

A woman wearing a blue uniform and a white hairnet stands in a large poultry farm. She is surrounded by many brown chickens and several large blue feeders. The farm has a high ceiling with metal structures and hanging ropes. The text "AN OVERVIEW OF THE STATE OF BIOSECURITY IN THE REPUBLIC OF GHANA" is overlaid on the left side of the image.

# AN OVERVIEW OF THE STATE OF BIOSECURITY IN THE REPUBLIC OF GHANA

## **BIOSECURITY**

- Biosecurity refers to a strategic and integrated approach that encompasses the policy and regulatory frameworks to analyse and manage risks in food safety, animal life and health and plant life and health, including associated environmental risks (FAO, 2007)
- The securitisation of these sectors in the early 2000s has drawn attention to the potential for “the inadvertent, inappropriate, or intentional malicious or malevolent use of potentially dangerous biological agents or biotechnology” (US National Academies, 2006)
- Biosecurity is therefore concerned, on one level, with regulating the exposure of livestock and food crops to all possible naturally occurring threats to them.
- On another level, biosecurity is concerned with preempting and avoiding the weaponization of biological agents by state parties and private individuals.

# INTERNATIONAL STANDARDS

AGREEMENTS/STANDARDS	ENFORCING BODIES (STANDARDS SETTING BODIES)
International Plant Protection Convention (IPPC) (1951, 2005A)	United Nations Food and Agriculture Organisation (Commission on Phytosanitary Measures [CPM])
International Health Regulations (IHR) (2005)	World Health Organisation
Biological and Toxin Weapons Convention (BTWC) (1975)	United Nations Security Council (UNSC)
Convention on Biological Diversity (CBD) (1993)	United Nations Environmental Programme
Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) (1995)	World Trade Organisation (CAC, OIE, CPM)
UNSCR Resolution 1540 (2004) and subsequent affirming resolutions	UNSC 1540 Committee

# BIOSECURITY IN GHANA: COMPLIANCE WITH INTERNATIONAL STANDARDS

AGREEMENT		DATE OF SIGNATURE	DATE OF RATIFICATION (OTHER)
IPPC (1951, 2005)		Not Applicable	22-02-1991 (Adherence to 1951) 01-12-2004 (Acceptance of 2005)
IHR (2005)		15-06-2007	09-10-2012
BTWC (1975)		10-04-1972	06-06-1975
CBD (1993)	Cartagena Protocol on Biosafety	12/06/1992	N/A 29/08/1994
	Nagoya Protocol on Access and Benefit Sharing		30/05/2003 (Accession) 08/08/2019
SPS AGREEMENT (1995)		01/01/1995	N/A
UNSCR 1540 (2004)		davisopoku.com	N/A

## **BIOSECURITY IN GHANA: THE LEGAL REGIME**

Public Health Act, 2012 (Act 851)

- Meat Inspection Regulations, 2020 (L.I. 2405)
  - Ratifies IHR into Ghanaian Law
  - Establishes Food and Drugs Authority (FDA) to ensure food safety
  - L.I. 2405 empowers FDA/Veterinary Services Directorate to provide quality animal health services to enhance livestock, poultry and companion animals' production and productivity

Biosafety Act, 2011 (Act 831)

- Biosafety (Management of Biotechnology) Regulations, 2019 (L.I. 2383)
  - Implements Cartagena Protocol
  - Establishes National Biosafety Authority as national focal point for biosafety and biotechnology

Plant and Fertilizer Act, 2010 (Act 803)

- Establishes, amongst others, the Plant Protection and Regulatory Service Directorate (PPRSD) to provide for plant protection in compliance with IPPC

Environmental Protection Agency Act, 1994 (Act 490)

# IMPLEMENTING AGENCIES

The implementation of the biosecurity legal framework is the shared responsibility of several agencies under various ministries. These include:

Ministry of Environment, Science, Technology and Innovation

National Biosafety Authority (NBA)

Environmental Protection Agency

- Ministry of Food and Agriculture

Food and Drugs Authority

PPRSD

VSD

- Ministry of Finance

Ghana Revenue Authority Customs Division

- Ministry of Trade and Industry
- Ghana Standards Authority
- Ministry of Local Government

MMDAs

- Other Government Ministries, Departments and Agencies

# BIOSECURITY STAKEHOLDERS UNDER BIOSAFETY ACT, 2011 (ACT 851)

## National Biosafety Authority

- Receipt of all biosafety and biotechnology applications save applications for contained use and field trials

## Technical Advisory Committee (TAC)

- Eleven-member body composed of individuals from the 7 implementing agencies and from the private sector
- Undertakes risks assessment of various applications and makes recommendations

## Institutional Biosafety Committees (IBCs)

- Review applications for contained use and field trials

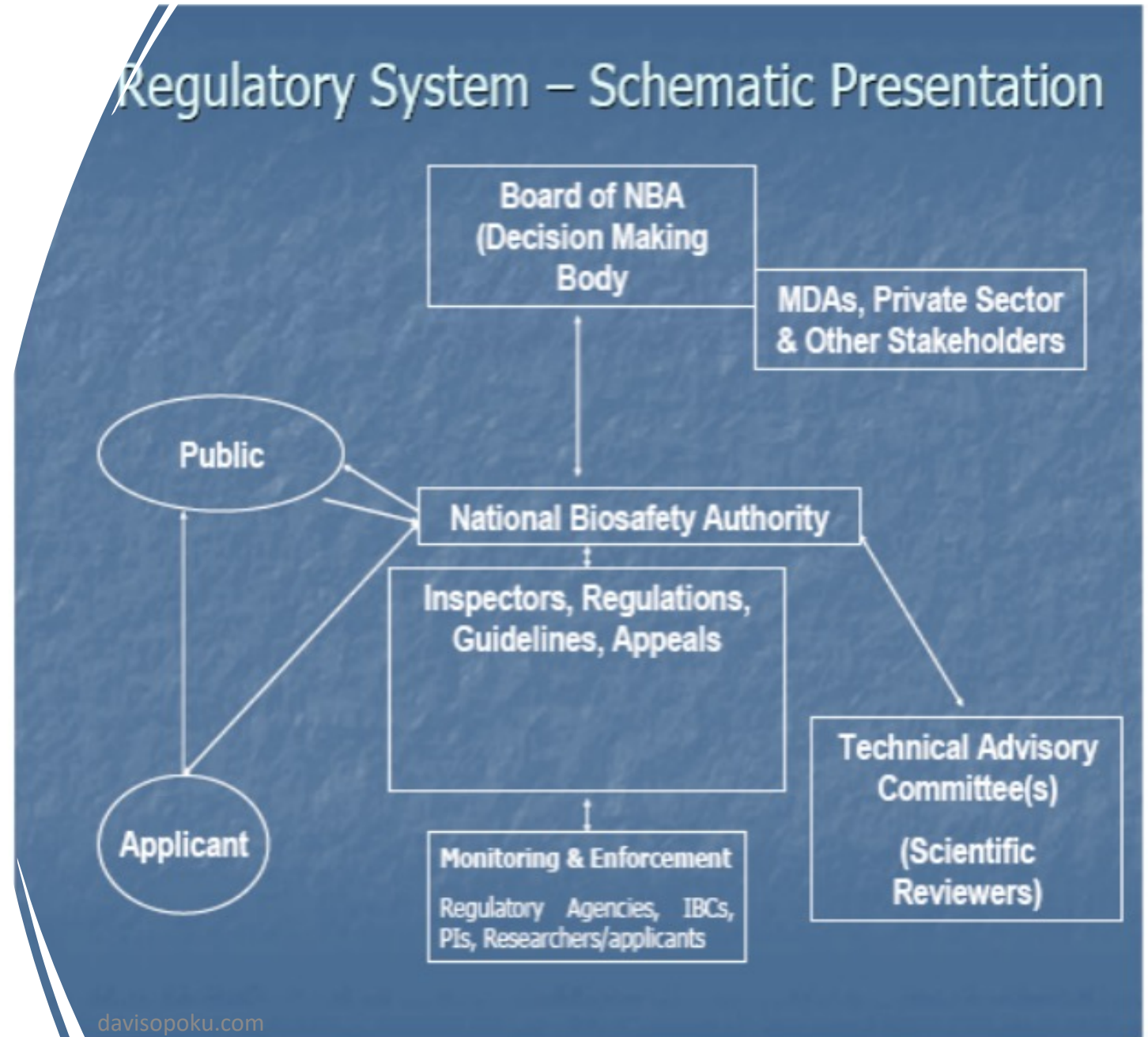
# **NATIONAL BIOSAFETY AUTHORITY**

- Focal Point for coordination between relevant government agencies and international bodies (CBD Secretariat) on the implementation of the Cartagena Protocol. Schedule 5 of Act 831 specifically identifies these government agencies as
  - Food and Drugs Authority (FDA)
  - Ghana Standards Authority (GSA)
  - Environmental Protection Agency (EPA)
  - Veterinary Services Directorate (VSD)
  - Plant Protection and Regulation Service Directorate (PPRSD)
  - Ghana Revenue Authority Customs Division
  - Metropolitan, Municipal and District Assemblies and any other local government authority (MMDAs)



# NBA: REGULATORY STRUCTURE

- Figure 1: Regulatory Structure. Adapted from *Status of Biosafety and Biosecurity Efforts in Ghana*, by W. K. Ampofo, 2008, p. 7.



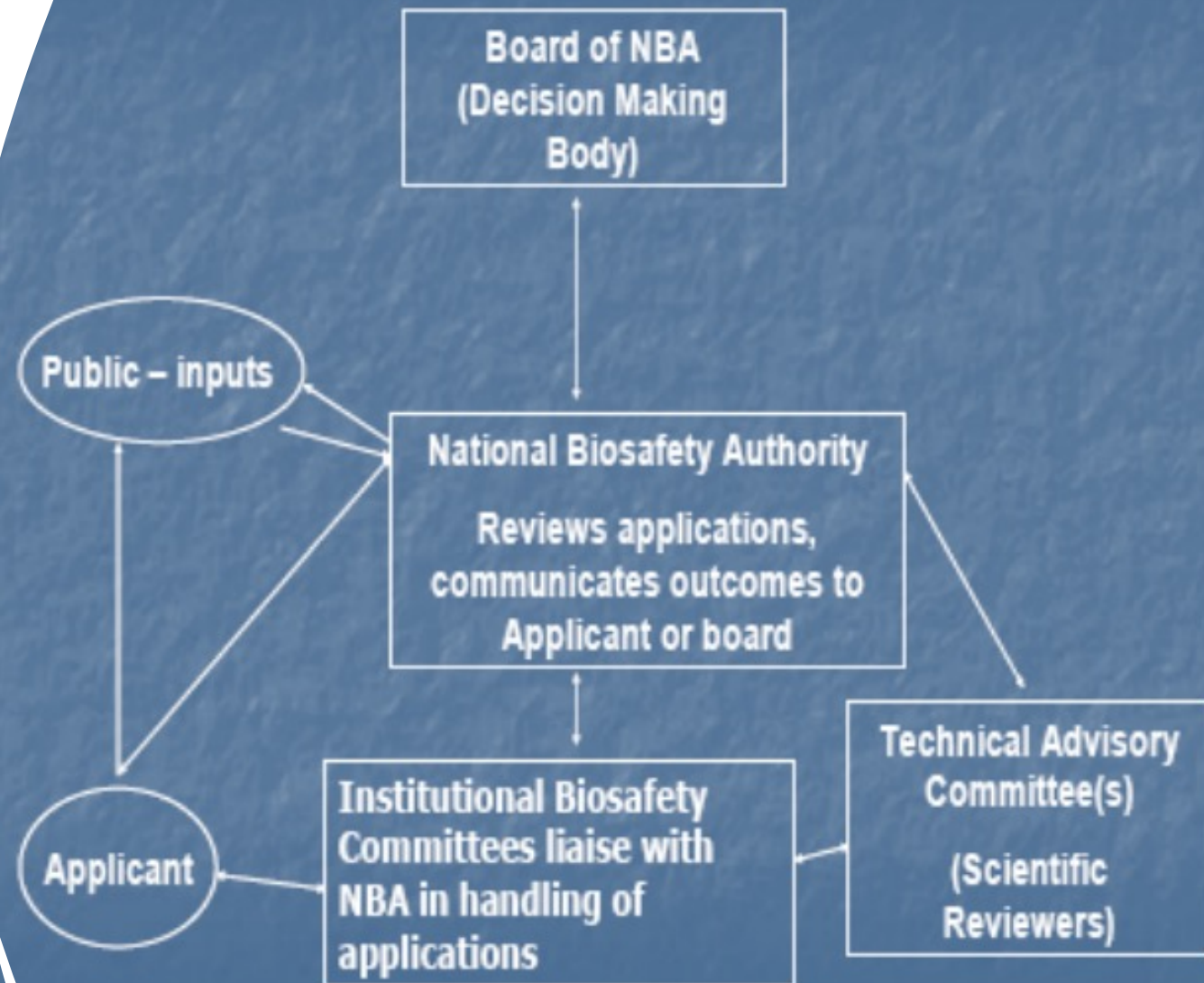
# **NBA: STANDARD SETTING**

- Sets standards for activities concerning Genetically Modified Organisms (GMOs). Sets the criteria for processing applications and making risk assessments on their
  - Contained Use
  - Confined Field Trials
  - Introduction to the Ghanaian market
  - Exports
  - Confidential Information
  - Transit
- Section 11-23, Act 831 & Regulations 11-25, L.I. 2383 set the procedure for handling applications (See below)

# NBA: SYSTEM FOR HANDLING APPLICATIONS

- Figure 2: System for Handling Applications. Adapted from *Status of Biosafety and Biosecurity Efforts in Ghana*, by W. K. Ampofo, 2008, p. 8.

Figure 2: System for Handling Applications – Schematic Presentation



# **PLANT PROTECTION AND REGULATION SERVICE DIRECTORATE (PPRSD)**

Crop Pest Management Division develops guidelines called Good Agricultural Practices (GAP) for the Integrated Pest Management of food crops.

Seed Inspection and Certification Division facilitates the production of quality seeds and planting materials.

Pesticide and Fertilizer Regulatory Division regulates the supply and use of pesticides and fertilizers by

- Training Regulatory Inspectors
- Registering and training fertilizer and pesticide dealers and applicators
- Publishing information material
- Maintaining records on fertilizer and pesticide usage
- Managing fertilizer and pesticide stock

# PPRSD & CUSTOMS

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- Plant Quarantine Division collaborate with the Customs Division of the Ghana Revenue Authority at all entry points to the country to maintain proper phytosanitary measures by
  - Implementation of relevant International Standards for Phytosanitary Measures
  - Inspection of fresh fruits and vegetables for export to ensure compliance with marketing quality standards
  - Supervision and training of Phytosanitary Inspectors
  - Developing and publishing information material
  - Maintaining records on plant imports and exports and their respective importers and exporters
  - Maintaining records on pests and diseases which may need to be quarantined
  - Issuing phytosanitary certificates and import permits
  - Operation of SPS Enquiry Point to provide information to IPPC and WTO on implementation of SPS Agreement

# FOOD AND DRUGS AUTHORITY

- Implementing arm is the Food Division of the FDA which derives authority from Part 7, Act 851 to ensure food available in Ghanaian markets meets quality standards.
- Activities include:
  - Processing and authorization of food products intended for sale on Ghanaian markets or for exports by the Food Evaluation and Registration Department (FERD)
  - Regulation of storage and manufacturing facilities of food products by the Food Inspectorate Department (FID)
  - Conducts market surveillance of authorized pre-packaged goods by the Food Market Surveillance Department (FMSD)

# **FDA ACTIVITIES CONTINUED**

Supporting local food processing, distribution and storage facilities and food service establishments to enhance compliance with regulatory requirements by Food Industrial Support Department (FISD)

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Regulation of commercial facilities that sell cooked foods, conducting foodborne disease surveillance and relaying information to INFOSAN for Ghana by Food Safety Management Department (FSMD)

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Coordinating with NBA to regulate facilities for agricultural produce and animal feed by Agro Produce and Biosafety Department (APBD)

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Coordinating with Veterinary Services Department (VSD) to regulate facilities for processing, storage and sale of animal products including meat products and eggs by Animal Products Department (APD)

# GHANA STANDARDS AUTHORITY

Food, Chemistry and Material Standards Division develops and harmonises standards on food to ensure compliance with international standards.

Units under division such as Food and Agriculture Standards Bureau develop and maintain national standards in food and agriculture.

Units such as Codex Contact Point assist the Division in efforts to harmonise national standards with regional and international standards with organisations such as

- Codex Alimentarius Commission (CAC)
- International Organization for Standardization (ISO)
- African for Organization Standardization (ARSO)
- ECOWAS Commission under the ECOWAS Standards Harmonization Mechanism (ECOSHAM)



- **VETERINARY SERVICES DEPARTMENT (VSD)**

- Liaises with FDA/APD to inspect facilities processing, storing and selling meat and animal products on retail
- Responsible for providing animal health services to boost livestock and poultry production in Ghana
- Protects public health by monitoring and controlling animal diseases communicable to human beings
- Protecting the health and safety of pets and zoological animals

- **ENVIRONMENTAL PROTECTION AGENCY (EPA)**

- Efficient environmental regulation, including the Integrated Environmental Planning and Management System, enables sustainable agriculture in relevant zones while protecting the biological diversity of Ghana's genetic resources.

- **MMDAs**

- Work with regulatory agencies at local government levels to ensure enforcement of regulations

# GHANA'S PROGRESS IN IHR



World Health  
Organization

e-SPAR  
STATE PARTY ANNUAL REPORT

## 1 IHR Capacity Progress Ghana 2018 - 2020

2	Year	Capacity	Average	Global Average	Region Average
3	2018	C1 Legislation and Financing	27	62	41
4	2018	C2 IHR Coordination and National IHR Focal Point Functions	50	67	47
5	2018	C3 Zoonotic Events and the Human-animal Interface	60	63	51
6	2018	C4 Food Safety	40	61	40
7	2018	C5 Laboratory	47	70	54
8	2018	C6 Surveillance	80	72	59
9	2018	C7 Human Resources	20	63	49
10	2018	C8 National Health Emergency Framework	27	59	36
11	2018	C9 Health Service Provision	40	60	39
12	2018	C10 Risk Communication	80	57	39
13	2018	C10 Risk communication	80	57	39
14	2018	C11 Points of Entry	40	52	31
15	2018	C12 Chemical Events	40	50	31
16	2018	C13 Radiation Emergencies	60	52	29
17	2019	C1 Legislation and Financing	33	66	43
18	2019	C2 IHR Coordination and National IHR Focal Point Functions	60	70	51
19	2019	C3 Zoonotic Events and the Human-animal Interface	60	67	50
20	2019	C4 Food Safety	40	65	43
21	2019	C5 Laboratory	53	72	55
22	2019	C6 Surveillance	80	73	61
23	2019	C7 Human Resources	20	63	49
24	2019	C8 National Health Emergency Framework	33	62	39
25	2019	C9 Health Service Provision	40	63	41
26	2019	C10 Risk Communication	80	60	43
27	2019	C10 Risk communication	80	60	43
28	2019	C11 Points of Entry	40	56	36

# GHANA'S PROGRESS IHR: CONTINUED

28	2019	C11 Points of Entry	40	56	36
29	2019	C12 Chemical Events	40	53	32
30	2019	C13 Radiation Emergencies	60	55	32
31	2020	C1 Legislation and Financing	33	66	47
32	2020	C2 IHR Coordination and National IHR Focal Point Functions	60	70	54
33	2020	C3 Zoonotic Events and the Human–animal Interface	60	66	52
34	2020	C4 Food Safety	40	65	46
35	2020	C5 Laboratory	53	74	61
36	2020	C6 Surveillance	80	76	64
37	2020	C7 Human Resources	20	64	52
38	2020	C8 National Health Emergency Framework	33	66	48
39	2020	C9 Health Service Provision	40	64	45
40	2020	C10 Risk Communication	80	64	55
41	2020	C10 Risk communication	80	64	55
42	2020	C11 Points of Entry	40	57	42
43	2020	C12 Chemical Events	40	53	32
44	2020	C13 Radiation Emergencies	60	55	32

Figure 3: IHR Capacity Project Ghana 2018-2020.

- Notably, Ghana's high surveillance rate contributed immensely to the country's relatively low Covid-19 morbidity rate of 1.9%.

# REFERENCES

- Ampofo, W. K. (2008, May 28). *Status of Biosafety and Biosecurity Efforts in Ghana* [PowerPoint Slides]. Center for International and Security Studies, University of Maryland. [https://spp.umd.edu/sites/default/files/2019-07/southafrica\\_workshop08\\_ampofo.pdf](https://spp.umd.edu/sites/default/files/2019-07/southafrica_workshop08_ampofo.pdf)
- Institute of Medicine and National Research Council. (2006). *Globalization, biosecurity, and the future of the life sciences*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/11567>
- Manzella, D., Vapnek, J., & Food and Agriculture Organization of the United Nations. (2007). *Development of an analytical tool to assess national biosecurity legislation*. Rome: Food and Agriculture Organization of the United Nations. Accessed August 4, 2022 from <https://www.fao.org/3/a1453e/a1453e.pdf>
- World Health Organisation. (n.d). Electronic State Parties Self-Assessment Annual Reporting Tool. Accessed August 4, 2022 from <https://extranet.who.int/e-spar/#capacity-score>

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