Workshop of the Network of Laboratories for the Detection and Identification of Living Modified Organisms
Ispra, Italy, 9-11 June 2015

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Democratic Republic of the Congo
(DRC)

➢ Superficie :
2 345 409 km²

➢ Population :
67,51 millions (2013)

➢ The largest African biodiversity.

➢ Surrounded by 9 countries

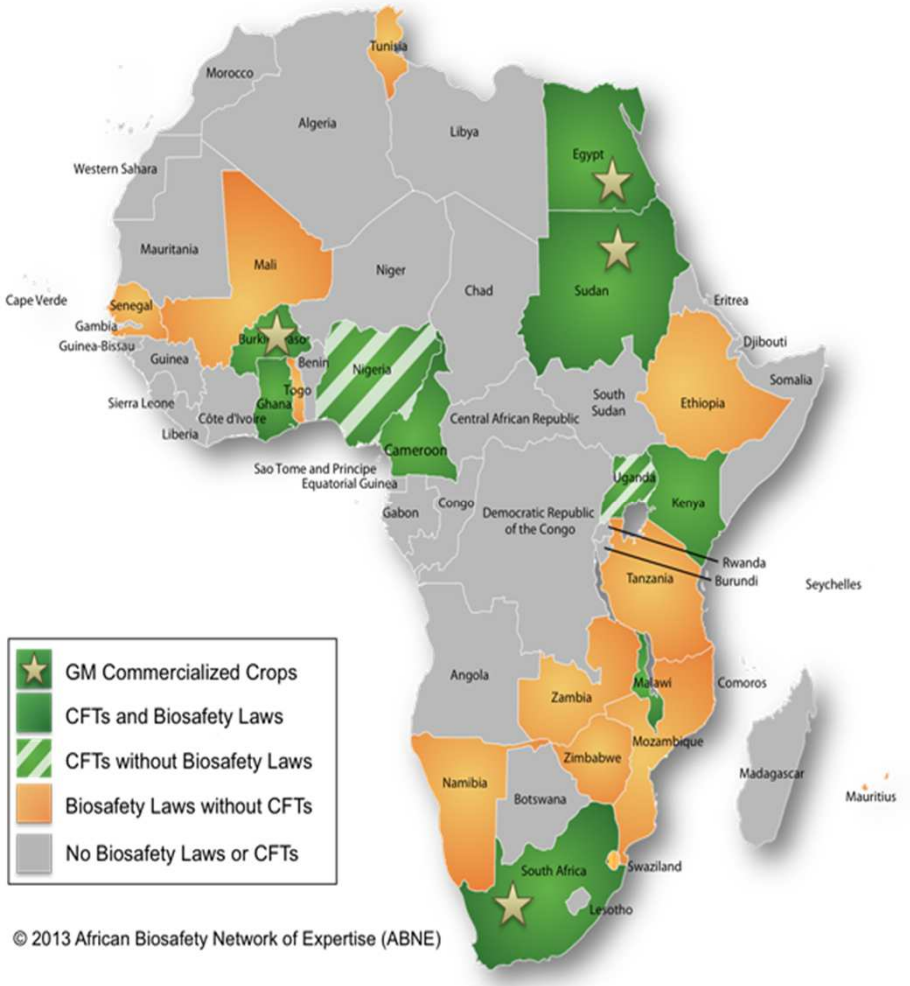
➢ Advantage to belonging to Central Africa and South Africa (SADC) region.

Current status of LMO detection

➢ Central Africa region:

There are still gaps :

- Absence of the regulatory framework on biotechnology and biosafety.



Status of the regulation of Biosecurity in Africa (ABNE, 2013

Still gaps in the central Africa region

- 2008: the DRC has finalized the process of developing the national biosafety framework and draft Bill on Biosafety.
- To date, the National Biosafety Framework is still not implemented while Bill is in Parliament pending.
- The laws and regulations on plant health, animal health and the protection of industrial property rights exist.

Still gaps in the central Africa region

For the **detection of LMOs**:

- Lack, in the region, of basic equipment and consumables (including the reference sample and the specific primers);
- Lack of procedures.
- Insufficient managers trained.

➢ South Africa region (SADC):

- A Multicountry Project to strengthen institutional capacities on LMO Testing in support of national decision making is developing (UNDP-GEF/RAEIN-Africa/SANGL) :
- 2 laboratories of DRC were identified for LMO detection:

  - Laboratory of Biotechnology and Molecular Biology of CGEA/CREN-K;
  - Kinshasa Veterinary Laboratory.

- These laboratories have the human and technical potential as well as basic infrastructure in molecular biology.
- Equipment available: PCR Machines, ELISA, Electrophoresis, Gel Doc Documentation, centrifuges, …

Experiences and challenges working in the field of LMO detection

➢ Experiences :

- Personnel not yet trained in LMO detection.

➢ Challenges :

- Operationalization of National biosafety Framework (Project UNDP-GEF/RAEIN-Africa) .
- Acquisition of:
  - PCR based diagnostic kits;
  - validated primers;
  - antibodies (Detection kit);
  - Reference materials : positive and negative controls; calibrants for quantification.
- Maintenace and calibration of equipment.

➢ Other challenges:

- Presence or absence of non-approved LMOs;
- GM crops with more than one altered trait.
- Extent of the country (DRC).

Specific areas where capacity building can be useful to help advance the status of LMO detection in DRC and central African region

- Training of personnel on:

- Sampling and Analytic methods for detection, identification and quantification of LMOs.
- Quality assurance/Quality control for accreditation.

Thank you!