

# Status of Biosafety and Biosecurity efforts in Ghana



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## Focus

- National Biosafety framework
- Biosecurity in Ghana



# Regulatory regime

- The Legal Regime in Ghana previously lacked specific enactments for biotechnology. However there were relevant Plant, Animal and Food Safety Laws on issues related to Biotechnology.
- The draft Ghanaian Biosafety Regulatory system, is a therefore a coordinated framework with a coordinating agency, the National Biosafety Authority.
- Enforcement issues are still the domain of the existing regulatory agencies

# Legal Milestones



- Ghana ratified the Convention on Biological Diversity on Aug 29<sup>th</sup> 1994 and the Convention's Cartagena Protocol on Biosafety on the 30th May 2003.
- Launched a National Biosafety Framework in July 2005 by the Minister of Environment and Science to assist in the implementation and domestication of the Cartagena Protocol on Biosafety

# Biosafety Bill

- Scope: The draft law regulates all activities in biotechnology including contained use, releases into the environment and placements in the market, export and import and transit of GMOs.
- It covers procedures:
  - for handling of requests including contained use,
  - introduction to the environment,
  - import and export,
  - GMOs in transit,
  - handling of confidential information
  - acknowledgment of applications.

# National Biosafety Framework

*United Nations Environment Programme & Global Environment Facility*

- Govt policy on biosafety, which is part of a broader policy on biotechnology
- Regulatory system - Biosafety Act and National Biosafety Guidelines
- Administrative system to handle requests for permits for certain activities
- Decision making system for risk assessment and management for the release of LMOs
- Mechanisms for public participation and information sharing.

Figure 1: Regulatory System for the National Biosafety Framework for Ghana

## Regulatory System – Schematic Presentation

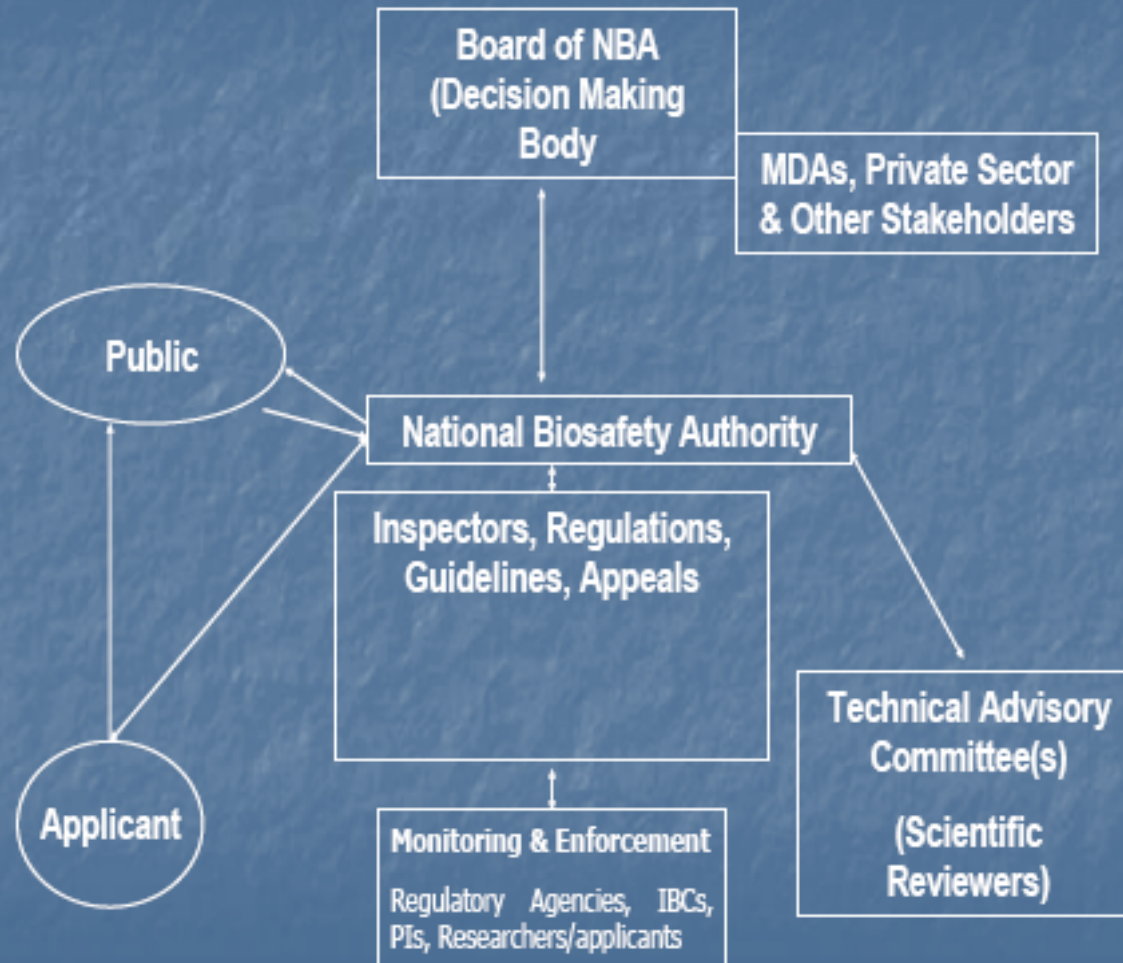
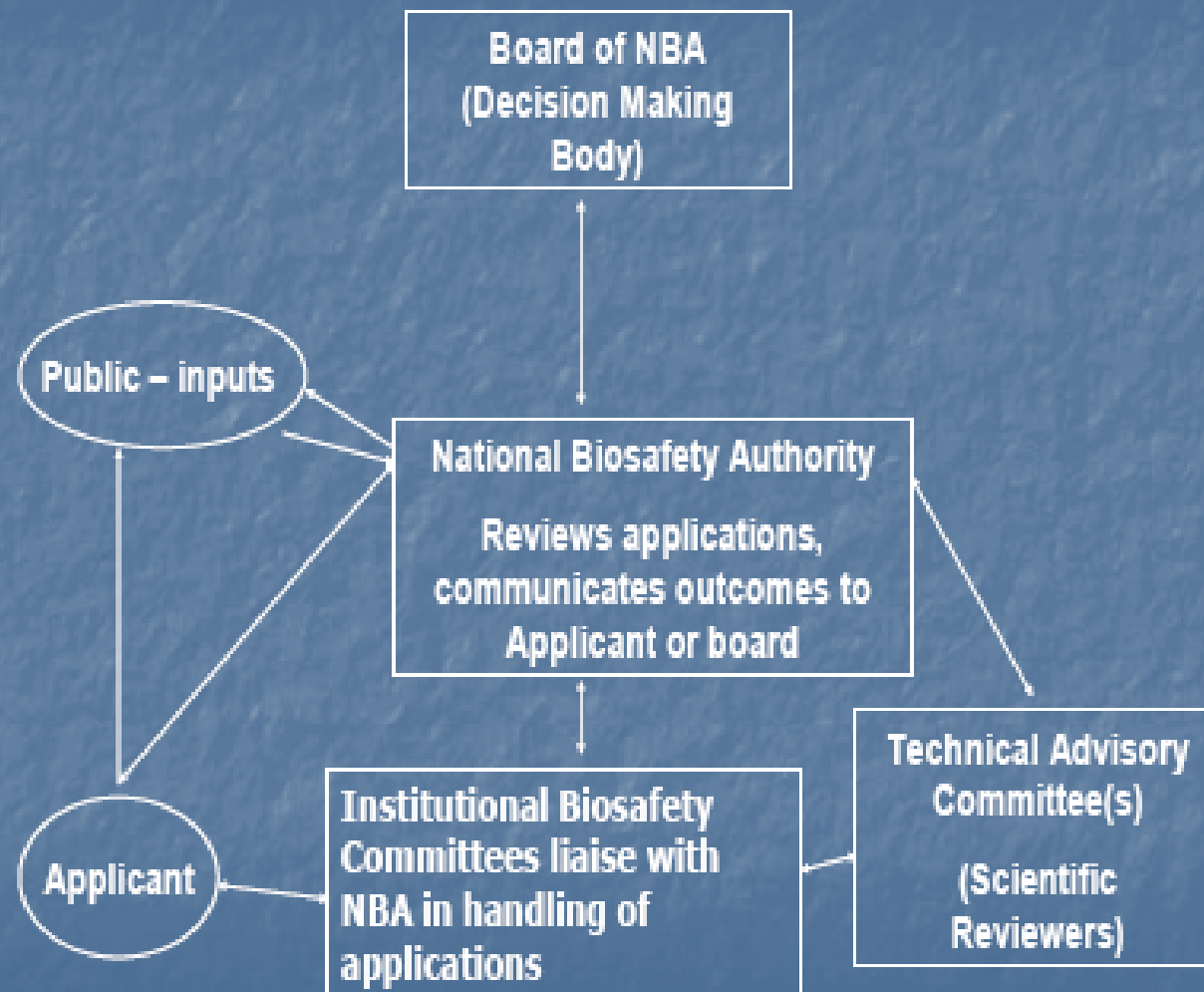


Figure 2: System for Handling Applications – Schematic Presentation





# The Institutional basis of Biosecurity in Ghana

- *Biosecurity issues are not the responsibility of one ministry, department or agency (MDA) of state.*
- *Several MDAs have responsibility for, or are engaged in, activities in this area*
- *Overall coordination by the EPA*

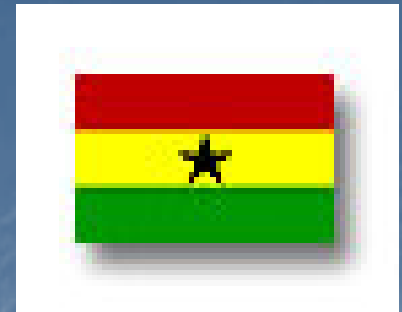
- **Ministry of Food and Agriculture**
  - *Crops Services Directorate*
  - *PPRSD*
  - *VSD*
  
- **Ministry of Health**
  - *FDB*
  
- **Ministry of Lands, Forestry and Mines**
  - - *Forestry Commission (Wildlife, Forest Products Inspection, Forest Services, and Timber Export Development Divisions)*
  
- **Ministry of Local Government, Rural Development & Environment**
  - - *Environmental Protection Agency (EPA)*
  - - *district, municipal and metropolitan assemblies*

- **Ministry of Finance**
  - *Quality Control Division of Cocoa Marketing Board*
  - *Cocoa Research Institute*
  
- **Ministry of Trade, Industry, Private Sector and Presidential Special Initiatives**
  - *GSB*
  - *CEPS*
  
- **Ministry of Tourism and Diasporean Relations**
  - *Ghana Tourist Control Board*
  
- **Ministry of Education**
- **Ministry of Fisheries**
- **Ministry of Foreign Affairs**
- **Ministry of Justice**
- **Ministry of National Security**
- **Ministry of Water Resources, Works and Housing**

# Regulatory bodies with legislative responsibility for Biosecurity are:

- FDB and GSB – food and related safety matters
- VSD – animal health and related safety issues;
- PPRSD – responsible for plant health and related safety matters
- EPA – responsible for environmental regulation, including safety matters;
- CEPS – responsible for ports and borders in collaboration with the other agencies
- District, Municipal and Metropolitan assemblies which work with the regulatory agencies at the local levels of governance especially in monitoring and enforcement at markets.

# Legal Milestones



- The National Biosafety Committee announced the promulgation in Feb 2008 of a Biosafety Legislative Instrument to circumvent the delay in the passage of the Biosafety Bill .
- The LI :
  - used the existing CSIR Act 521 of 1996 for the conduct of research - extension to include GMOs.
  - recognised and empowered the NBC as the National Focal Point on Biosafety,
  - authorised the conduct of confined field trials
  - but did not allow the commercialisation or release of products to farmers and consumers.

# Related events: “Grant To Bolster Africa's Biosafety Capacity”

- – news item by the Ghana News Agency [in Feb 2008](#)
- New Partnership for Africa's Development, Michigan State University - \$1.5m grant from the Bill & Melinda Gates Foundation to bolster Africa's biosafety expertise.
  - To develop the African Biosafety Network of Expertise to help regulators access up-to-date training, data, and resources to properly regulate biotechnologies, ensuring countries are able to take full advantage of advances while safeguarding consumers and the environment.

# AI prep plan: Game and wildlife monitoring of a Ramsar wetland



- Wetland Management (Ramsar Sites) Regulations, 1999 (LI 1659). Under these regulations, six Ramsar sites have been designated.

- ( pics from Keta Lagoon Complex Dec 2006 )

# Animal Health: AI outbreak in Ghana biosecurity related events

- Ban on import of PP from AI countries by MOFA in 2005/2006
- Ban on movt of PP in/out of outbreak areas MOFA in 2007
- Increased awareness about biosecurity measures for poultry farms and wet markets conducted by the VSD for poultry farmers ff the AI outbreak in April 2007
- Bio-security schools were to be established in poultry areas to update poultry farmers in





# Human Health eg: HIV clinical trial "SAVVY and HIV in Ghana"

NMIMR, KATH / FHI , CELLEGY (BIOSYN) /USAID

study was conducted in compliance with  
Institutional and National requirements

- FHI - PHSC, NMIMR/KATH – IRBs,
- Ghana Food & Drugs Board / US FDA



- all Serious Adverse Events were reported to FHI, IRBS and FDA within 24 hours
- Destruction of unused study material supervised by FDB

# Institutional capacity-building: Biosafety

- Laboratory Training for Nat APML and the CHS in Aug/Sept 2007 by the NMIMR
- 55 lab staff from 9 regions of the country and 32 hospitals participated
- Goal was to provide *a comprehensive review of lab. mngmt. in CHS and instill GLP in private med. labs*  
“become abreast with current biosafety procedures was one initial expectation”  
Program included “Biosafety” highlighting safe work practice in the lab due to infectious nature of organisms and materials handled

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