Biodiversity and Conservation

Implementation of the Cartagena Protocol on Biosafety in South Africa

22/11/2018

environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA

2030 NDP

Presentation Overview

- Background
- Status of genetically modified (GM) products in South Africa (SA)
- Implementation of the Cartagena Protocol on Biosafety in SA
- Legislative Framework
- Regulatory Approach
- Risk Management Approach for SA
- Public awareness and Participation

Background

South Africa is the 3rd most biodiverse country in the world

2% of the world's land area

7% of the world's reptiles, birds and mammals

10% of the world's plants

15% of the world's coastal marine species

STATUS OF GM PRODUCTS IN SOUTH AFRICA

OVER THE PAST FIVE YEARS ON AVERAGE

In addition, many GM-derived medicines, including anti cancer agents, vaccines, insulin, cytokines and growth factors are on the South African market.

2.7 million hectares of GM crops were planted in South Africa.

90% of maize is GM (HT and/or IR)

95% of soybean is GM (HT)

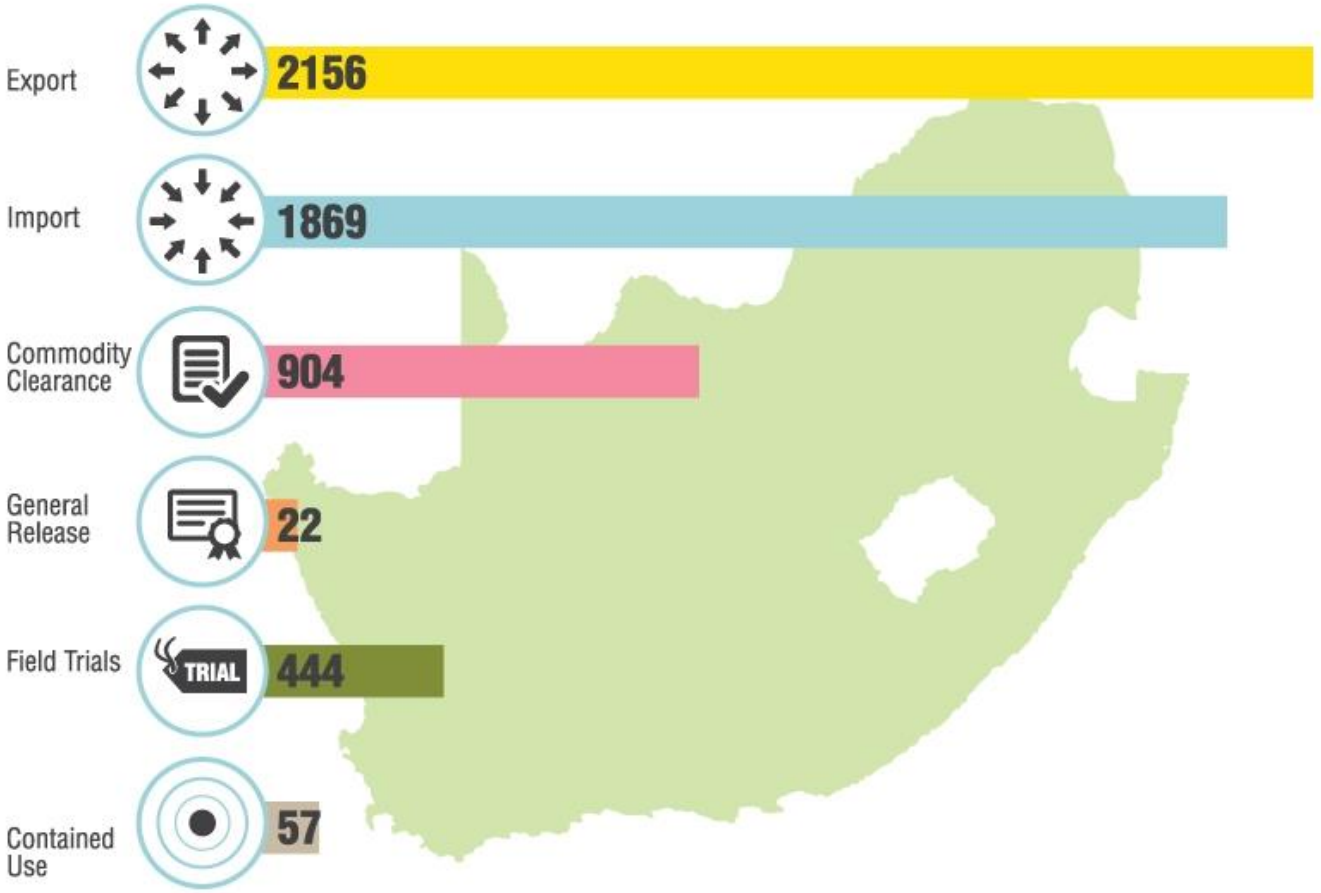
100% of cotton is GM (HT and/or IR)

Since 1999, **393** permits for confined field trials on 10 different crops have been issued.

IR – Insect resistant HT – Herbicide tolerant

ISAAA BRIEF 53, Global Status of commercialised biotech/GM crops in 2017

NUMBER OF PERMIT TYPES ISSUED IN SOUTH AFRICA FOR THE PERIOD 1999-2017



http://biosafety.org.za

IMPLEMENTATION: BIOSAFETY PROTOCOL IN SOUTH AFRICA

Progress towards Facilitating the establishment and further development of effective biosafety system

Acceded to the Protocol in 2003

DEA is the NFP

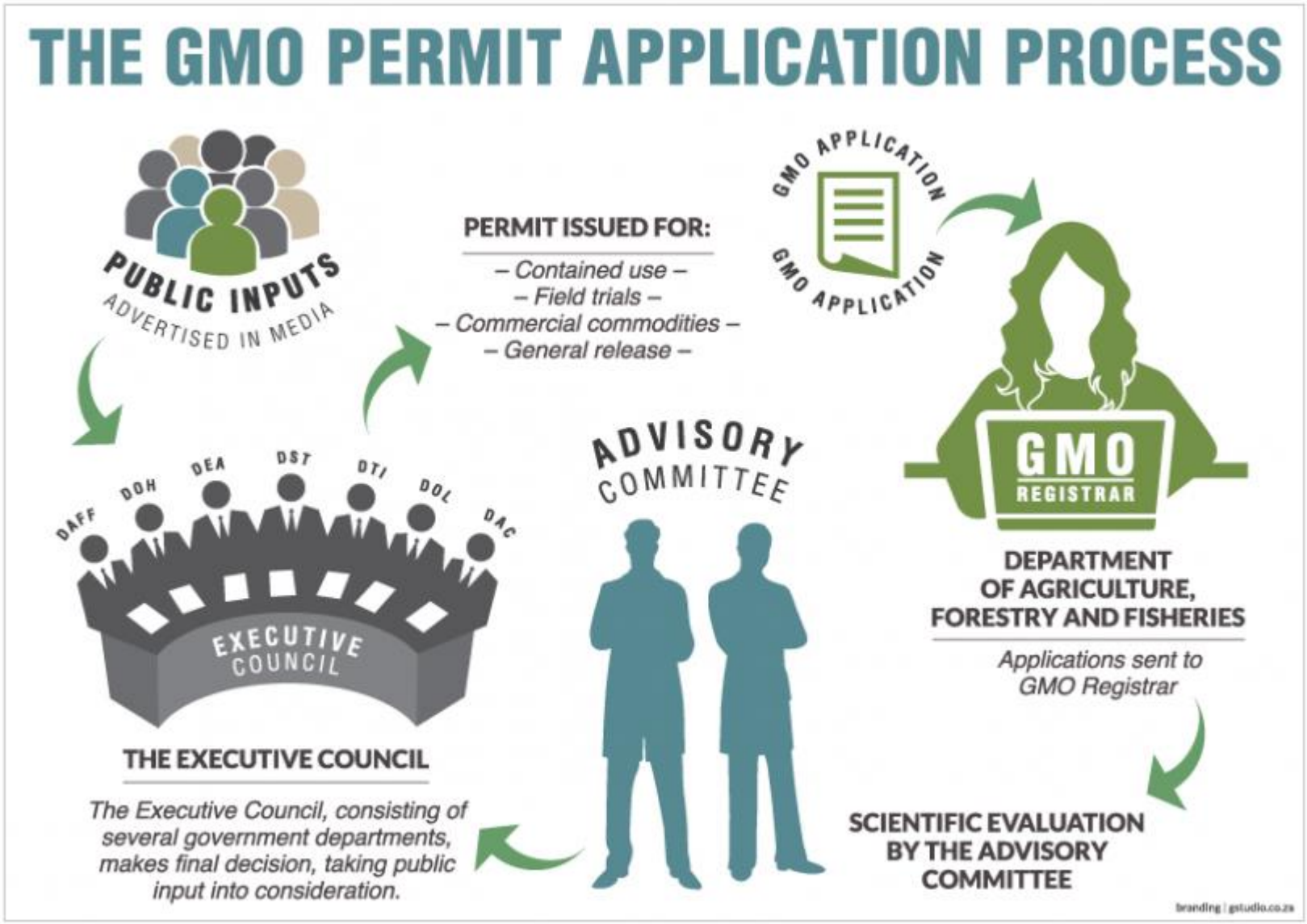
DAFF is the Competent National Authority (CNA)

- 2003, the Public Understanding of Biotechnology (PUB) programme, the Department of Science and Technology (DST)
- 2005, Integrated of biosafety activities into the NBSAP-1
- Development of Environmental Risk Assessment (ERA) Framework documents on:
  - Genetically modified crops (2008)
  - Genetically modified fish (2012)
  - Pharmaceutical crops (2015).
- Between 2008-2010, South Africa-Norway Biosafety Cooperation Project: a report on Monitoring the Environmental Impacts of GM Maize in South Africa
- 2010, Biosafety South Africa
- 2013, the Bio-economy Strategy
- 2015, Revised NBSAP

GMO LEGISLATIVE FRAMEWORK IN SA

POTENTIAL IMPACT	LEGISLATION		HOW THE LEGISLATION IS APPLIED
Human and animal health and safety	**Genetically Modified Organisms (GMO) Act** Provides for measures to promote the responsible development, production, use and application of genetically modified organisms	**Foodstuffs, Cosmetics and Disinfectants Act**	Defines labelling requirements for GM containing foods (Regulation 25, 2004).
		Occupational Health and Safety Act	Safeguards the health and safety of the workers, cleaning personnel and any other person, involved with activities with GMOs.
Environmental safety		**National Environmental Management Biodiversity Act**	Regulates possible impacts of GMOs on biodiversity and introduces minimum monitoring requirements, implemented through SANBI (South African National Biodiversity Institute).
		National Environmental Management Act	Provides general guidance with regards to the criteria that may trigger an EIA for GMOs, the objectives of such an EIA and the administrative procedure to follow
Socio-economic viability		**Consumer Protection Act**	Introduced mandatory labeling requirements for all GM goods (Regulation 293, 2008).

THE GMO PERMIT APPLICATION PROCESS



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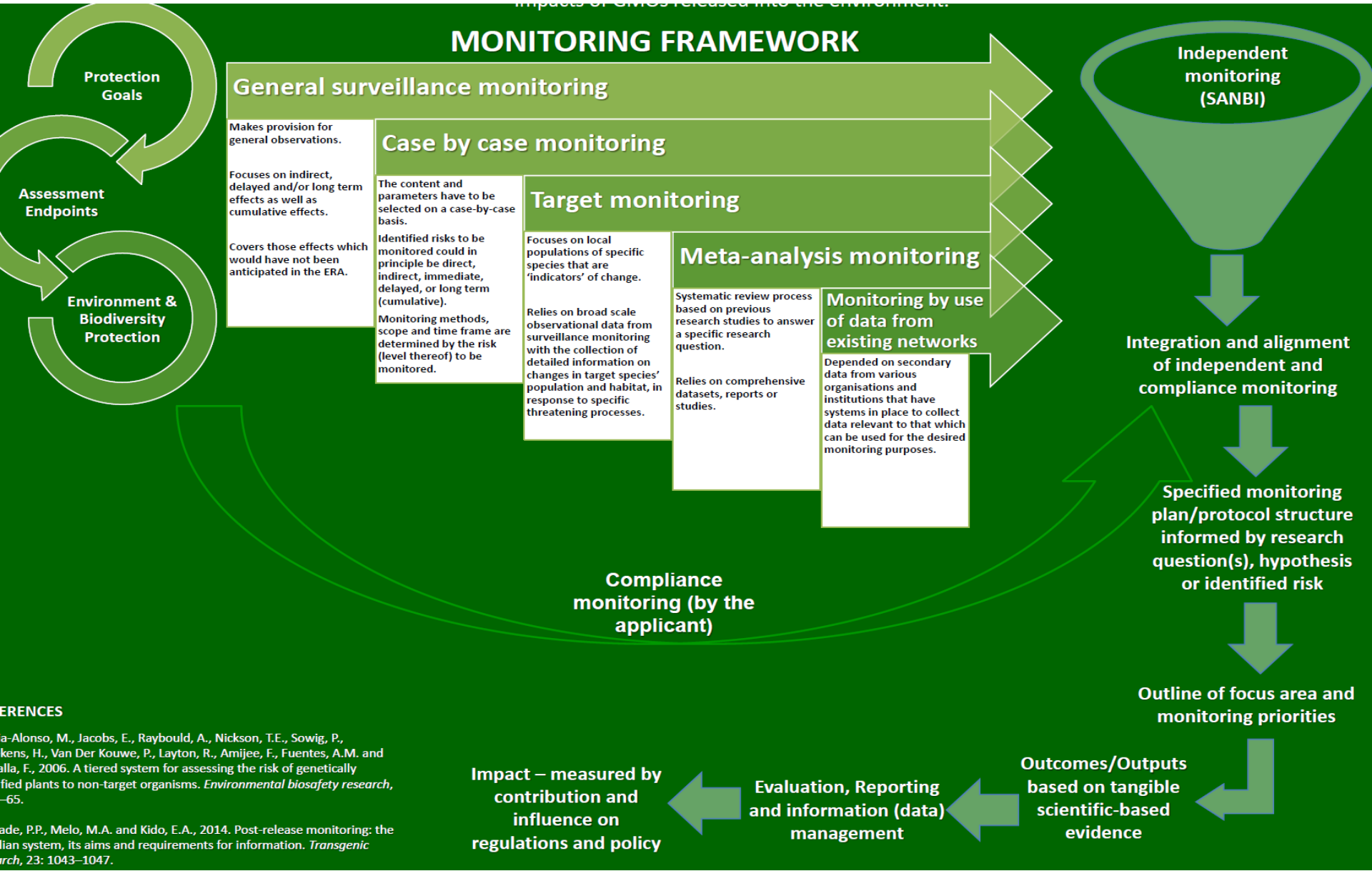
Risk Management approach for SA



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ade, P.P., Melo, M.A. and Kido, E.A., 2014. Post-release monitoring: the lian system, its aims and requirements for information. *Transgenic rch*, 23: 1043–1047.

Outreach and cooperation

School awareness activities

Capacity building

Universities

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA
Denkleiers • Leading Minds • Dikgopolo tša Dihlalefi

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT

UNIVERSITEIT
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UNIVERSITY

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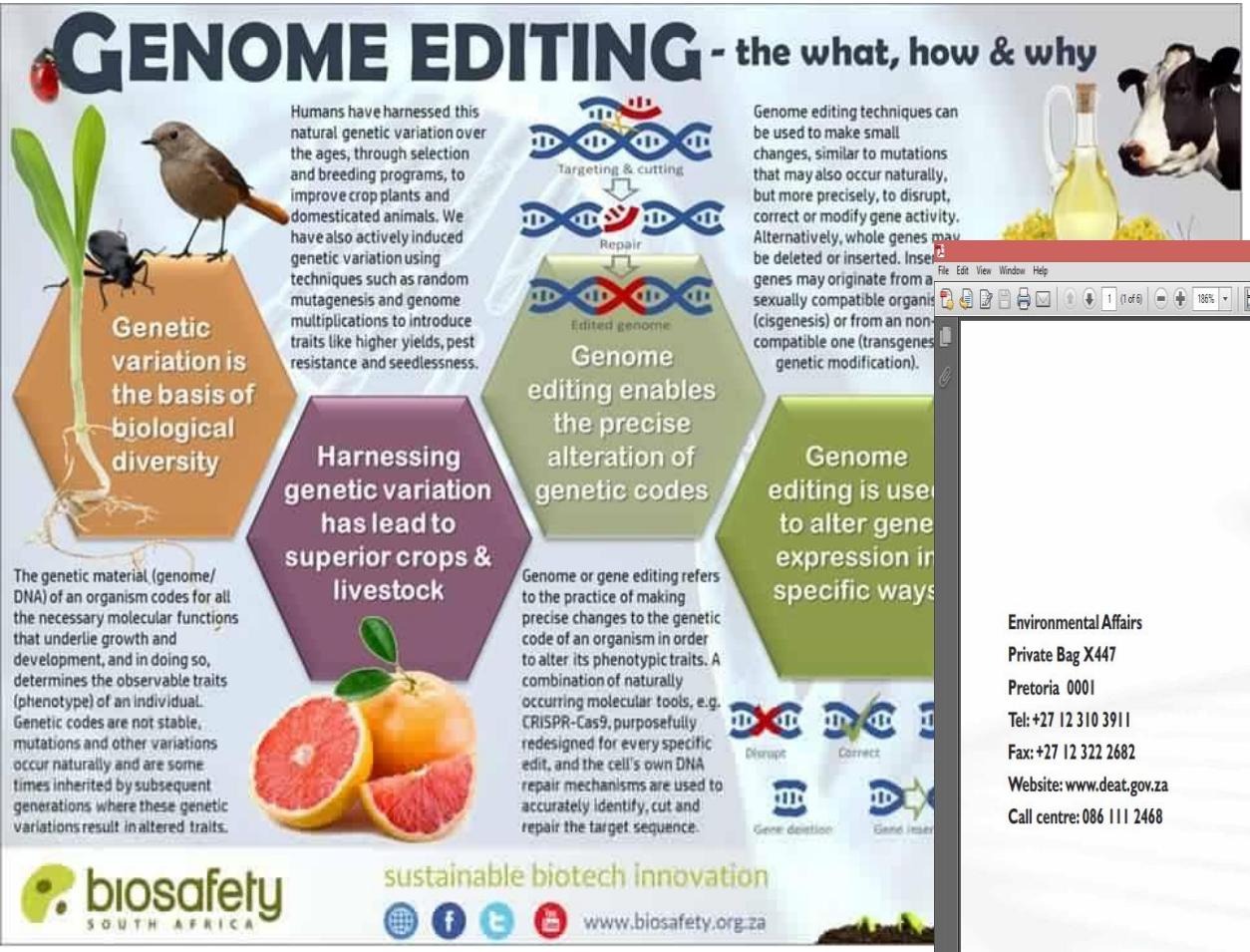
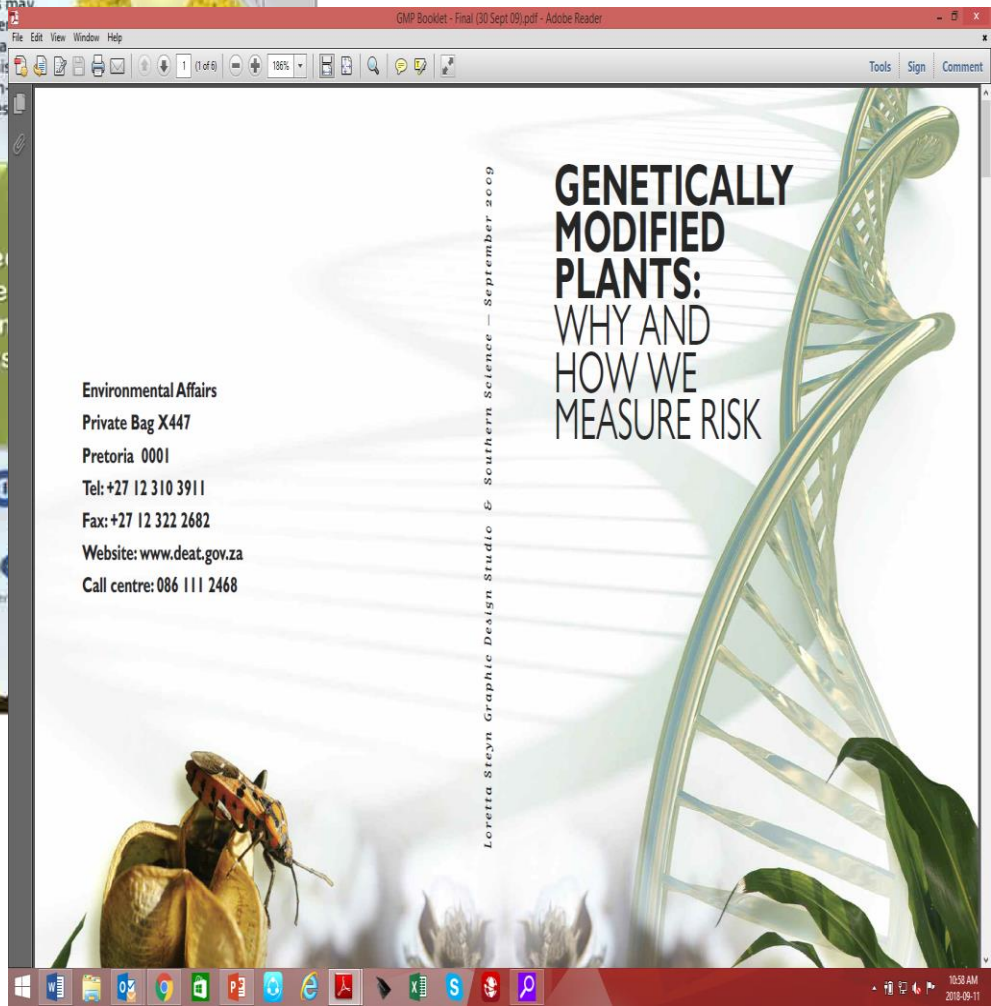
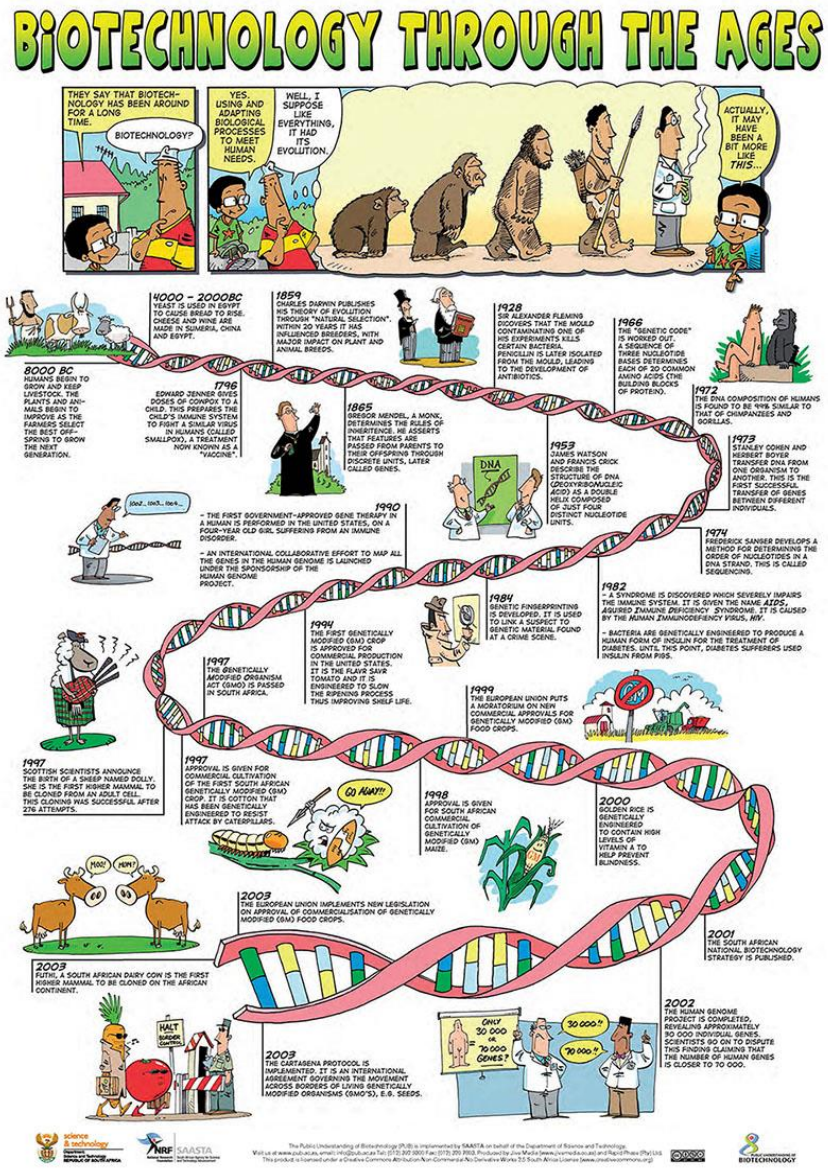
Examples of publications





Examples of publications



Case study Public perceptions of Biotechnology in South Africa

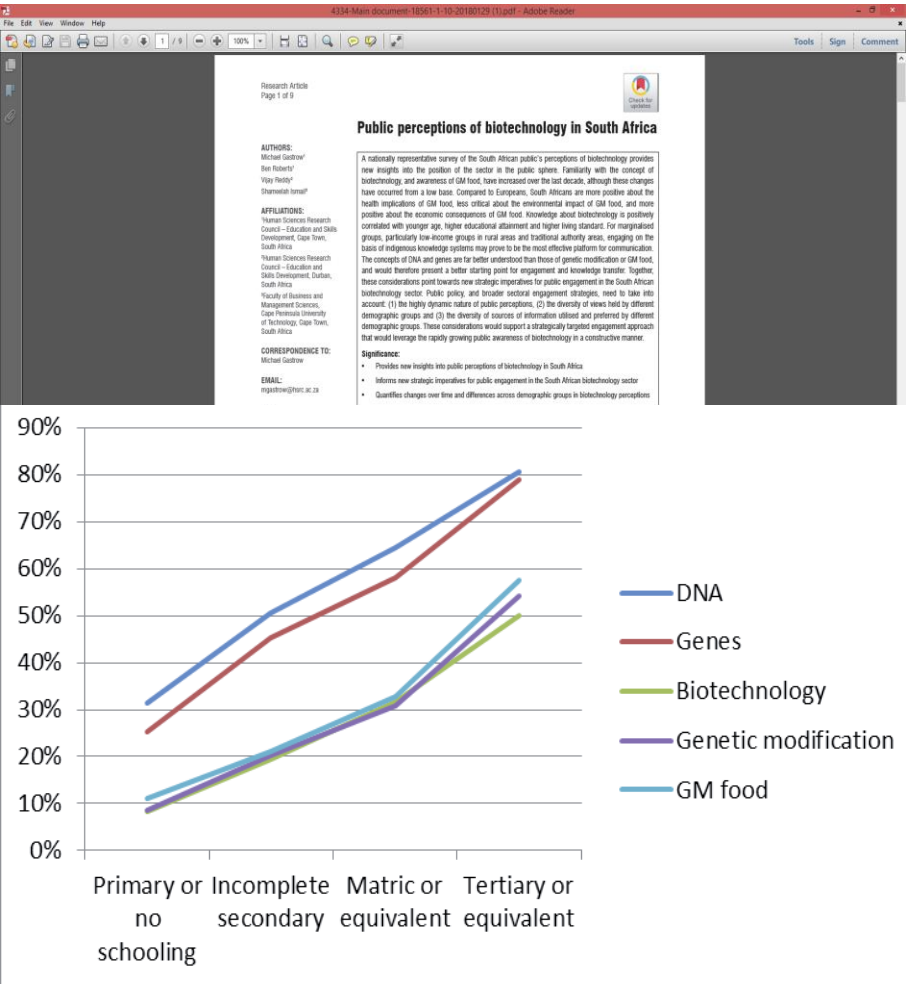


Figure 1, Knowledge of core biotechnology concepts, by education level.

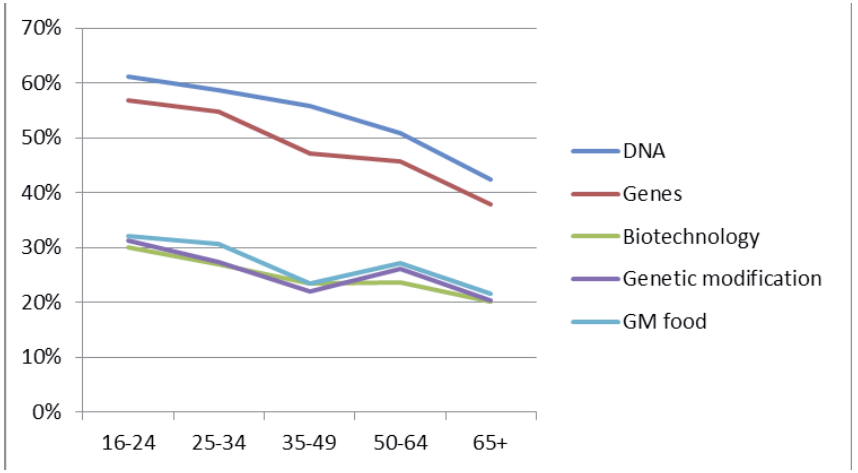
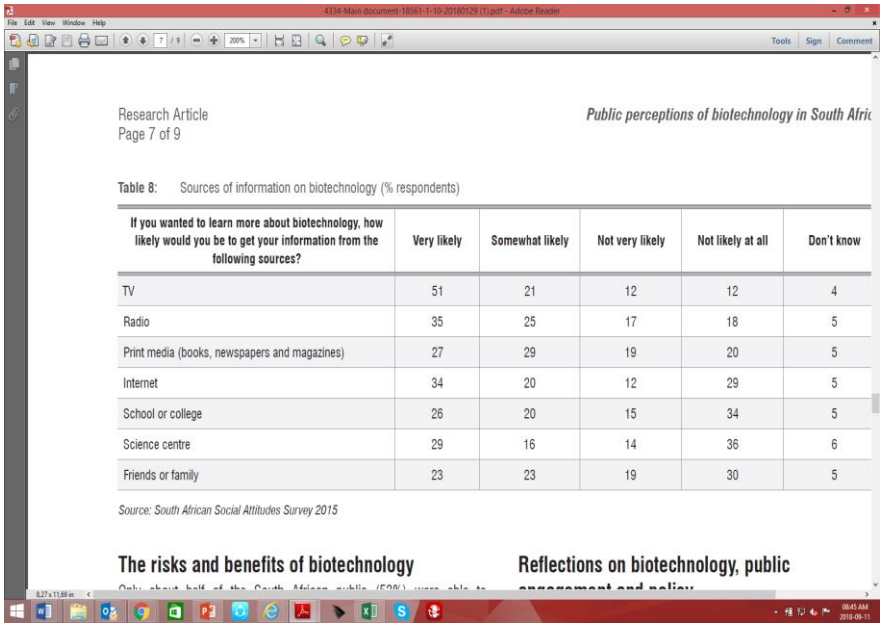


Figure 2, Knowledge of core biotechnology concepts, by age group.



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