

A few comments on SA's agricultural production in the context of biotech crops

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Grain Building

Pretoria

26 July 2018



Overview of the presentation

Agricultural production – international and domestic view

- International grain production and stocks
- Domestic agricultural production and export trends and weather forecasts

Benefits on GMO crops in improving yields

- SA maize vs Nigeria
- SA maize vs the SSA
- Proportion of SA soybean and maize GMO plantings

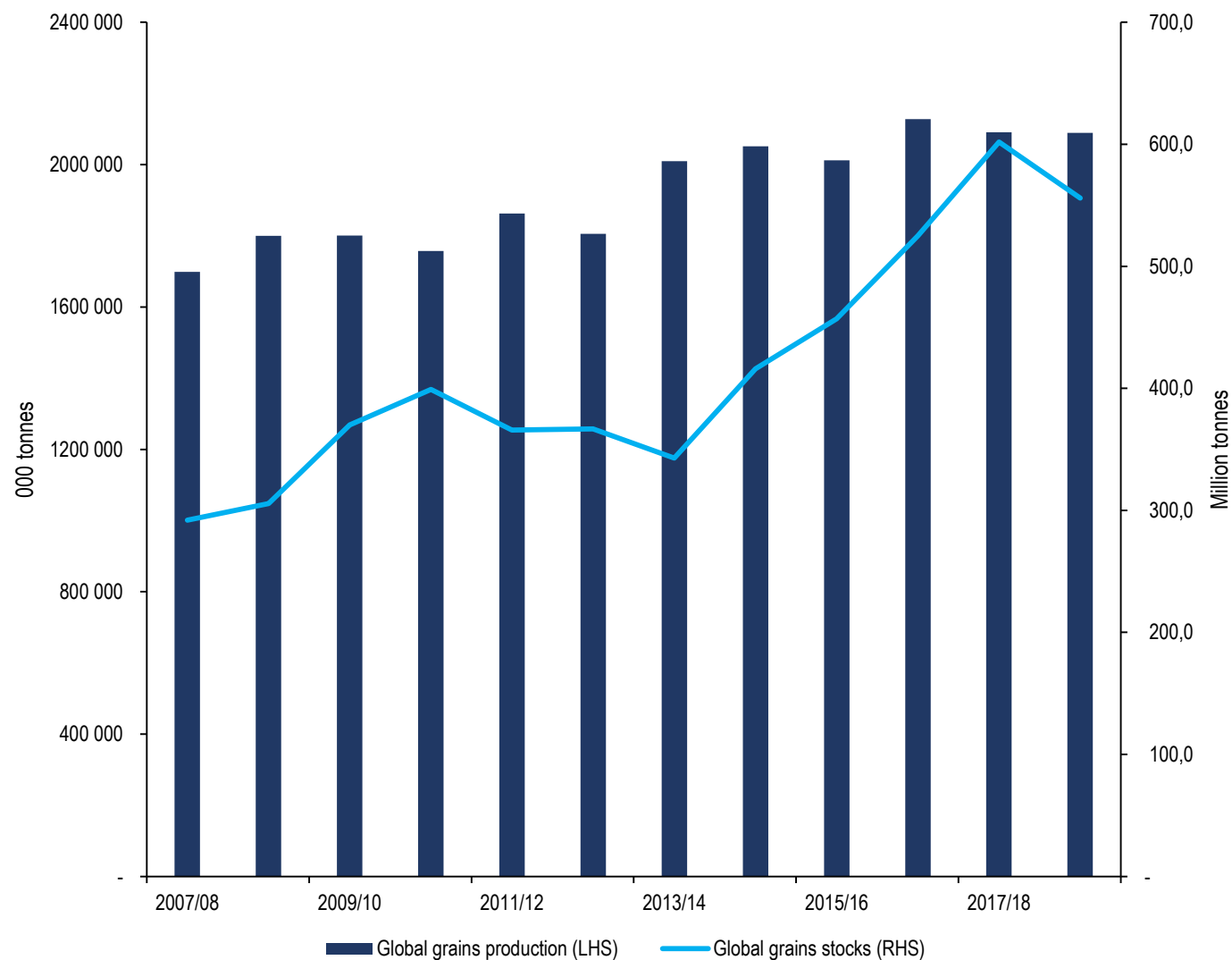
Food security

- South Africa's ranking in the Global Food Security Index

Concluding remarks

Agricultural conditions: international and domestic view...

Global grains situation



Key producers

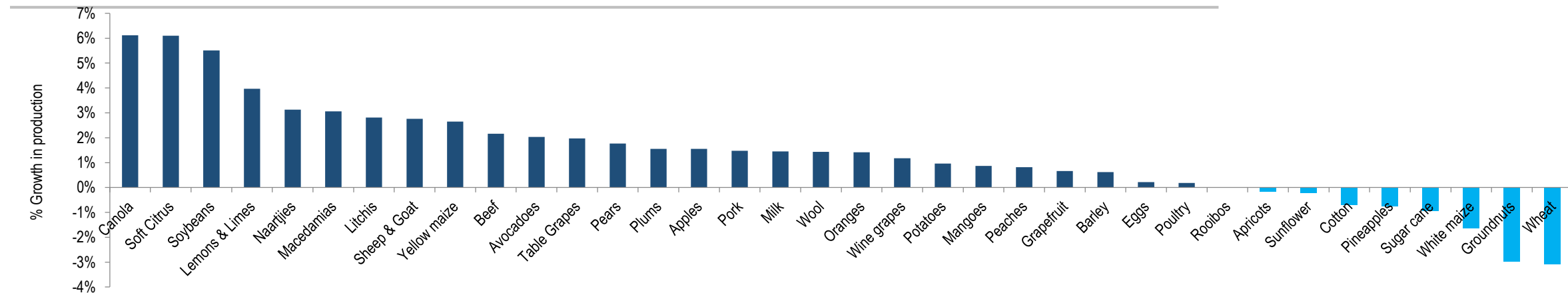
- Argentina
- Brazil
- Australia
- Canada
- European Union
- Kazakhstan
- Russia
- Ukraine
- USA
- China
- India

Bottom line

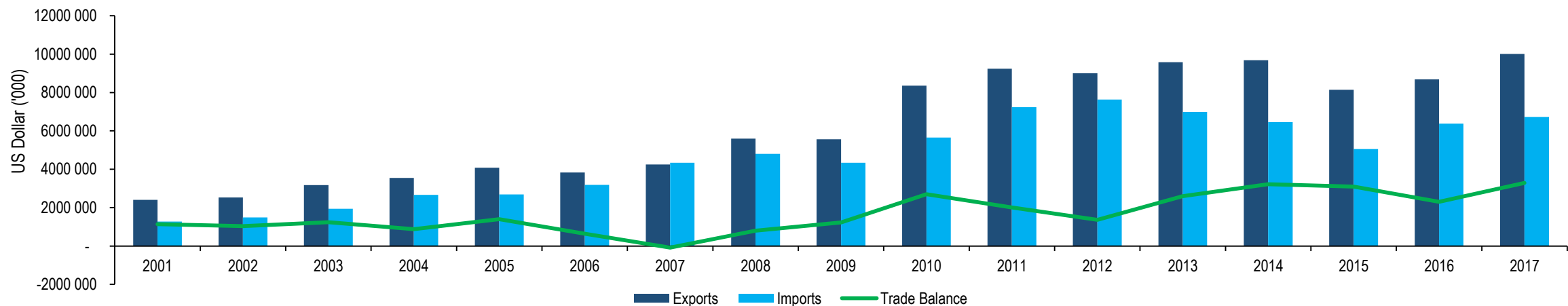
A marginal decline in world total grains production is envisaged in 2018/19, but overall supplies are seen down 1% due to tighter opening stocks.

South Africa's agricultural production and trade performance

Perspective: SA agricultural production performance (2011-2015)...



SA is a net exporter of agricultural products...

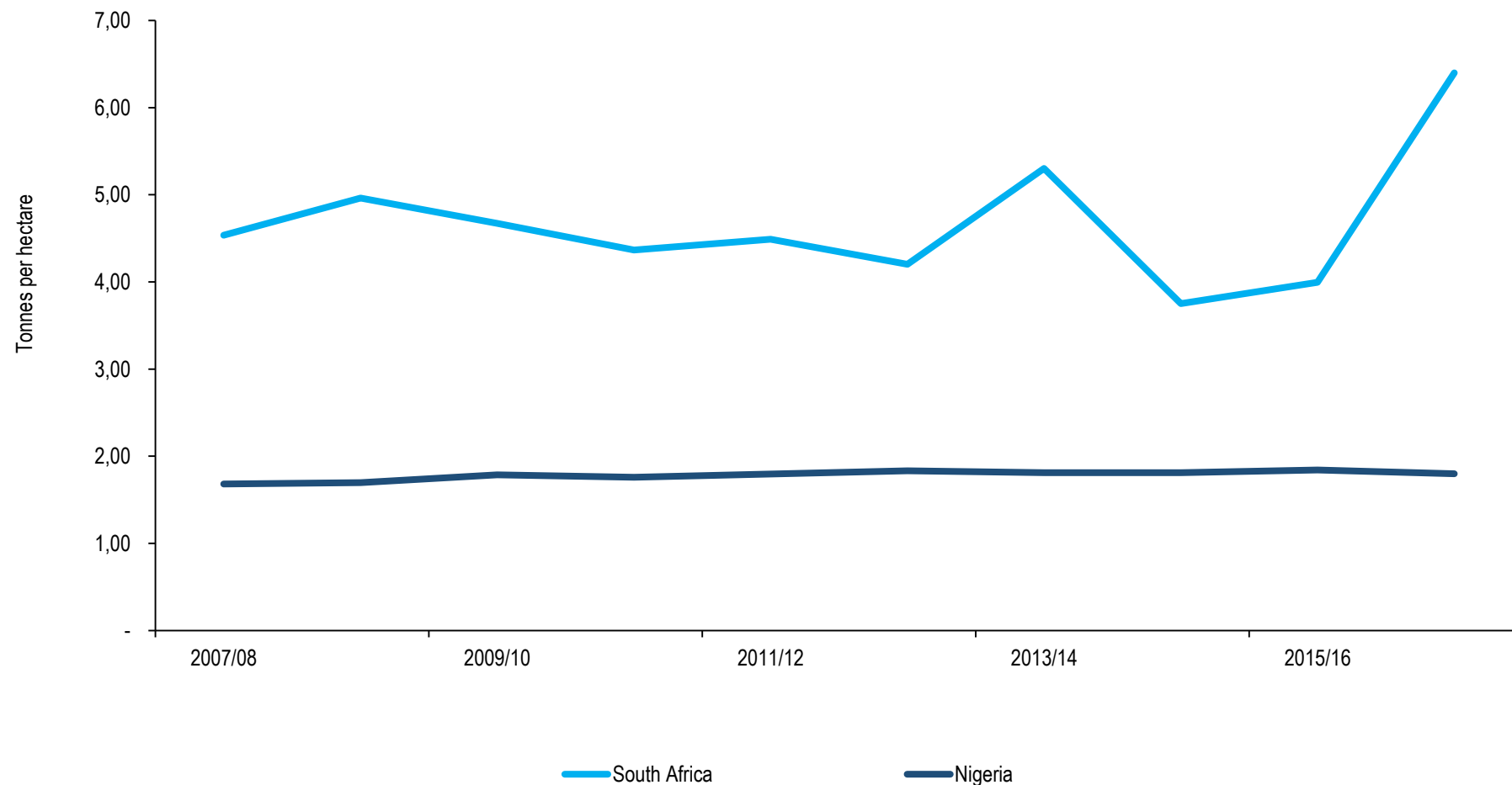


Benefits on GMO crops in improving maize yields

Key points

- South Africa produced 26% of Sub-Saharan maize in the 2016/17 production season while utilising a relatively small area of 2.6 million hectares.
- In contrast, countries such as Nigeria planted 4 million hectares in the 2016/17 production season but only harvested 7.2 million tonnes of maize.
- Overall, a recent study by agricultural economists Jayson Lusk, Jesse Tack and Nathan Hendricks shows that the adoption of GM maize has led to a 17% increase in yields across the globe.
- Moreover, the study shows that there are several other benefits from the adoption of GM crops beyond yield increases.
- These non-yield benefits come in the form of labour savings, reduced insecticide use, and improved weed and pest control which has facilitated the ability to adopt low and no-till production methods and utilise higher planting densities.

South Africa vs Nigeria's maize yields....

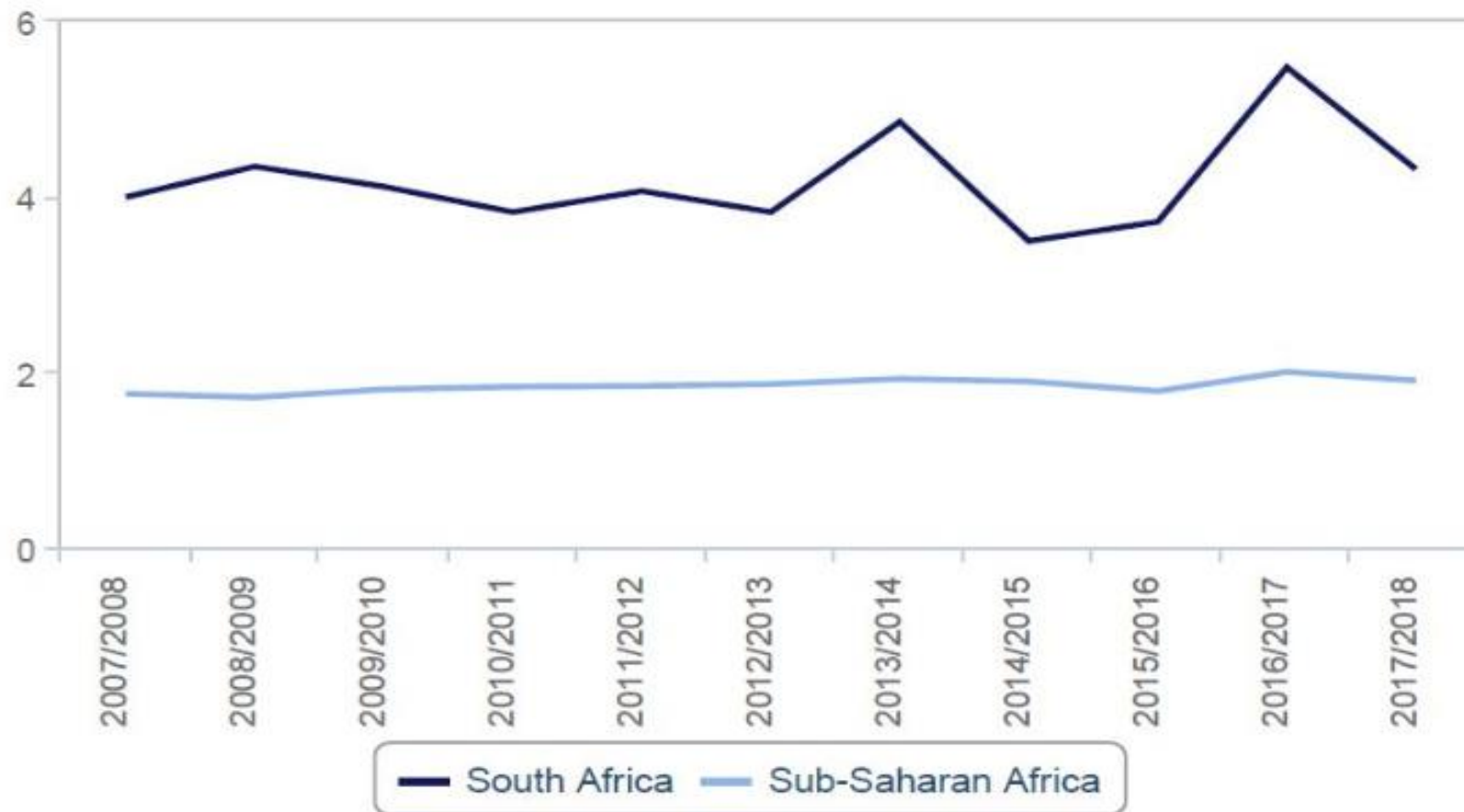


Benefits on GMO crops in improving maize yields

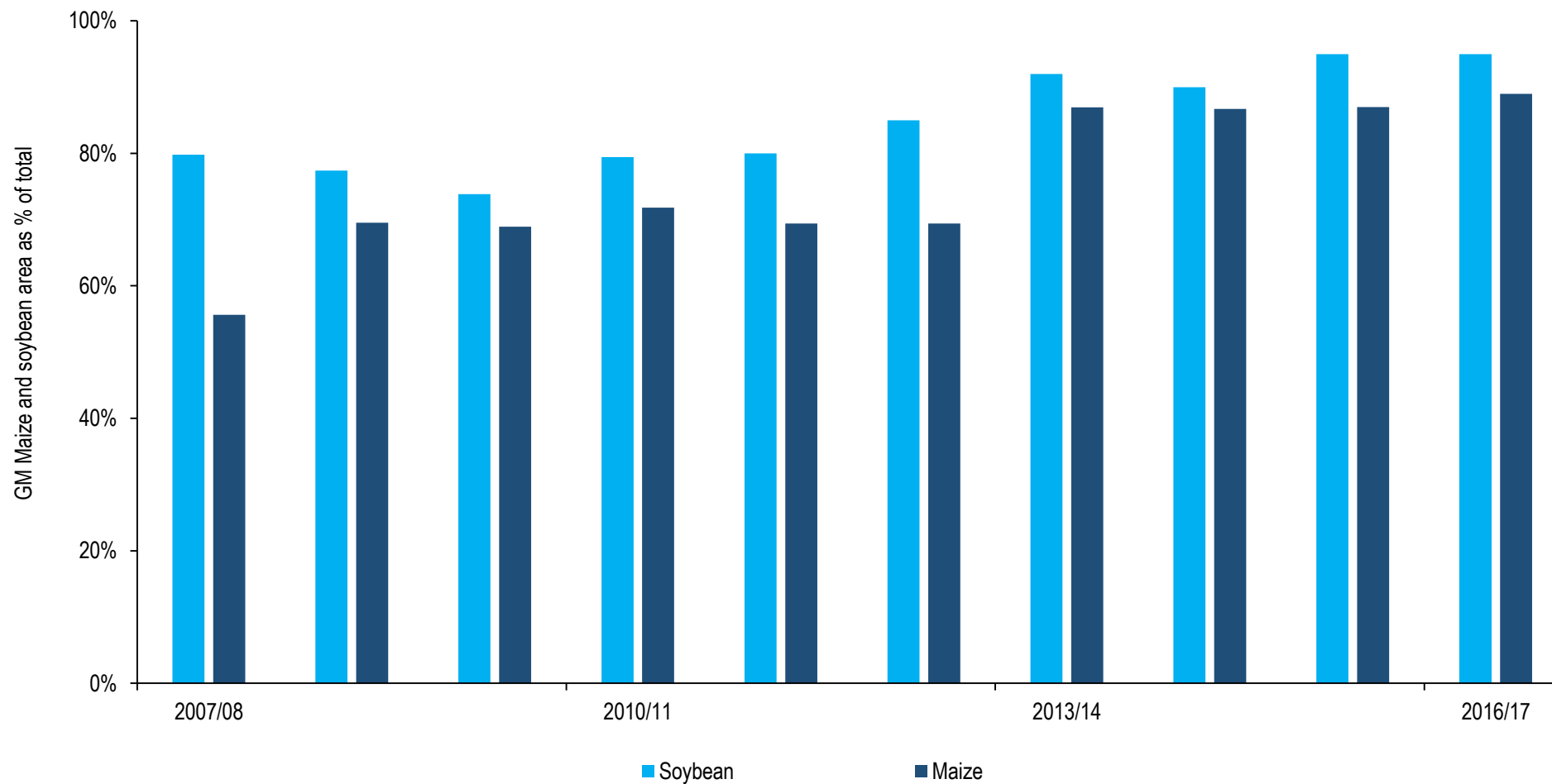
Key points

- On the African continent, it is only South Africa that plants GM soybean crops.
- In the 2016/17 production season, over 80% of the maize area planted was under GM. Therefore, it is no coincidence that South Africa continues to enjoy tremendous growth in maize output.
- In the 2017/18 season, the country is expected to harvest a above-average crop of 13.2 million tonnes of maize.
- While lower than the previous season's record harvest, this is a notable production and well above our national maize consumption of 10.8 million tonnes.
- The key driver of this has been the improvement in yields, which averaged at levels above 4 tonnes per hectare. Meanwhile, a number of African countries continue to receive lower yields of below 2 tonnes per hectare, despite the favourable weather conditions in a number of countries.

....if we compare to the region, the picture is the same (tonnes per hectare)



Proportion on GM maize and soybean planting in South Africa



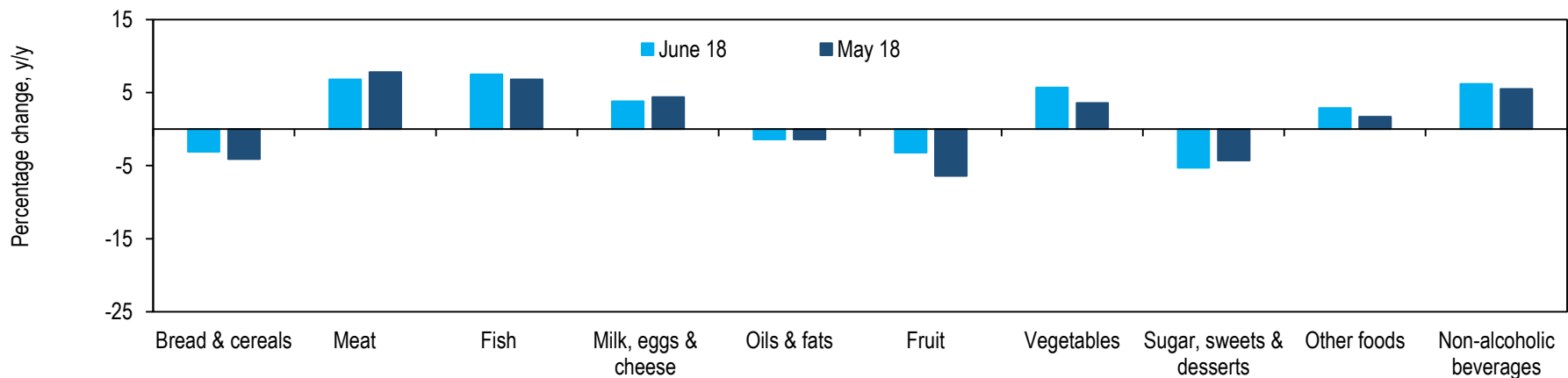
South Africa's Food Security Status...

What do these developments mean for South African food inflation

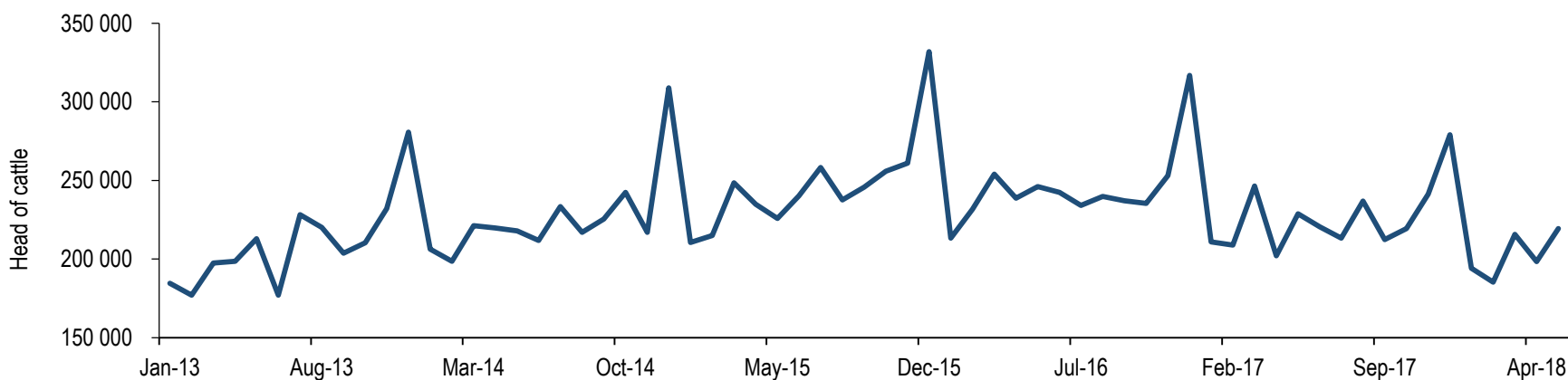
Key points

- South Africa's food and non-alcoholic beverages inflation remain unchanged in June 2018 at 3.4% y/y.
- Looking ahead, South African **food inflation could average 5.2%**, with the peak somewhere around September 2018.
- South African farmers slaughtered 219 434 head of cattle in May 2018, down by 4 percent from the same period last year.
- The decline in slaughtering is on the back of a cattle herd rebuilding process after a reduction during the 2015-16 drought.
- However, the trend could soon change as the USDA forecasts a 4 percent annual increase in the number of cattle to be slaughtered in South Africa in 2018 to 3.5 million cattle, due to the anticipated uptick in demand and a general recovery in the industry performance

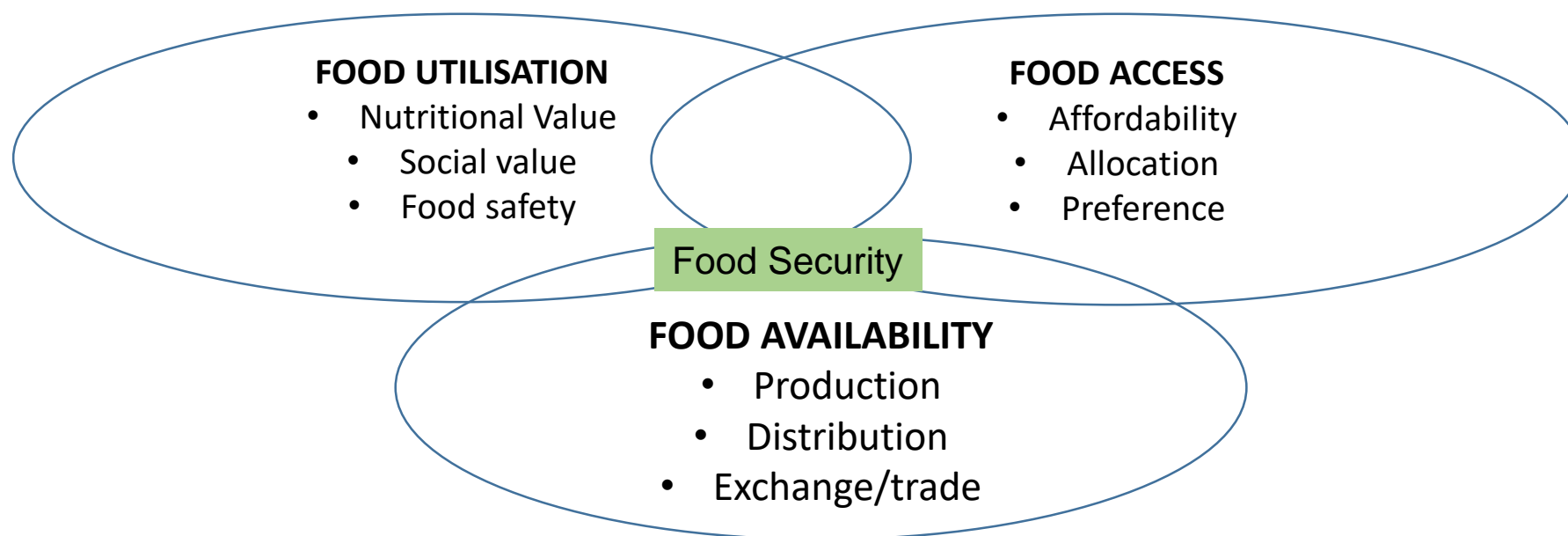
South African food inflation by product...



South Africa's cattle slaughtering activity...



Components of Food Security



South Africa's ranking in the Global Food Security Index

Category	Rank (out of 133 countries)	Year-on-year change	Average score (all countries)
SOUTH AFRICA'S OVERALL FOOD SECURITY	44	+0,2	57,3
1) AFFORDABILITY	50	+1,3	54,8
2) AVAILABILITY	37	-0,7	59,0
3) QUALITY AND SAFETY	53	0,0	58,7

Concluding remarks...

- Because of climate change and the demand for land for housing and other economic activities, the world will have to produce more in a declining area.
- Yields per hectare will have to increase to cope with the expected increase in demand for food
- In the face of all this – technology could play a crucial part:
- Boosting yields
- Drought tolerant varieties
- Reduced insecticide use
- Improved weed and pest control

Thank you for your attention...

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