

STATUS OF BIOTECH& BIOSAFETY IN BOTSWANA



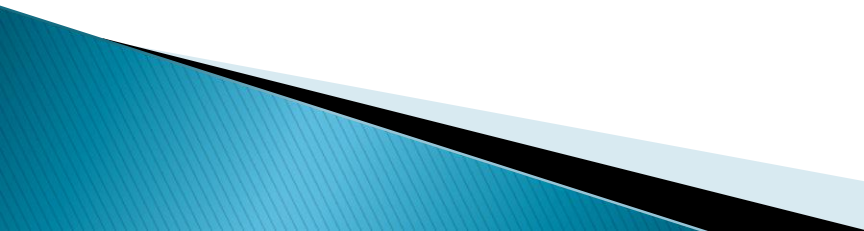
Biosafety Regulatory Framework

Cartagena Protocol On Biosafety

- ▶ Botswana signed and ratified the treaty
- ▶ Parties are expected to domestic the protocol
- ▶ Draft National Biosafety Framework was completed in 2007 funded by (UNEP-GEF).

National Biosafety Policy

The goal of the Policy is to regulate and monitor the application; and promote the development of biotechnology by ensuring the application of Biosafety measures to guarantee the protection of biological resources, to ensure sustainable use of biological resources, protection of human health, and to minimize the adverse socio-economic impacts of biotechnology.



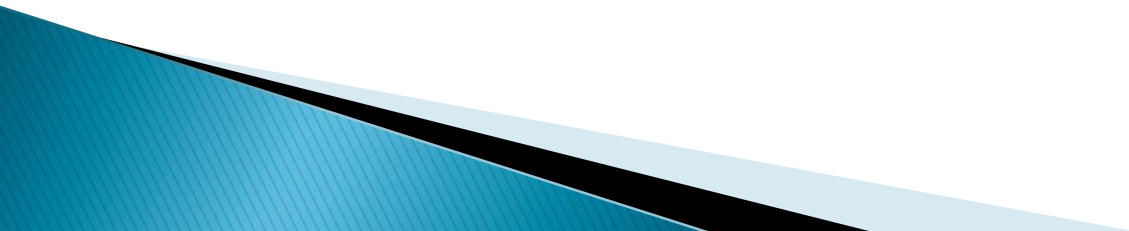
Objectives

- To promote and ensure the application of Biosafety measures in the development and use of biotechnology.
- To promote the development and application of biotechnology.
- To regulate the importation, use, handling, transfer, introduction into the environment and contained use of genetically modified organisms and the products thereof.
- To ensure public participation and access to information on biotechnology and Biosafety.
- To establish and strengthen national capacity for biotechnology, development, application and Biosafety regulation.
- To raise public awareness on modern biotechnology and Biosafety.
- To protect human health, the environment and social values from potentially adverse effects of modern biotechnology.

Outstanding Issues

- ▶ No bill
- ▶ No regulations
- ▶ No BCH

Biotechnology Activities



Biotech players and activities

1. Department Of Agricultural Research(DAR)

1.1. Watermelon project (collaboration with NAIST)

Ran protein of wild watermelon (*Citrullus lanatus*) can promote root elongation, and plants with an artificial expression of the wild watermelon-derived Ran gene were found to have enhanced root elongation.

A patent was filed in 2009.



Biotech players cont..

1.2. Biofuel production

- ▶ Genetic modification of *Jatropha* for biofuel production
- ▶ 1.3. GMO Testing

2. University of Botswana

2.1. Vaccine development with:

The Ferre/Marquet Vaccine Development Institute, BVI, BCA, MOA,

2.2 Teaching Biotech courses



Biotech players cont..

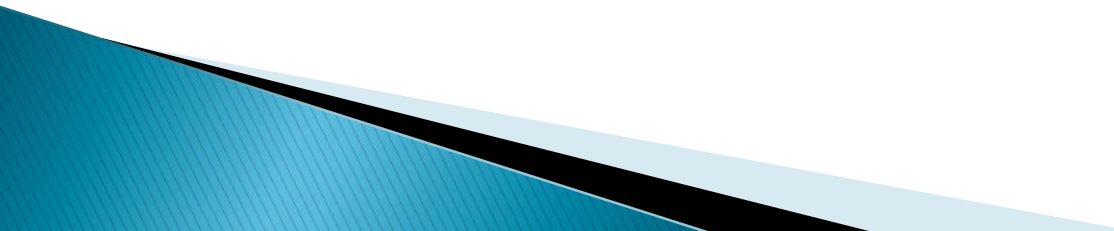
3. National Food Technology Research Centre (NAFTRC)

3.1. GMO Testing

4. Botswana International University Of Science And Technology (BUIST)

4.1. Teaching Biotechnology Courses

CHALLENGES

- ▶ Lack of legislations
 - ▶ Lack of resources: human, capital and infrastructure
 - ▶ Lack of networks
 - ▶ Private sector not well developed
 - ▶ Implementation strategy
- 

THANK YOU

Charles Mazereku
cmazereku@gov.Bw