

Planning a new Laboratory to deliver impact in South Africa

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NMISA

18th NMI Directors meeting
25 October 2016





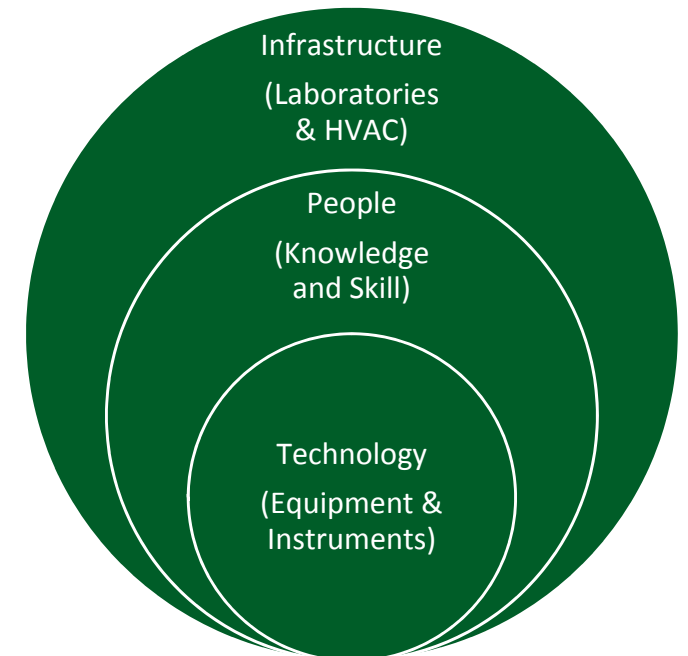
Section 3A Public Entity

Measurement Units and Measurement Standards Act, No 18 of 2006 (The Measurement Act)



NMISA Maintains measurement equivalence with the global system of measurements as a foundation of all measurements performed in South Africa

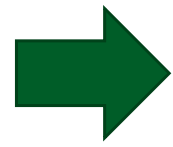
The complete view of NMS



Housed at the CSIR campus since 1950s, the buildings have reached their technical limit of modification



History of the NMISA



1947

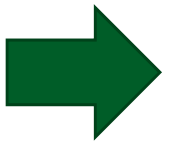
The forerunner of the CSIR National Metrology Laboratory (NML) is formed

1957

The NML occupies building 4 and 5 on the new Scientia campus, so our buildings are 60 years old!

2006

The Measurement Units and Measurement Standards Act, no. 18 of 2006, is promulgated. It establishes the NMISA



2007

On 1 May NMISA officially starts business. The entity is transferred as a going concern from CSIR

2010

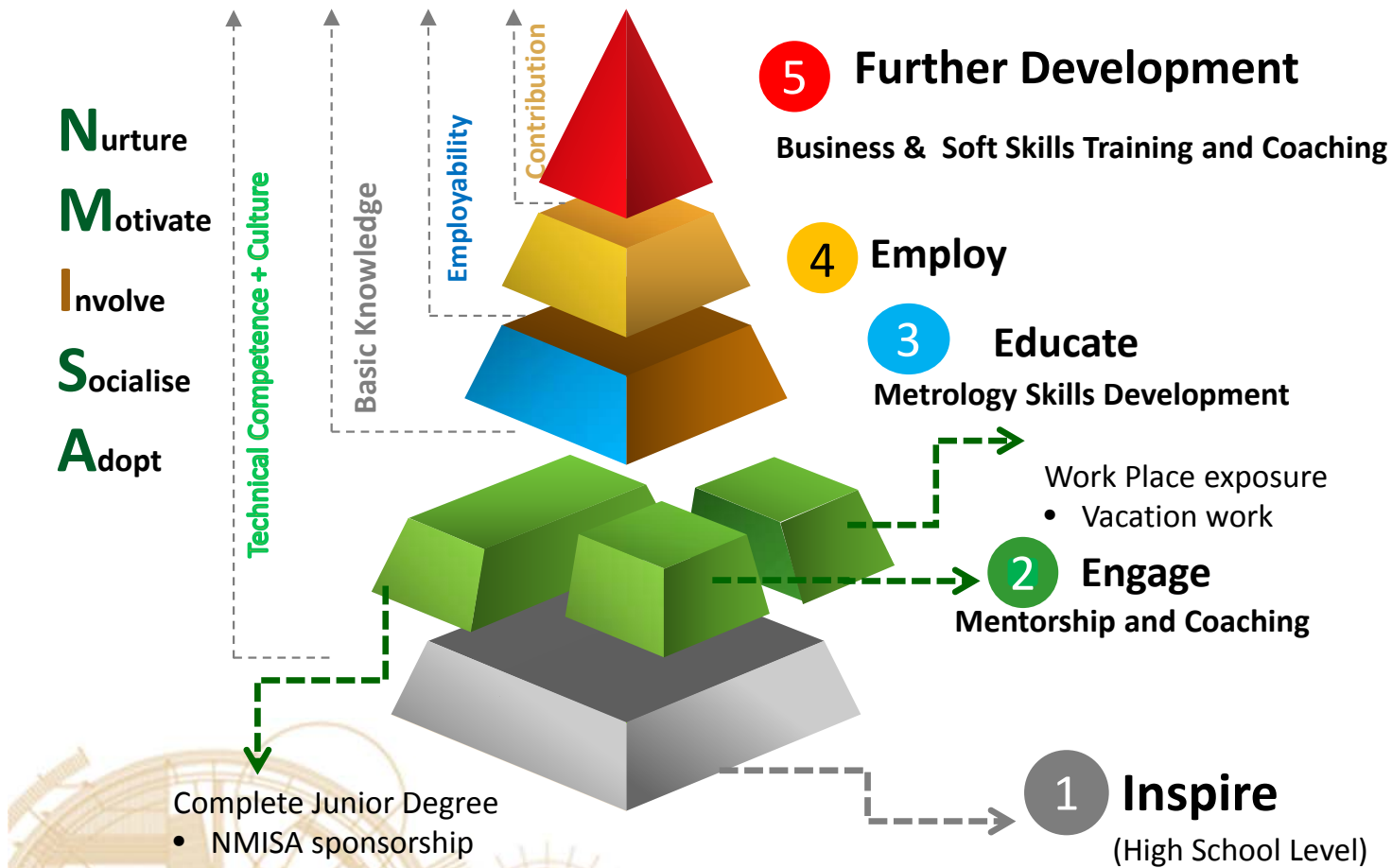
NMISA Management motivates to the **dti** that a recapitalisation of its facilities is urgently needed

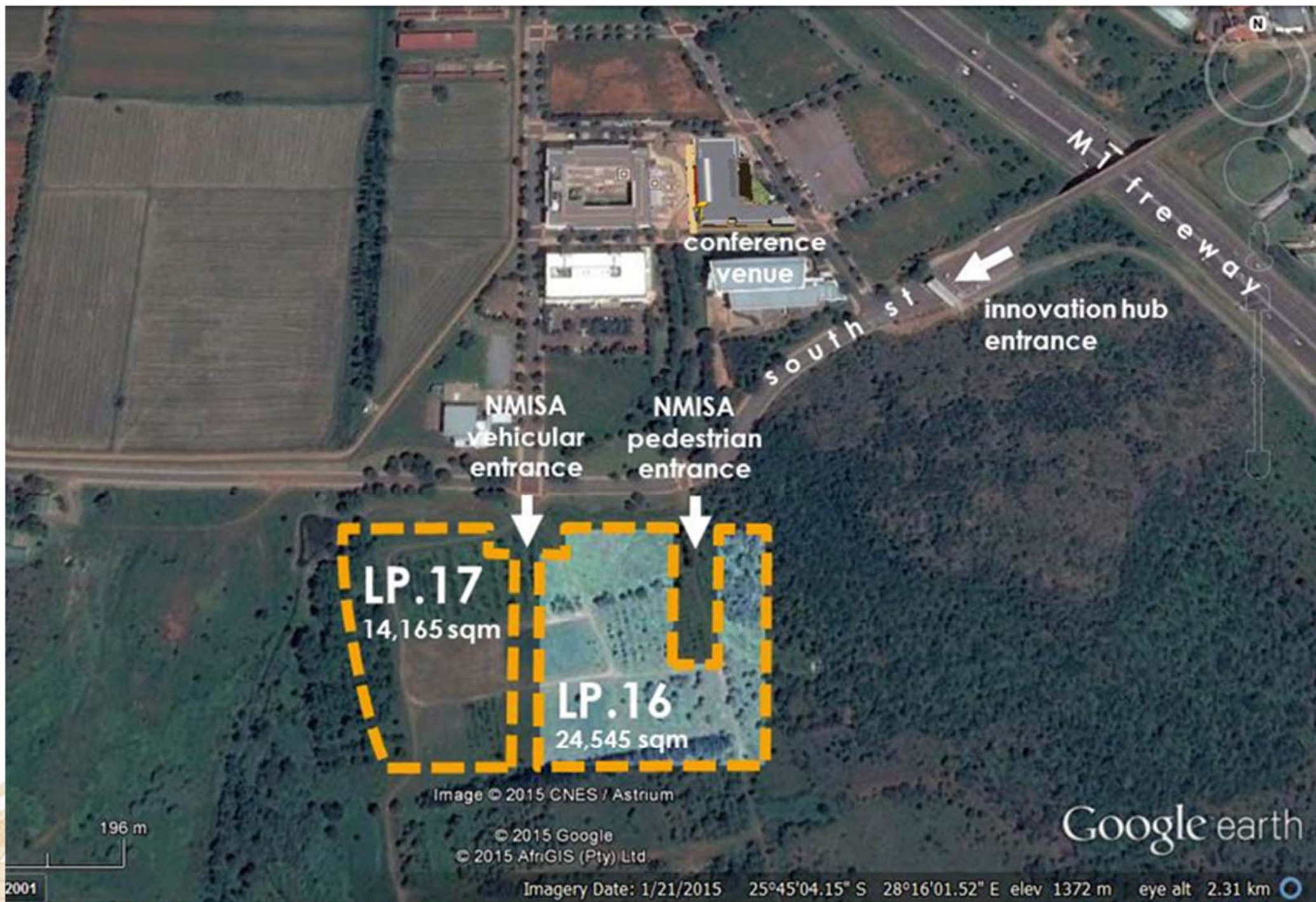
2011

With the blessing of the **dti**, a motivation is prepared for additional CAPEX over the MTEF period (and beyond). It is successful and a dedicated Grant for Recapitalisation is published

NMISA HCD Programme

- Developing work ready graduates to address the **Measurement Skills shortage**
- Developing **Future Experts and Leaders**





OPTION D INNOVATION HUB ERF 32 (LP.16 AND 17)

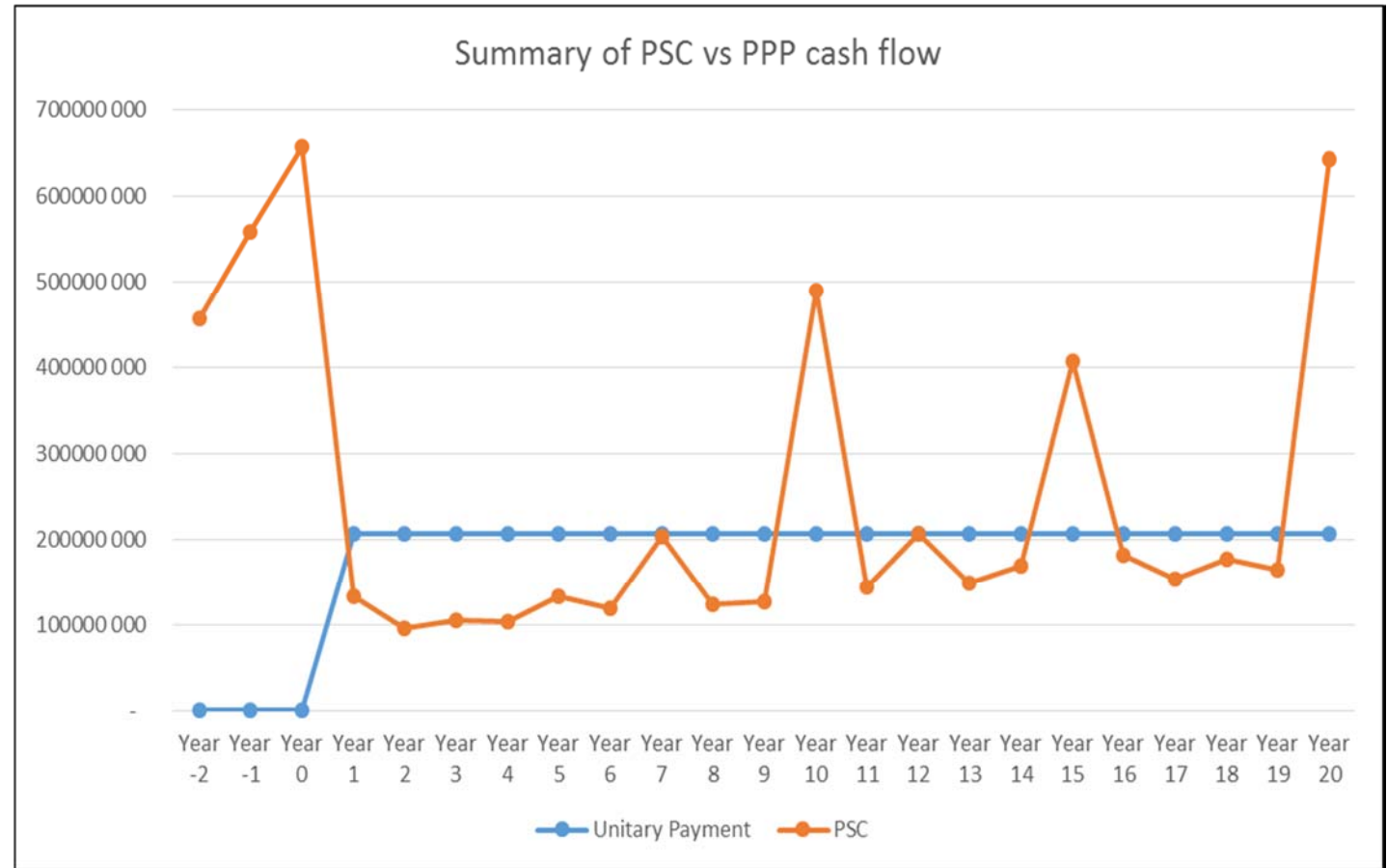
The Building

Description	Size
Laboratories	8 943sqm
Offices	3 824sqm
Meeting rooms (incl. café + auditorium)	1 590sqm
GFA (Gross Floor Area)	14 357sqm
Services (incl. plant + circulation + ablutions)	15 840sqm
TFA (Total Floor Area)	30 197sqm



Metrology Equipment Replacement

Yellow - represents the cumulative expenditure over the life of the project.
Grey - Metrology equipment
Orange - Lifecycle maintenance
Blue - Operating costs



Competing Interests!



Envisaged Timeline

TAI
Approval:
January
2017

RFQ: May
2107

RFP:
December
2017

Financial
Closure and
Commence
Building:
January
2018

Metrology Impacts Every Sphere of Society



Petroleum & Mining Industry



Chemical Industry



Plastics & packaging



Locomotives and Large Passenger Vehicles



Pharmaceutical Industry



Quality of life



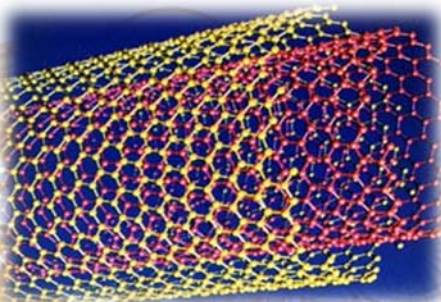
Air pollution



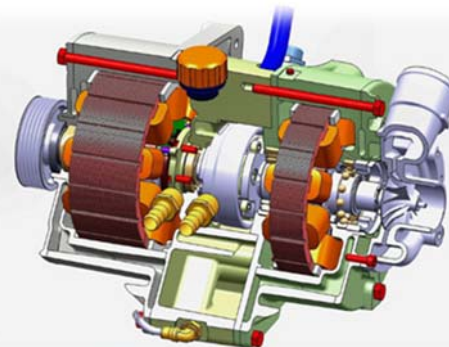
Produce



Environmental



Nanotechnology



Automotive and Alternative Energies



Food sector

CFTA developments

- 54 Countries
- > 1 billion population
- > \$ 3.4 trillion market opportunity

The Tripartite free trade area project will be a post mortem case if the implementers do not take into account the important role of the QI during the early stages of implementation.

Paul Date at AFRIMETS GA meeting, Johannesburg, July 2015



Why Does Africa need Traceability?

Almost 30% of this food will be required in Africa with implications on trade growth and an increased focus on food and feed safety





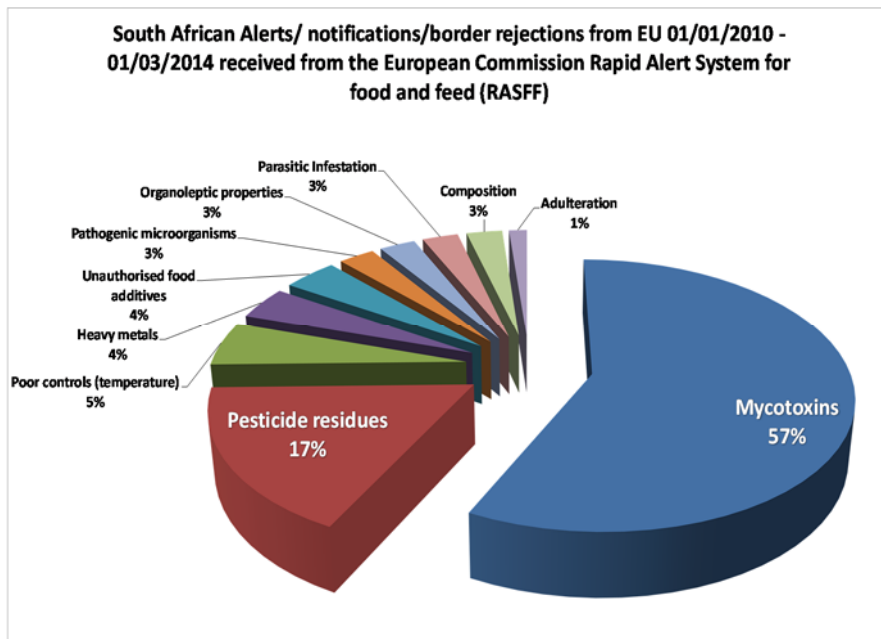
Example:

Reference material production for RSA and region (AFFRMP)

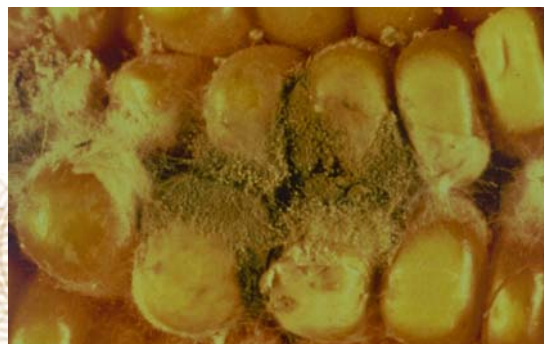
- Feed and Food
- Drug reference material for law enforcement

‘Shortening the Traceability Chain for Africa’ ShoTCAf

Lower-income countries are losing about 14% of their agrifood exports to non-compliance with SPS measures, **SADC is losing up to R3,5 milliard a year in export trade** *2011 figures



SA need to import 3,8 million tonnes of maize in 2016, 2 recent consignments of 30 000+ tonnes rejected for mycotoxins



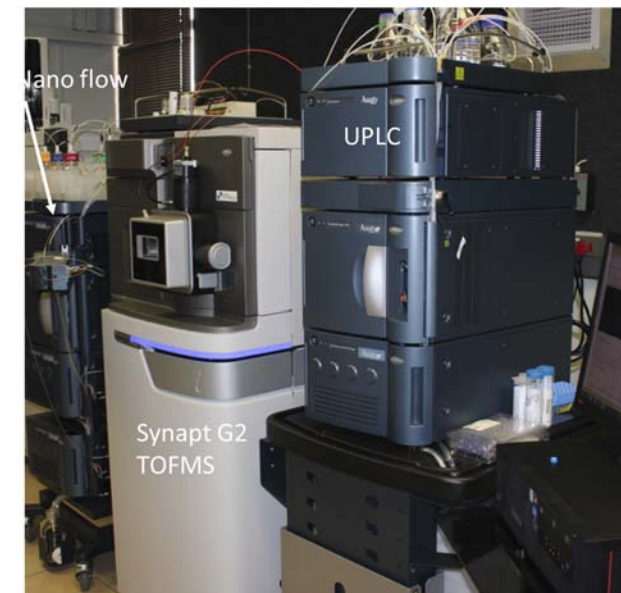
RSA imports app. R10 to R20 million high level CRMs p/a for accurate mycotoxin and pesticide analysis, estimated imports of all CRMs R100 –R150 million



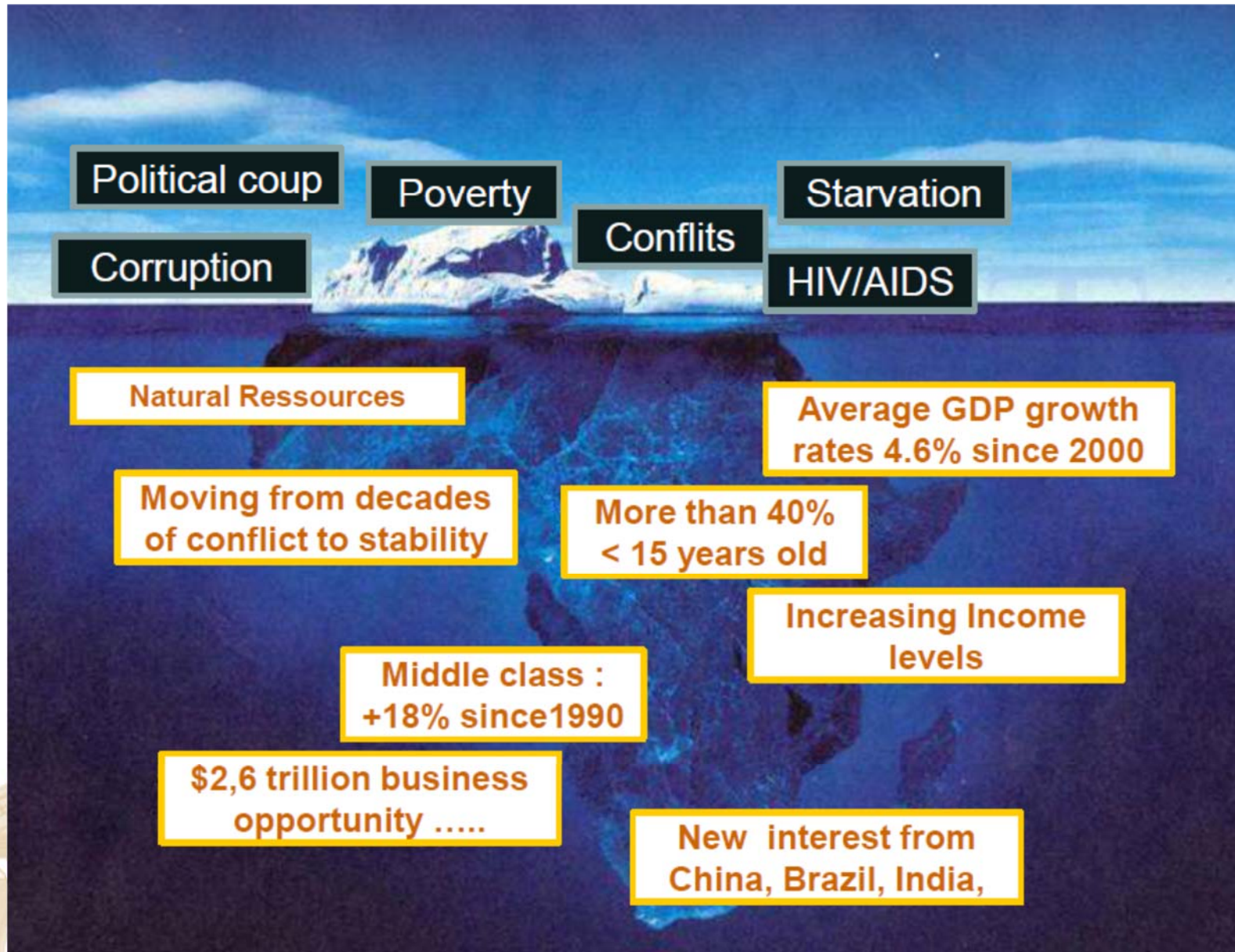
NMISA started an African Food and Feed Reference Material Programme to:

- Replace Imports of CRMs
- Provide African specific matrix reference materials

The programme setup costs are app. R100 million



Let's unlock the hidden potential



2017 Focus on Africa

- Africa Year of Quality
- NMISA 70/10 Year Celebration

