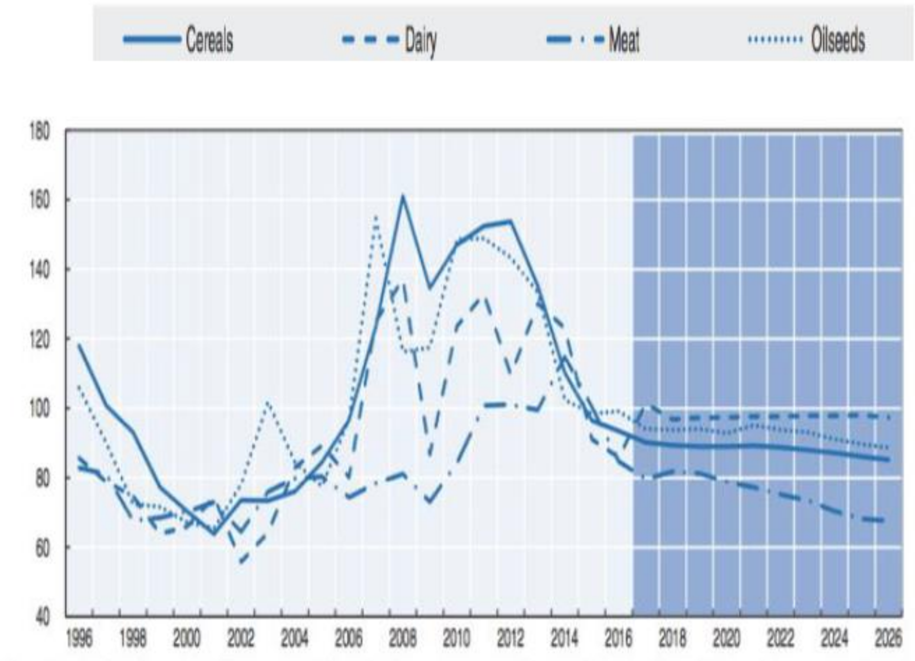




 Source of the slide: Prof. Marcos Fava Neves

fea-RP

Prices Until 2026/27 – European Vision

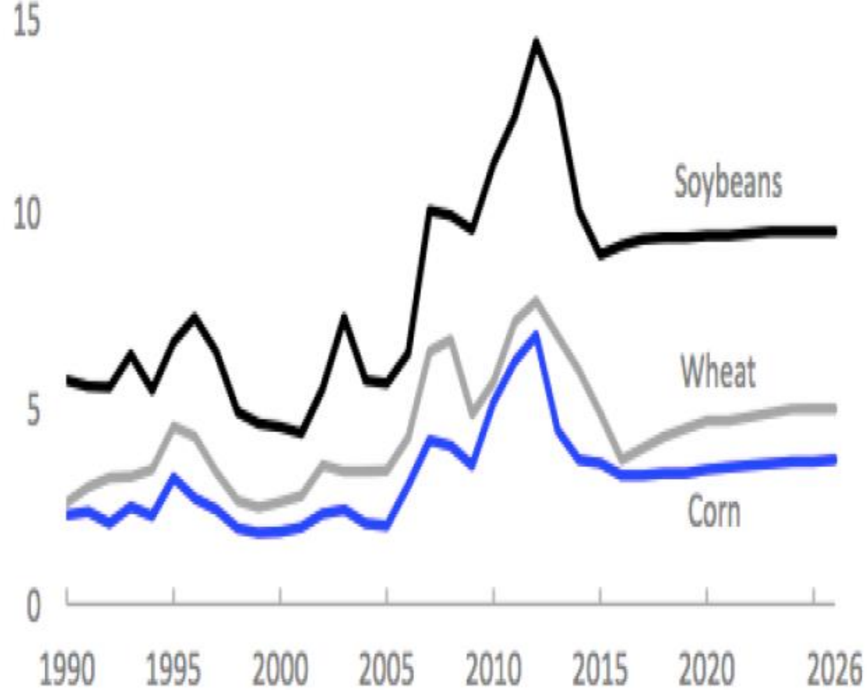


Note: Price indices for commodity groups calculated using a constant weighting of commodities within each aggregate, using the average 2014-16 production value as weights.

Source: OECD/FAO (2017), "OECD-FAO Agricultural Outlook", OECD Agriculture statistics (database), http://dx.doi.org/10.1787/agr-data-en.

Prices Until 2026/27 – USA Vision

(US$ por bushel)

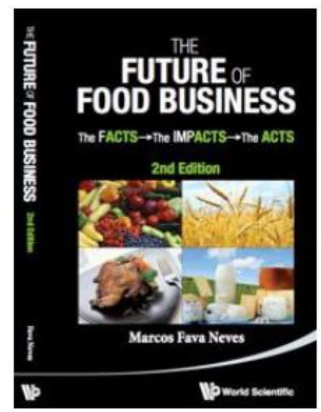


So what is the message until now?

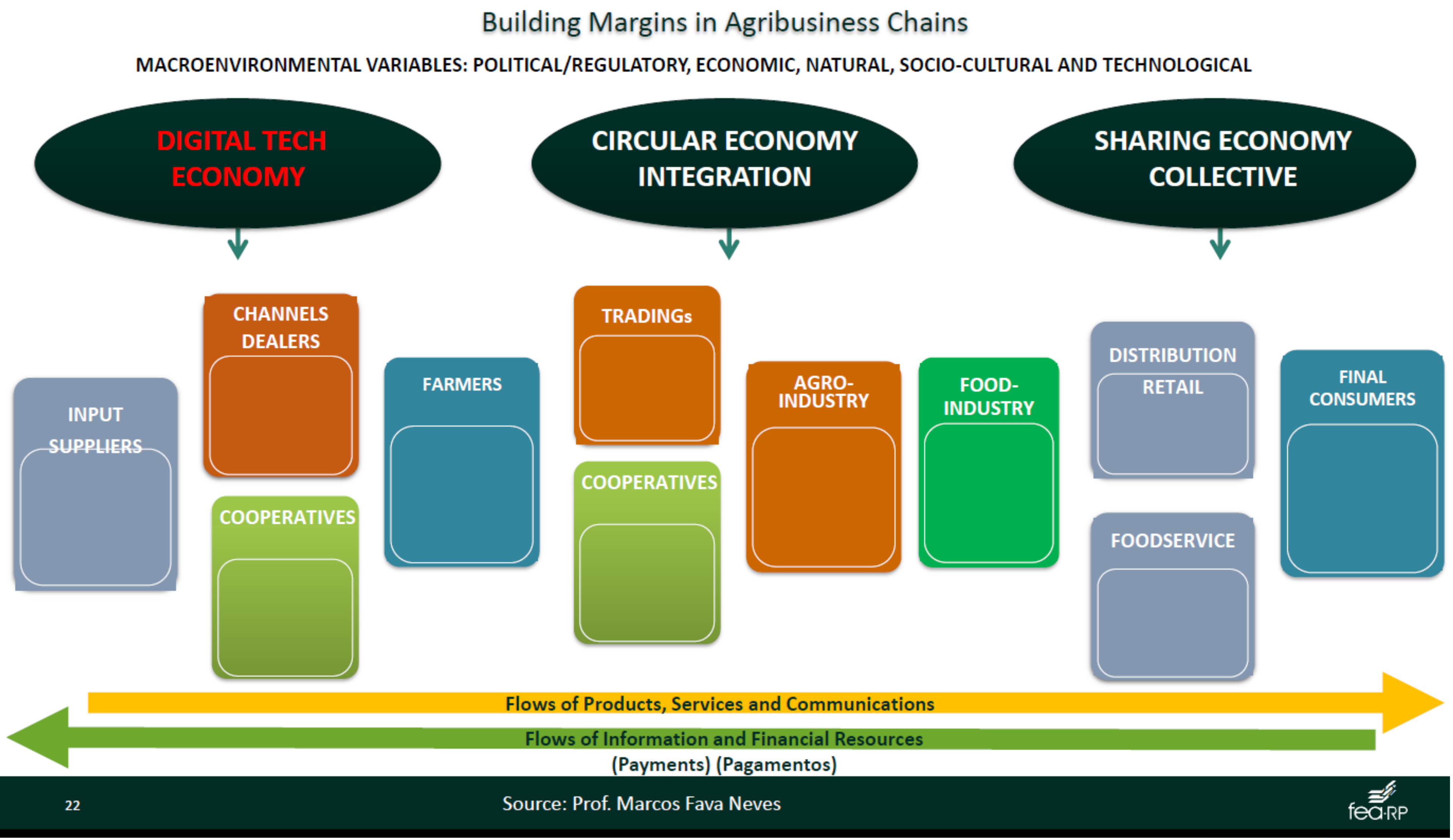
a) Growth in markets

b) Current prices

So we need to...



BUILD MARGINS!!!


Building Margins in Agribusiness Chains
MACROENVIRONMENTAL VARIABLES: POLITICAL/REGULATORY, ECONOMIC, NATURAL, SOCIO-CULTURAL AND TECHNOLOGICAL
DIGITAL TECH ECONOMY
CIRCULAR ECONOMY INTEGRATION
SHARING ECONOMY COLLECTIVE
INPUT SUPPLIERS
CHANNELS DEALERS
COOPERATIVES
FARMERS
TRADINGs
COOPERATIVES
AGRO-INDUSTRY
FOOD-INDUSTRY
DISTRIBUTION RETAIL
FOODSERVICE
FINAL CONSUMERS
Flows of Products, Services and Communications
Flows of Information and Financial Resources
(Payments) (Pagamentos)
22
Source: Prof. Marcos Fava Neves
fea-RP

A Special PUSH for Agribusiness

1 - We need to promote sustainable inclusion of people

2 - There is no sustainable inclusion and income distribution without income generation

TO CREATE OPORTUNITIES FOR PEOPLE, WE MUST FOCUS ON INCOME GENERATION

3 – Who generates income?

BUSINESS GENERATES INCOME (GDP, EXPORTS, JOBS, TAXES)

4 – So what is the role of Governments?

THE ROLE OF GOVERNMENTS IS TO PUSH PRIVATE SECTOR TO GENERATE INCOME

5 – How?

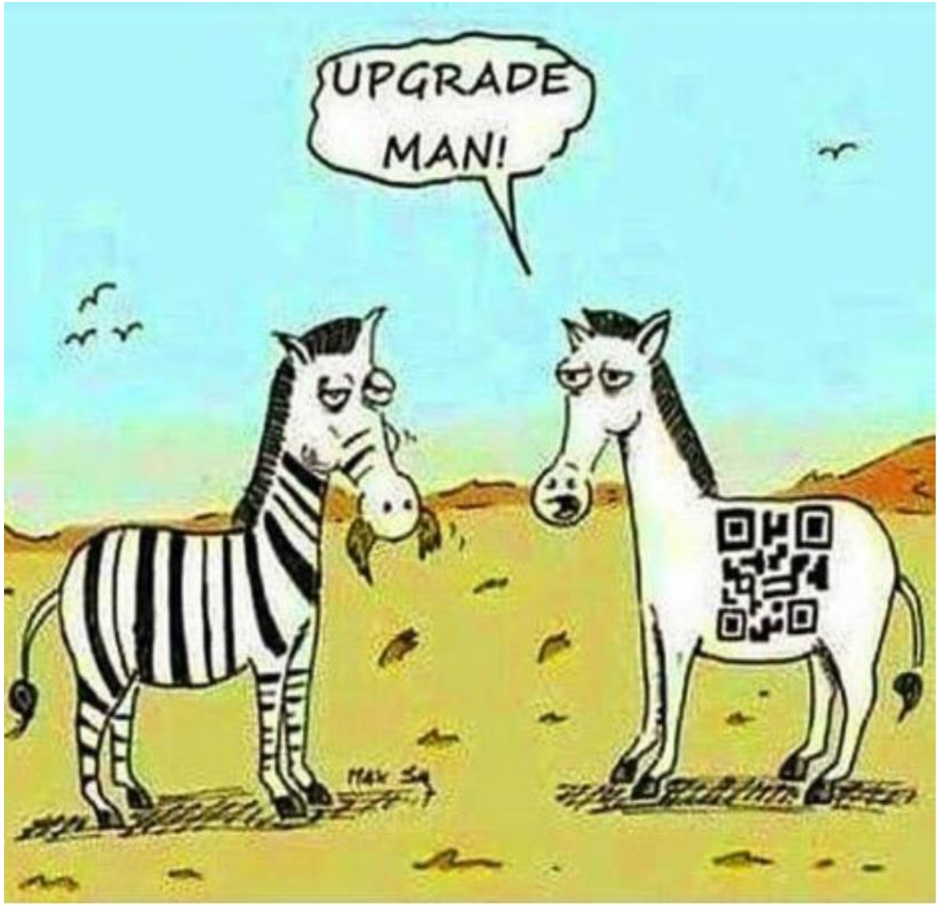
CREATING AN ENVIRONMENT FOR BUSINESS TO GROW.

ASK THEM HOW AND SERVE THEM!

Source: Prof Marcos Fava Neves

How will 2028 agribusiness look at 2018 agribusiness?

What do we need from you?!



For today…….

1. Challenging and complex environment evolving
2. Food Security and Competitiveness imperative
3. Perspectives on global trade & impact on agricultural trade
4. International Food & Agribusiness Management Association (IFAMA) Forum 2018
5. Agbiz Congress: Prof Marcos Fava Neves perspectives
6. **10 Factors determining the future of the Agro-food system**
7. Wrap up

10 Factors determining the future of Agro-food system

1. Consumer demand, trends & activism
2. Rate and impact of technological development, and adoption
3. Increased regulation of agro-food system
4. Climate change & weather variability
5. Water availability and cost
6. Sustainable and efficient use of land and water
7. Trade agreements/trade wars (WTO role?)
8. Big Data (precision farming, etc.), and innovation
9. Improved and transparent/credible communication
10. Skills and talent factor: Management and sciences

For today…….

1. Challenging and complex environment evolving
2. Food Security and Competitiveness imperative
3. Perspectives on global trade & impact on agricultural trade
4. International Food & Agribusiness Management Association (IFAMA) Forum 2018
5. Agbiz Congress: Prof Marcos Fava Neves perspectives
6. 10 Factors determining the future of the Agro-food system
7. **Wrap up**

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

www.agbiz.co.za