



NATIONAL BIOSAFETY AUTHORITY

Championing for a Biosafe Nation

STRATEGIC PLAN

2020 - 2025

Publication of National Biosafety Authority



Food security, Affordable housing,
universal health care,
Manufacturing and Job creation





NATIONAL BIOSAFETY AUTHORITY

STRATEGIC PLAN

2020-2025



NATIONAL BIOSAFETY AUTHORITY

Vision

A world-class Biosafety agency

Mission

To ensure and assure safe development, transfer, handling, and use of genetically modified organisms (GMOs).

Core values

In the implementation of the Strategic Plan and achieving its mandate the Authority will be guided by the following core values: Good governance and integrity, professionalism, customer focus, and inclusiveness

Motto

Championing for a biosafety nation

PHOTO ILLUSTRATION



National Biosafety Authority CEO, Prof. Dorington O. Ogoyi (4th from Right), receiving representatives from ISAAA and KALRO during the submission of the GM Cassava application.



National Biosafety Authority CEO, Prof. Ogoyi (Left), inspecting the Bt-cotton Trials at KALRO- Mwea.



NBA staff members having a group photo during the meeting to develop the 2020 - 2025 NBA Strategic Plan in Naivasha, Kenya.



Members pausing for a group photo during the site visit for inspecting the Confined Field Trials (CFT) demonstration of Insect Protected Bt-Maize Hybrids in Kitale.

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ABBREVIATIONS AND ACRONYMS

AOP	Annual Operational Plan
BCH	Biosafety Clearing House
BRED	Biosafety Risk Evaluation Department
CEO	Chief Executive Officer
CoE	Centre of excellence
COP	Conference of Parties
CSD	Corporate Service Division
CSOs	Civil Society Organizations
CSR	Corporate Social Responsibility
CUE	Commission for University Education
DFA	Director Administration and Finance
DTS	Director Technical Services
ERP	Enterprise Resource Program
GDP	Gross Domestic Product
GMOs	Genetically Modified Organisms
GoK	Government of Kenya
HOD	Head of Department
HR	Human Resources
IBCs	Institutional Biosafety Committees
ICT	Information Communication and Technology
ISO	International Organization for Standardization
ITES	IT Enabled Services
KPA	Key Performance Areas
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MIS	Management Information System
MoALFI	Ministry of Agriculture Livestock, Fisheries and Irrigation
MoE	Ministry of Education
MTP	Medium Term Plan
NBA	National Biosafety Authority
NPBTs	New Plant Breeding Techniques
NGOs	Non-Governmental Organizations
PAS	Performance Appraisal System
PESTEL	Political, Economic, Social, Technological, Ecological and Legal
SCM	Supply Chain Management
SDGs	Sustainable Development Goals
STI	Science Technology and Innovation
SWOT	Strengths, Weaknesses, Opportunities and Threats
TIVET	Technical and Vocational Education and Training
TMT	Top Management Team
TNAs	Training Needs Analysis
UN	United Nations

FOREWORD



With utmost pleasure, I present to you the National Biosafety Authority (NBA) Strategic Plan (2020- 2025). The expiry of the 2016-2020 strategic plan necessitated a new plan to guide the operations of the authority for the next 5 years. This strategic plan lays out our identified strategic visions and goals that will facilitate the Authority towards realizing its full potential and stimulate greatness in our partners and stakeholders.

NBA is a state corporation in Kenya mandated to ensure the safety of human and animal health and provide adequate protection of the environment from harmful effects that may result from genetically modified organisms (CMOs). Being a competent Authority mandated to regulate all activities involving GMOs in Kenya, developing this five-year plan presented a special opportunity to review our Achievements, Failures, Strengths, Weaknesses, Opportunities, and Threats. With this plan, we are not only prepared to be responsive to the changing needs in GMO matters but also make its an active and participating agent on bioactivities of GMOs for food, feed, industrial, research, or any other use.

The Strategic Plan (2020- 2025) is aligned to the Medium-Term Plan III of Kenya Vision 2030, the National Development Agenda, the Kenya Constitution, and other relevant policy documents. It is hinged on the following Key Result Areas: Biosafety management system, Legal and Regulatory Frameworks, Knowledge management and corporate branding and Partnership, linkages and collaborations. This will enable it to remain relevant while enhancing performance, meeting diverse expectations and aligning programs and activities to the overall Big Four Agenda.

To implement these strategic objectives, we will develop an enabling environment in which our human, financial and physical resources are suitably apportioned.

I would like to thank the Ministry of Education for their continuous support towards the implementation of our critical activities within the Authority. My sincere appreciation and thanks are due to the Strategic Plan Task Team who worked tirelessly from the start of the process, facilitating all the consultation sessions, and compiling and overseeing the development of several drafts of the new National Biosafety Authority Strategic Plan (2020-2025).

A handwritten signature in black ink, appearing to read 'Joseph Chavutia', written in a cursive style.

DR. JOSEPH KITHAKA CHAVUTIA
CHAIR OF BOARD
NATIONAL BIOSAFETY AUTHORITY

PREFACE



decision making.

The National Biosafety Authority (NBA) was established in 2009 with a mandate to exercise control over transfer, handling and use of genetically modified organisms (GMOs). The Authority was established to regulate research and commercial use of GMOs with a view to ensuring safety of human health and provision of an adequate level of protection of the environment. The Authority shall establish a transparent science-based and predictable process to guide the

This Strategic Plan outlines the strategic direction NBA will follow. It sets out the Vision, Mission, Goals, and Strategic Objectives for the period 2020-2025 to ensure that the Authority is effective in achieving positive outcomes for regulating research and commercial use of GMOs in Kenya. To achieve its purpose, the Strategic Plan contains definite robust programmes and actions that focus on ways and means of effective implementation of our mandates.

This Strategic Plan builds on the national priorities as spelt out in Vision 2030 and Medium Term Plan III, the Big 4 Agenda among other national, sectoral, and stakeholder considerations. The Authority is also committed to supporting the Government to implement the United Nations' new 2030 Agenda for Sustainable Development, including the Sustainable Development Goals (SDGs).

In developing this Strategic Plan, we have taken stock of our strengths, weaknesses, opportunities, and threats and have fully appreciated the underlying challenges facing us. We have also taken cognizance of the stakeholders of NBA and thus embraced the spirit of inclusiveness and consultations in developing this document. Among the key achievement of the Strategic Plan 2016-2020 was the approval of Bt cotton for Environmental release and Placement in the market in January 2020. This was made possible by the Cabinet's decision to approve Bt cotton for cultivation. The Authority was also able to transit from being ISO certified 9001:2008 to 9001:2015.

We owe our gratitude to Cabinet Secretary, Principal Secretaries, and the staff of the Ministry for Education Science and Technology and other Government Ministries and Departments for their invaluable contributions to the Strategic Plan.

To all the stakeholders who contributed either directly or indirectly to the successful preparation of the Strategic Plan 2016-2020, we want to thank you most sincerely.

In the course of implementing the new Strategic Plan, we will conduct Monitoring, Evaluation, and Reporting to determine whether the expected impacts have been achieved. We will measure our performance and, where necessary, adjust to emerging strategic directions. Reports indicating the progress will be shared with the management, implementation partners, and stakeholders.

A handwritten signature in black ink, appearing to read 'D. Ogoyi', written in a cursive style.

PROF. DORINGTON O. OGOYI
CHIEF EXECUTIVE OFFICER
NATIONAL BIOSAFETY AUTHORITY

EXECUTIVE SUMMARY

The National Biosafety Authority (NBA) was established by the Biosafety Act No. 2 of 2009. The overall mandate of Authority is to exercise general supervision and control over the development, transfer, handling, and use of genetically modified organisms (GMOs) to ensure the safety of human and animal health and provide adequate protection of the environment. This includes all activities of GMO for food, feed, industrial, research, or any other use. To achieve this objective, the Authority has established a transparent science-based and predictable process to guide decision making on applications for approval of research and commercial activities involving GMOs.

This 2020-2025 Strategic Plan will guide NBA in conducting its operations as stipulated in the Biosafety Act, 2009. The Strategic Plan is aligned with the 2010 Constitution of Kenya, Vision 2030, the 'Big Four Agenda', and the Medium-Term Plan III.

The Authority's Vision is: World-class biosafety agency, while the mission is: To ensure assure safe development, transfer, handling and use of genetically modified organisms (GMOs).

In this strategic plan, the NBA activities will revolve around the following 5 Key Result Areas:

1. Biosafety management system

- To carry out a risk assessment and socio-economic impact assessments of GMOs
- To enhance compliance and enforcement capacities on biosafety
- To serve as a regional Centre of Excellence on biosafety management

2. Legal and Regulatory Frameworks

- To review the legal and regulatory framework on biosafety
- To advice the Government on biosafety policy issues

3. Knowledge management and corporate branding

- To enhance Knowledge Management framework
- To promote public awareness and public participation on biosafety
- To enhance visibility and corporate image

4. Partnership, linkages and collaborations

- To enhance synergies through collaboration with stakeholders and partners
- To strengthen linkages with partners and compliance with international obligations

5. Institutional capacity and resource mobilization

- To enhance staff and infrastructure capacities
- To mobilize, optimally allocate and prudently utilize financial resources
- To improve quality management and good corporate governance systems

CHAPTER 1: HISTORICAL, LEGAL AND INSTITUTIONAL FRAMEWORK

1.1 Historical profile of NBA

The Government of Kenya recognizes the role biotechnology can play in poverty reduction, enhancing food security and in the conservation of biodiversity as well as the environment, but on the other hand recognizes that if applied irresponsibly, modern biotechnology can result in unforeseen negative impacts on human health, the environment, and biodiversity.

Kenya is a signatory to the Cartagena Protocol on Biosafety having signed in the year 2000 followed by ratification in 2003. The Cartagena Protocol on Biosafety is a supplementary agreement to the Convention on Biological Diversity. Its objective is to contribute to ensuring the safe transfer, handling and use of living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health.

The Government of Kenya approved the National Biotechnology Policy in 2006 which provided policy direction in the safe applications of Biotechnology in the country. The policy proposed the enactment of the relevant Biosafety laws and the establishment of the National Biosafety Authority (NBA) as a way of domesticating the provisions of the Cartagena Protocol. The Biosafety Act was enacted in 2009 to regulate all activities involving genetically modified organisms (GMOs) in Kenya. It established the National Biosafety Authority (NBA) to exercise supervision and control over the transfer, handling and use of genetically modified organisms with a view to ensuring the safety of human and animal health as well as the provision of an adequate level of protection of the environment. The Authority also serves as the focal point to the Cartagena Protocol on Biosafety.

Under the biosafety Act the following regulations have been developed; the Biosafety (Contained use) Regulations, 2011; the Biosafety (Environmental Release) Regulations, 2011; the Biosafety (Import, Export, and Transit) Regulations, 2011; and the Biosafety (Labelling) Regulations, 2012.

The Authority shall respect, and uphold the Constitution of Kenya, 2010 through the functions and services offered to its stakeholders. The Articles of the Constitution of Kenya, 2010, that are relevant to the Authority's mandate include Article 11 (2) (b) that recognizes the role of science and indigenous technologies in the development of the country; Article 42 on right to a clean and healthy environment; and Article 43 (1) (c) on right to safe food.

1.2 Global Context

1.2.1 Sustainable Development Goals (SDGs)

The Authority is committed to support the Government to implement the United Nations' 2030 Agenda for Sustainable Development, including the Sustainable Development Goals (SDGs) adopted by the UN General Assembly on 25 September 2015. The Authority will contribute towards the achievement of the following relevant SDGs;

1. **Poverty:** End poverty in all its forms everywhere

2. **Food:** End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
3. **Health:** Ensure healthy lives and promote wellbeing for all at all ages
4. **Economy:** Promote sustained, inclusive and sustainable economic growth, full and productive employment, and decent work for all
5. **Ecosystems:** Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation, and halt biodiversity loss

1.2.2 African Union Agenda 2063

The African Union (AU) Agenda 2063 lays down a master-plan for transforming Africa into a global powerhouse. It outlines the path on how the continent can achieve the Pan African vision of an integrated, prosperous, and peaceful Africa, driven by its citizens, representing a dynamic force in the international arena.

The AU Science, Technology, and Innovation Strategy for Africa 2024 (STISA-2024) is part of the AU Agenda 2063 which embraces science, technology, and innovation as multifunctional tools and enablers for achieving Africa's development goals. The strategy is anchored on six distinct priority areas that contribute to the achievement of the AU Vision. These are: Eradication of Hunger and Achieving Food Security; Prevention and Control of Diseases; Communication (Physical and Intellectual Mobility); Protection of our Space; Live Together– Build the Society; and Wealth Creation. The Authority will undertake several activities to ensure the realization of the strategy.

1.2.3 Kenya's Development Agenda

1.2.3.1 Kenya Vision 2030

The development agenda for Kenya is anchored on Vision 2030, which is the development blueprint for the country. It aims to create a globally competitive and prosperous country with a high quality of life by the year 2030. It envisages transforming Kenya from a developing country to a newly industrialized middle-income country by the year 2030. Vision 2030 is anchored on three key pillars: economic, social, and political. The Vision is implemented through five-year Medium-Term Plans.

1.2.3.2 Third Medium Term Plan (2018-2022) (MTP III)

The National Biosafety Authority will promote an effective and efficient regulatory framework that regulates modern biotechnology for, among others, maximizing productivity in agriculture and industry, protecting the environment, conserving biodiversity, bio-prospecting, and generally improving the quality of human welfare. Modern biotechnology being a Science, Technology, and Innovation tool, underpins the critical areas of national development as identified in the Vision 2030 Third Medium Term Plan programme on Biotechnology and Biosciences specifically Biotechnology stewardship. Under this, the Authority will facilitate the safe application and adoption of Biotechnology through

technology stewardship of the approved National Performance Trials (NPT) for the insect protected and water-efficient Bt. Maize and Bt. Cotton.

1.2.3.3 The Big Four Agenda (Enhancing Manufacturing, Food and Nutrition Security and Universal Health Coverage)

The Government has prioritized policy objectives under the Big Four Agenda that will lead to accelerated growth of the economy. These include enhancing Manufacturing, Food and Nutrition Security and Universal Health Coverage. The Authority shall contribute towards the achievement of the Big Four Agenda in the following areas:

a. Manufacturing

The Authority shall play a key role in the manufacturing sector more specifically in the textile sub-sector. With the approval by NBA for Bt cotton to proceed with National Performance Trials (NPTs) and the appointment of Bt cotton commercialization Task Force by Government, the Bt cotton is expected to play a significant role in the manufacturing sector specifically in the textile sector. This will be in the production phase and the entire value chain including ginneries, apparel factories, EPZ leading to the employment of youth and women, generation of income to farmers, generation of wealth, and ultimately reduction of poverty in the country.

The NBA shall contribute to manufacturing Action Plan by implementing the following operations;

- i). Conducting risk assessment and socio-economic impact assessment for open cultivation and placing on the market of Bt cotton.
- ii). Post-release monitoring that entails general surveillance and case-specific monitoring.
- iii). Strengthening National Capacities in institutions to be involved in the monitoring of the Bt cotton.
- iv). Public awareness and public participation on biosafety and biotechnology especially on Bt cotton-growing areas.

b. Food security and nutrition

The Authority shall play a key role in ensuring food security in ensuring access to safe and nutritious foods improved through biotechnology techniques. The Authority has given approvals on GMO projects addressing several agricultural and livestock production constraints such as drought, nutritional deficiencies, plant pests and disease, animal diseases among other stresses. More recently, the Authority granted an approval for commercialization of Bt cotton and an approval for environmental release for Bt-Maize for conducting national performance trials (NPTs), a key step towards commercialization. The Bt maize once commercialized will address the menace of stem borers and Fall Army worms where maize is grown thus ensuring food security.

The NBA shall contribute to Food Security by implementing the following operations;

- i). Monitoring of Approved Projects and Surveillance Programs
- ii). Establishment of a molecular lab for GMO testing and analysis.
- iii). Strengthening National Capacity and Capability on biotechnology

- iv). Conduct risk assessment of GMO projects and make timely and scientifically sound decisions.
- v). Public awareness on biosafety and biotechnology
- vi). Implement international agreements where Kenya is party to, on matters of biotechnology and biosafety.

c. Universal health care

With regard to health care, NBA in line with her mandate plays a critical role in the safety assessment of biotechnology products to ensure safety to human and animal health as well as protection of the environment. This is done through an established risk assessment process involving food safety assessment and environmental risk assessment of biotechnology products in line with international protocols and Biosafety Act as well as Regulations. By ensuring safety of GM foods that is nutritious, NBA shall significantly contribute to preventive health care.

1.2.4 Legislations Relevant to NBA

The biosafety legal and institutional framework is premised on biosafety Act,2009 which Established NBA and stipulates its mandate as well as the operational parameters. Under The Act, regulations were formulated for handling of elements at different stages of GMOs product development cycle. The Act further identified regulatory agencies with which NBA has to maintain a consultative relationship in undertaking its mandate. These Agencies implement laws regulating matters relating to environment, standards development, pest control products, plant health and public health among others.

1.3 Mandate

The overall mandate of NBA is to exercise general supervision and control over development, transfer, handling and use of genetically modified organisms (GMOs) so as to ensure safety of human and animal health and provide adequate protection of the environment. This includes all activities of GMO for food, feed, industrial, research or any other use.

1.4 Core Functions

The Biosafety Act, 2009 lists the functions of NBA as follows:

- a) To consider and determine applications for approval for the development, transfer, handling and use of genetically modified organisms, and related;
- b) To co-ordinate, monitor and assess activities relating to the development, safe transfer, handling and use of genetically modified organisms in order to ensure that such activities do not have adverse effect on human health and the environment;
- c) To co-ordinate research and surveys in matters relating to the safe development, transfer, handling and use of genetically modified organisms, and to collect, collate and disseminate information about the findings of such research, investigation or survey;

- d) To identify national requirements for manpower development and capacity building in biosafety;
- e) To advise the Government on legislative and other measures relating to the safe development, transfer, handling and use of genetically modified organisms;
- f) To promote awareness and education among the general public in matters relating to biosafety;
- g) To establish and maintain a biosafety clearing house to serve as a means through which information is made available facilitate the exchange of scientific, technical, environmental and legal information on, and experience with, living modified organisms;
- h) To exercise and perform all other functions and powers conferred on by the Act.

1.5 Rationale of the strategic plan 2020-2025

The Authority has implemented two strategic plans since inception; the second one ended in March 2020. The development of this strategic plan was informed by the need for

- a) To align the Authority's Strategic direction with the National Development Agenda
- b) To make strategic provisions for emerging issues in biotechnology
- c) To outline NBA's strategies in order to achieve its mandate and functions
- d) a new plan to guide the operations of the Authority for the next 5 years upon expiry of 2016-2020 Strategic Plan.

1.6 Methodology of developing the Strategic Plan

In developing this strategic plan, a management committee was constituted with the mandate to support the Board to develop the draft strategic plan and drive the entire process to a successful completion. The process involved a consultative and participatory approach with relevant stakeholders to the authority which included the following key steps:

- a) End-term review of the previous strategic plan (2016-2020) to determine the challenges and lessons learnt during its implementation and for consideration in the development of this strategic plan.
- b) Data analysis through desk review of the relevant documents and consultative meetings with management, and staff.
- c) Drafting of the strategic plan 2020-2025: This process was undertaken by the strategy management committee which brought in the services of an external expert.
- d) Stakeholders Engagement: The draft strategic plan was presented to stakeholders for their review and feedback.
- e) Board Approval: The Final Draft Strategic Plan was submitted to the Board of Directors for adoption and approval.
- f) Launch the Strategic Plan 2020-2025: The approved strategic plan was launched.

This Strategic Plan has been prepared in line with the government policy guidelines on Strategic Planning.

CHAPTER 2: SITUATIONAL ANALYSIS

2.1 Introduction

National Biosafety Authority developed the 2016-2020 Strategic Plan that was aligned to the Medium-Term Plan II of the Kenya Vision 2030. To gauge performance during the 2016-2020 implementation periods, the organization undertook an evaluation of its Strategic Plan. Lessons learnt from the evaluation were taken into consideration during the development of the current 2020-2025 Strategic Plan.

This Strategic Plan will help NBA to position itself strategically in its operational environment by aligning itself effectively to the changes taking place therein. This will enable it to remain relevant while enhancing performance, meeting diverse expectations and aligning programmes and activities to the overall Government development agenda/Big four agenda. In line with the Government Policy Framework, the Strategic Plan is aligned to the Medium-Term Plan III of Kenya Vision 2030, the Kenya Constitution, and other relevant policy documents.

2.1.1 Achievements

During the period 2016-2020, the Authority has achievements include the following:

1. Approved BT Cotton for Environmental release that will contribute to the manufacturing pillar of the Big 4 Agenda
2. Approved BT maize for National Performance Trials (NPTs)
3. Approval of 32 contained use GMO projects and 12 Confined Field Trials cumulatively. The GMO projects are being experimented in various research facilities in the country.
4. Authority enhanced Biosafety awareness creation by successfully holding six (6) Annual Biosafety Conferences since its inception.
5. Registered and built capacity of institutional biosafety committees (IBCs) in local research and academic institutions in Kenya.
6. Built key partnerships with international organizations for technical capacity building of NBA board members and staff as well as other stakeholders. Some of the partners include USAID, FAO and NEPAD.
7. Drafted key guidelines such as Genome Editing and Genetically Modified Animal Guidelines
8. The Authority is ISO certified and transited from ISO 9001:2008 to ISO 9001:2015.
9. Established and operationalized regional offices in Mombasa, Namanga, JKIA, and Busia
10. Automation of Authority's processes and procedures (Enterprise Resource Planning, EDMS, ISMS, Kenya National Single Window System)
11. The Authority was allocated land for the Authority's head office and GMO testing and reference molecular lab at the Vet labs, Kabete Nairobi.
12. Developed a project concept note for the lab construction which was forwarded to the Ministry of Education for subsequent submission to the National Treasury for approval and funding consideration.

2.1.2 Key challenges

- a) Inadequate institutional capacity.
- b) Regulatory challenges in adapting to new and emerging technologies.
- c) Lack of harmonized regional biosafety regulatory framework.
- d) The slow rate of adoption and applications of Biotechnology in Agriculture, medical, and industry.
- e) Misinformation of the public due to fast and widespread fake news due to advances in digital communication.
- f) The slow rate of development of biotechnology regulatory regimes within the region
- g) The Government ban on importation and use of GM foods that hampers the implementation of the Biosafety Act

2.1.3 Lessons Learnt

Based on lessons learnt from the previous Strategic Plan 2016-2020, there is a need to:

- (a) Link the Strategic Plan implementation with performance management;
- (b) Enhance human resource capacity;
- (c) Strengthen monitoring, evaluation and reporting system;
- (d) Review and harmonize the regulatory framework;
- (e) Enhance awareness on the Authority's mandate; and
- (f) Diversify sources of funding.

2.2 Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis

This analysis aims at identifying the strengths, internal challenges, opportunities, and external threats. It enables the Authority to project its future development. During the current Plan, the Authority will take advantage of its strengths and the opportunities available in its effort to fulfil its mandate and will address internal weaknesses, and mitigate any external threats.

2.2.1 Internal Environment Analysis

The analysis is aimed at identifying the strengths and weaknesses of the Authority. The strengths which will enable it to accomplish its mandate and achieve the strategic objectives and the weaknesses which must be addressed to realize the strategic objectives during the period are summarized in the table below:

Table 1: *Internal environment analysis*

Strengths			
S/No	Strength	Strategic Implication	Strategic Response
1	Established by Act of parliament, Biosafety Act, 2009	The Authority is a body Corporate	<ul style="list-style-type: none"> ▪ Sensitize stakeholders on the provisions of the Biosafety Act • Ability to enter into formal partnerships

2	Skilled and competent staff	Ability to deliver on the Authority's Mandate	<ul style="list-style-type: none"> ▪ Proper placement and utilization of the employees ▪ Competitive remuneration
3	Well balanced competent and committed Board of Directors	Able to drive strategic direction Inculcate good governance	Enhance the capacity of the Board of Directors Enhance good governance practices Compliance with the Board charter
4	Sound Quality Management System- ISO 9001:2015 certified	Continuous improvement of NBA processes and services	Maintain the ISO 9001:2015 Certification
6.	Strategic positioning as a result of professional competency in biosafety matters relation to East Africa and the region;	The regional reference point on biosafety matters	Create a center of excellence on biosafety matters
7	Decentralized services for easy access	Accessible service delivery	Establishment of additional regional offices
8	Embracing new technologies in service delivery;	<ul style="list-style-type: none"> ▪ Cost-saving by using the new technology ▪ Fast accessibility to services 	Leverage on the new technology

Weaknesses

S/No	Weaknesses	Strategic Implication	Strategic Response
1	Insufficient financial resources;	Inability to meet NBA objectives	<ul style="list-style-type: none"> ▪ Lobby for additional financial resources ▪ Collaborate with more development partners
2	Limited biosafety expertise	Inadequate knowledge of biosafety	Linkages with Tertiary institutions for adoption of Biosafety curricula
3	Inadequate visibility and awareness about the Authority's mandate	Inadequate public awareness	Corporate rebranding
4	Inadequate number of staff	Inadequate capacity to deliver on the mandate	Recruit staff to optimal Levels
5	Inadequate resource Mobilization	Slow levels of programme implementation	Develop and implement a resource mobilization strategy

6	Insufficient public awareness	Negative public perception of GMOs	Enhance public awareness campaigns at the National and County level
Opportunities			
S/No	Opportunity	Strategic Implication	Strategic Response
1.	Political goodwill for Biosafety in Kenya	Facilitative policy framework on matters of biosafety	Continuous engagement with the policymakers
2.	Partnering with the county governments	Availability of opportunities to reach the public for awareness creation purposes and ease of management of the NPTs and inspection surveillance programs	Linkages with the County Government
3.	The increasing need for biotechnological interventions in national socio-economic development endeavour	Address emerging societal challenges through modern biotechnologies	Develop necessary frameworks for the management of emerging biotechnologies
4.	Support from development partners to fund NBA projects;	Stable resource for funding of NBA core programs	Development of funding proposals
5.	Access to professional training and awareness for a;	Well trained staff to carry out NBA mandate	<ul style="list-style-type: none"> ▪ Seek partnerships with the development partners ▪ Allocate sufficient resources for capacity building
6	Existence of strong collaborations and partnerships	Various sources of technical and financial support	<ul style="list-style-type: none"> ▪ Maintain and strengthen the collaborations
7.	A growing economy demanding the application of biotechnology in key sectorial areas.	The relevance of NBA to offer services for the regulation of biotechnology applications	Establish an effective and efficient biosafety regulatory system (Policy, legal and institutional)
8.	Dynamic digital communication.	Faster and widespread communication information	Leverage on ICT

Threats			
S/No	Threat	Strategic Implication	Strategic Response
1.	The overlapping regulatory mandate in the biosafety sector	The conflict between the various regulatory bodies regulatory sector	Offer advisory service to the Government on the review the existing legal frameworks that touch on biosafety
2.	Limited budgetary allocation by the exchequer	Inability to fully carry the NBA mandate	<ul style="list-style-type: none"> ▪ Diversify sources of revenue ▪ Negotiate for enhanced budgetary allocation
4.	Resistance by towards biotechnology by a section of the society	Low uptake of biotechnology	<ul style="list-style-type: none"> ▪ Carry out a science-based risk assessment to ensure the safety of biotechnology products ▪ Provide balanced and accurate information on biotechnology ▪ Labeling of biotechnology products for informed choices
5.	New epidemics and potential bioterrorism worldwide.	Inability to execute NBA mandate.	Advice on early warning systems.

2.3 Pestel Analysis

A broad Political, Economic, Social, Technological, Ecological, and Legal (PESTEL) scan was undertaken to describe the circumstances under which NBA operates to be able to appreciate the factors that will either support or impede the process of implementing the strategic plan. A synthesis of the outcome of the PESTEL analysis is presented in the table below:

Table 2: *PESTEL analysis of NBA operations*

Category	Issue	Strategic implication	Strategic Response
Political	Political stability	Long term planning for biosafety matters.	Develop policy and strategy for the advancement of biosafety/biotechnology
Economic	National budget constraints	Low allocation on biosafety matters	Align activities with available resources
		Disruption of planned activities.	Diversify sources of funding
Socio-Cultural	<ul style="list-style-type: none"> • Cultural practices and attitudes that do not support Biosafety • Poor knowledge 	<ul style="list-style-type: none"> • Low acceptance of biotechnology and innovations 	<ul style="list-style-type: none"> • Promote biosafety development. • Build capacity for communicating on biosafety matters/create

Category	Issue	Strategic implication	Strategic Response
	<p>and attitudes of the citizens on the potential of the country improving its capability in enhancing research in Biotechnology and Biosafety in the Country</p> <ul style="list-style-type: none"> Existing education and technical training curricula do not encourage the acquisition of modern skills and knowledge in Biotechnology and Biosafety. 		awareness
Technological	Increase in adoption of information and communication technologies	Effective and efficient business processes	Leverage on ICT to enhance service delivery.
	New and emerging technologies	Production of new products	Develop policy/strategy to advise on new and emerging technologies
	Cyber security	Increased cybercrime and threats	Develop the NBA's cybercrime strategy
Environmental	Enhanced emission of greenhouse gases into the atmosphere that is contributing to global warming and climate change.	The indirect effect on agricultural productivity, individual outputs, and therefore the overall quality of products approved by NBA.	Promote environment-friendly technologies in biosafety
Legal	Potential Litigation against the Authority	Poor corporate image	Enhance compliance with statutory requirements and legal obligations
		The high cost of litigation	Collaborate with the office of the Attorney General for representation

2.3.1 Stakeholder/ Partnership Analysis

A stakeholder analysis was conducted to identify the interests and expectations of NBA and its stakeholders. This involved taking an inventory of all parties that have a stake in this Strategic Plan taking into consideration the various ways they may influence its

implementation. This analysis was done to understand the nature and the extent of the functional relationships and the various stakeholder expectations.

The stakeholders of NBA as outlined in Table 4 include but not limited to Government of Kenya and relevant agencies, suppliers of inputs, financiers, the board of directors, customers, researchers, scientists, research and learning institutions, media, farmers, students, employees, the public and the community. These stakeholders have an interest in what NBA does as it impacts on them in one way or the other. NBA will endeavor to continue building good working relationships with them all.

Table 3: Stakeholders and their functional relationship with NBA

	Stakeholder	Expectations from stakeholders	Stakeholder obligations
1.	Government Ministries responsible for: <ul style="list-style-type: none"> ▪ Science and Technology; ▪ Finance; ▪ Agriculture; ▪ Trade and Industry; ▪ Environment; ▪ Health; and ▪ County Governments; and ▪ Other relevant government agencies Separate individual ministries into individual rows	<ul style="list-style-type: none"> ▪ Policy and legislative development ▪ Mobilize alternative resources ▪ Enforcement of regulations ▪ Ensuring compliance with law and regulations ▪ Safe deployment of GMOs 	<ul style="list-style-type: none"> ▪ A conducive policy and legal environment for operations of the Authority ▪ Adequate financial resources ▪ Enhanced supervision and control over the transfer, handling, and use of GMOs
2.	Employees	<ul style="list-style-type: none"> • Time and skills • Marketing of the Authority 	<ul style="list-style-type: none"> • Institutional productivity • Enhanced profile and corporate image of the Authority • Creating awareness of products and services of the Authority
3.	Regional and International bodies	<ul style="list-style-type: none"> • Advocacy • Capacity building • Technology transfer • Global engagements in negotiations • Financing 	<ul style="list-style-type: none"> • Increased National and international awareness of Biotechnology and Biosafety • Enhanced effectiveness and efficiency of the Authority • Additional financial resources to fill gaps

	Stakeholder	Expectations from stakeholders	Stakeholder obligations
4.	Research and learning institutions	<ul style="list-style-type: none"> ▪ Offer training, research, and consultancy services in Biosafety ▪ Clients ▪ Expert reviews 	<ul style="list-style-type: none"> ▪ Collaboration in research and training for improved relevant skills ▪ Informed decision making ▪ Conformity to the law
5.	Media	<ul style="list-style-type: none"> ▪ The media will be instrumental in advocacy programmes and disseminating information on Biotechnology and Biosafety 	<ul style="list-style-type: none"> ▪ Publicity ▪ Awareness ▪ Education
6.	The Public	<ul style="list-style-type: none"> ▪ Public participation in decision making ▪ Public participation in the development of policy and legal frameworks 	<ul style="list-style-type: none"> ▪ Public support for Biotechnology and Biosafety regulation ▪ Public confidence in decisions of the Authority

CHAPTER 3: STRATEGIC FOCUS

3.1 Introduction

The Authority has recognized the need for determination of its strategic framework for the purpose of achieving its mandate. This framework comprises of the vision, mission, core values, strategic objectives, and corresponding strategies.

3.1.1. Vision

World-class biosafety agency

3.1.2 Mission

To ensure and assure safe development, transfer, handling and use of genetically modified organisms (GMOs)

3.1.3 Core values

Good governance and Integrity, Professionalism, Customer Focus, Inclusiveness

- Good governance and integrity: The Authority embraces and practices good corporate governance. In this regard, the Authority shall ensure that all processes and procedures are carried out with efficiency, effectiveness, and are morally sound and ethical. The Authority's decision making processes shall be participatory, consultative, and reflects meritocracy, openness, and transparency.
- Professionalism: Building and maintaining a highly-skilled, diverse, and compassionate workforce.
- Customer Focus: Serving NBA's constituents by delivering programs that address their diverse needs.
- Inclusiveness: The Authority embraces corporate social responsibility and shall ensure that all decisions and actions are marked by human dignity, equity, social justice, inclusiveness, equality, human rights, non-discrimination, and protection of the marginalized. In all its activities, the Authority shall strive to respect and protect the environment.

3.2 Key Result Areas

In this strategic plan, the NBA objectives will revolve around the following 5 Key Result Areas:

1. Biosafety management system

- To carry out a risk assessment and socio-economic impact assessments of GMOs
- To enhance compliance and enforcement capacities on biosafety
- To serve as a regional Centre of Excellence on biosafety management

2. Legal and Regulatory Frameworks

- To review the legal and regulatory framework on biosafety
- To advise the Government on biosafety policy issues

3. Knowledge management and corporate branding

- To enhance Knowledge Management framework
- To promote public awareness and public participation on biosafety
- To enhance visibility and corporate image

4. Partnership, linkages and collaborations

- To enhance synergies through collaboration with stakeholders and partners
- To strengthen linkages with partners and compliance with international obligations

5. Institutional capacity and resource mobilization

- To enhance staff and infrastructure capacities
- To mobilize, optimally allocate and prudently utilize financial resources
- To improve quality management and good corporate governance systems

Table 4: Key Result Areas, Strategic objectives, and strategies

The strategy Implementation Framework is indicated in the appendix section

No.	Key Result Area	Strategic Objective	Strategy
1.	Biosafety management system	To carry out a risk assessment and socio-economic impact assessments of GMOs	Strengthen biosafety risk assessment and risk management systems of GMOs
			Strengthen social-economic impact assessment systems of GMOs for environmental release
		To enhance compliance and enforcement capacities on biosafety	Strengthen monitoring and surveillance program to ensure compliance with the Biosafety Act
			Strengthen operations at points of entry to ensure compliance with the Biosafety Act
			Contribute to the facilitation of trade involving GMOs

			Certification of facilities and capacity building of personnel conducting GMO research
		To serve as a regional Centre of Excellence on biosafety management	Position NBA as a regional biosafety Centre of Excellence
			Establish a regional reference laboratory for GMO detection
			Establish a platform for regional study tours on biosafety
2.	Legal and Regulatory Frameworks	To review the legal and regulatory framework on biosafety	Determine the appropriateness of the existing legal and regulatory framework in addressing new and emerging biotechnology and biosafety issues
			Assess the gaps in the existing legal and regulatory framework for adequacy and compliance with the international and regional biosafety requirements.
			Revise the legal framework with the participation of stakeholders
		To advise the Government on biosafety policy issues	Develop policy briefs on emerging biotechnology and biosafety issues
			Contribute in the review process of relevant policies on biotechnology and biosafety matters
3.	Institutional capacity and resource mobilization	To enhance staff and infrastructure capacities	Attract, recruit, develop and retain qualified, competent and cohesive workforce for high efficiency and productivity
			Adopt HR best practices for effective talent management
			Institutionalize Result based performance management system and reward-based approach for organizational performance
			Leveraging on ICT for efficiency and effectiveness in the Authority's operations
			Develop and institutionalize an efficient procurement system
			Develop and implement asset and fleet management framework
			Enhance the provision and maintenance of an appropriate working environment
		To mobilize, optimally allocate and prudently utilize financial resources	Diversify sources of finance
			Develop an elaborate mechanism for allocation of resources to prioritized programs
			Ensure prudent utilization of resources through enhanced financial management practices
			Strengthen internal controls in the financial

			management
		To improve quality management and good corporate governance systems	Enhance NBA Board capacity
			Enhance the risk management framework
			Maintain quality management systems for continual improvement
4.	Knowledge management and corporate branding	To enhance Knowledge Management framework	Establish a Knowledge Management system
			Establish a framework for access to information
			Ensure transparency and accountability in information sharing
		To promote public awareness and public participation on biosafety	Engage the public when making decisions on GMO's environmental release applications.
			Develop mechanisms to promote public awareness and education on biosafety.
To enhance visibility and corporate image	Enhance the Authority's online presence		
	Enhance Corporate visibility and image		
5.	Partnership, linkages, and collaborations	To enhance synergies through collaboration with stakeholders and partners	Develop instruments for collaboration and partnership
			Establish and maintain linkages with County Governments and other relevant agencies
		To strengthen linkages with partners and compliance with international obligations	Establish and strengthen global and regional linkages and partnerships on biosafety matters
			Compliance with international obligations and agreements on biosafety

CHAPTER 4: STRATEGY IMPLEMENTATION

4.1 Governance Framework

This chapter gives a highlight of the Authority's governance framework and the available capacity for implementation of the mandate with specific reference to the period 2020-2025. The governance framework in NBA takes cognizance of the relevant policies and laws. It comprises the Board of Directors at the strategic level and the management team headed by the CEO which is responsible for the day-to-day operations. The Board of Directors is responsible for policy formulation, strategic leadership, and providing overall oversight. The CEO is the accounting officer and is responsible for the overall coordination, implementation, monitoring, and evaluation of the Strategic Plan, including the implementation of Boards' decisions.

4.1.2 The Board

The Board of Directors is appointed under the provisions of Section 6 of the Biosafety Act, 2009. It comprises of the Chairperson and membership drawn from Ministries namely, science and technology, finance, agriculture and health; and three independent directors appointed by the cabinet secretary, two of whom are experts in biological, environmental and social sciences respectively; and one member with financial expertise. In addition, the Chief Executive Officer is an ex-officio member of the Board.

The Board operates through three committees responsible for technical matters, audit and finance & administration.

4.1.3 The Management

The management function is headed by the Chief Executive Officer who is responsible to the Board for day to day operations. The organization structure provides for two Directorates headed by Directors responsible for Technical services and Corporate Services, as shown in Annex 2. In addition to the Directorates, the Corporation Secretary and Legal Services as well as Internal Audit Departments report to the Board functionally while the Supply Chain department reports to the CEO.

The Technical Services division undertakes its functions through three Departments responsible for Biosafety Risk Evaluation, Compliance and Enforcement; and Biosafety Education and Awareness Departments. The CS and Legal Services Department provides the secretariat service for the Board and other support functions including legal, corporate communication and public relations; and corporate planning. The Corporate Services Directorate hosts various functions namely the Strategy and Planning, Human resource management, Administration, Finance and accounts; and Records and information management.

4.2 Proposed Staffing Levels

The Authority currently has forty-one (41) employees. Its anticipated that by 2025, the Authority will have attained a staffing level of 106 staff as tabulated below.

Table 5: Proposed staffing level for the National Biosafety Authority for the period 2020-2025

NO	CEO AND DIRECTORS	PROPOSED STAFFING LEVEL
1	CEO	1
2	Director, Technical Services	1
3	Director, Corporate Services	1
	DIRECTORATES	
A	DIRECTORATE OF TECHNICAL SERVICES	
1	Biosafety Risk Assessment Department	8
2	Compliance and Enforcement (HQs & Border post offices)	32
3	Biosafety Education & Awareness	8
4	Certification and Laboratory Services (Biosafety Officers, Lab Technicians and Lab Technologists)	16
B	DIRECTORATE OF CORPORATE SERVICES	
1	Administration Officers	2
2	Drivers	5
3	Secretaries	3
4	Office Assistants	1
5	Human Resource Officers	4
6	Security	1
7	Accountants	4
8	ICT Officers	3
9	Records and Knowledge Management Officers	2
10	Strategy and Planning Officers	3
11	Communication and Public Relation Officers	2
12	Receptionists	1
C	INDEPENDENT OFFICES	
1	Corporation Secretary and Legal Officer	2
2	Internal Auditors	3
3	Supply Chain Management Officers	3
Total		106

4.2.1 Organizational structure (Annex 2)

The organizational structure of the National Biosafety Authority is presented in annex 2.

4.3: Resource requirements

The total resource requirement for the implementation of this Strategic Plan is derived from the budget column of the implementation matrix. The estimated total five-year budget is **Kshs. 2,089,000,500**. The overall budget will be distributed across the five years through the annual budgets which will be based on the prioritized and approved programmes for implementation in each financial year. This budget will however be revised regularly to accommodate the prevailing economic situation and changing dynamics during the implementation timeframe.

Table 6: Total Resources required for the period 2020-2025

Key Result Area	Strategic Objective	Financial Resource Requirements Estimate (KES. Million)					
		2020/21	2021/22	2022/23	2023/24	2024/25	Total
1. Biosafety Management System	1. To carry out risk assessment and socio-economic impact assessments of GMOs	10.3	10.1	9.3	10.1	9.3	49.1
	2. To enhance compliance and enforcement capacities on biosafety	51.5	52.1	50.1	51.5	52.1	257.3
	3. To serve as a regional Centre of Excellence on biosafety management*	0.4	50	400	300	249.6	1000
	Sub-Total	62.2	112.2	459.4	361.6	311	1306.4
2. Legal and Regulatory Frameworks	4. To review the legal and regulatory framework on biosafety	0.65	2.825	0.625	1.375	1.375	6.850
	5. To advice the Government on biosafety policy issues	1.3	1.3	1.3	1.3	1.3	6.50
	Sub-Total	1.95	4.125	1.925	2.675	2.675	13.35
3. Institutional capacity and resource	6. To enhance staff and infrastructure	116.8	126.0	128.0	131.2	143.0	645.0

mobilization	capacities						
	7. To mobilize, optimally allocate and prudently utilize financial resources	1.94	1.94	1.94	1.94	1.94	9.7
	8. To improve quality management and good corporate governance systems	2.890	5.890	2.890	2.890	2.890	17.45
	Sub-Total	121.63	133.83	132.83	136.03	147.83	672.15
4. Knowledge management and corporate branding	9. To enhance knowledge management framework	5.7	2.8	1.2	1.2	1.2	12.1
	10. To promote public awareness and public participation on biosafety	9.2	13.2	9.2	13.2	9.2	54.0
	11. To enhance visibility and corporate image	0.9	8.4	2.4	4.4	2.4	18.5
	Sub-Total	15.8	24.4	12.8	18.8	12.8	84.6
5. Partnership, linkages and collaborations	12. To enhance synergies through collaboration with stakeholders and partners	1.5	1.5	1.5	1.5	1.5	7.5
	13. To strengthen linkages with partners and compliance with international obligations	1.0	1.0	1.0	1.0	1.0	5.0
	Sub-Total	2.5	2.5	2.5	2.5	2.5	12.5
Grand Total		204.08	277.06	609.46	521.61	476.81	2,089

***The allocation refers to the proposed Capital development project towards the establishment reference GMO detection Laboratory**

a) Projected Recurrent Expenditure

All the Strategic objectives will be achieved through the recurrent budget expenditure except for strategic objective 3.2(Establish a regional reference laboratory for GMO detection).

b) Projected Development Expenditure

The Authority plans to establish a modern GMO laboratory during the strategic plan period.

4.3.1: Source of funds and Resource Mobilization

The Authority majorly depends on the Government Exchequer as a revenue source of its required financial resources. In order to avail adequate financial resources for the successful implementation of this strategic plan the following measures will be prioritized;

4.3.2: Participation in the annual MTEF budgeting process.

The MTEF process uses the sector working group model to determine financial needs of public organization for allocation of government funds every financial year. NBA will be based on this plan prioritize its annual programmes and bid for required financial resources every year through the Education Sector Working Group where it falls under. It is projected that source of revenue will avail 90% of the financial resources required for the full implementation of the strategic plan.

4.3.3 Development of Funding Proposals.

The Authority will also develop funding proposals for resource mobilization from potential development partners interested in biotechnology programmes.

4.3.4 Fees and Levies for Services.

Finally, the Authority will raise funds from allowable fees and levies charged for services rendered in its normal course of business/ operations. It is projected that with the planned review of the Biosafety Act 2009, this source of income will be boosted significantly. The review will open more revenue streams by creating more chargeable services rendered by the Authority.

4.4: Measures to eliminate wastage

NBA shall take the following measures to eliminate wastage:

1. Prudent management of petty cash
 - a. Establish petty cash limit to be approved by the management
 - b. Ensuring that the petty cash is accounted for before the release of subsequent top-ups.
 - c. Availing a pre-approved list of petty cash expense items and ensure any item outside the list is subject to approval by the CEO or DFA.
2. Proper management of reimbursements
 - a. Availing of receipts or other relevant documents to back the refund claims.

- b. Strictly adhere to set budgets allocations for the expense items relating to reimbursable funds.
- 3. Strict adherence to annual procurement plan and procurement law
 - a. Develop and approve the annual procurement plan
 - b. Pre-qualify suppliers of goods and services
 - c. Establish approval limits for different levels of approvers on a maker checker model.
- 4. Strictly adhere to the procurement plan and guidelines. Reduction on paper printing
 - a. Ensure that printing is done only where necessary
 - b. Adopt other ways of information dissemination devoid of printing

CHAPTER 5: IMPLEMENTATION AND COORDINATION

5.1 Communicating the strategic plan

The Strategic Plan shall be communicated to staff to help them plan and implement set targets in the respective departments. Additionally, the plan shall be shared with our stakeholders and partners and will be available on the NBA website.

The Authority shall develop annual work plans and set performance contracts targets based on the Strategic Plan. This will help in the implementation of set targets in the strategic plan.

5.2 Coordination mechanisms

Reporting the progress of the implementation of the strategic plan is critical in adjusting strategic directions and measuring performance. Reports of the implementation status shall be

compiled by the Planning Department in consultation with other departments and availed to the Strategic Plan Implementation Committee. This shall be done on a quarterly and annual basis.

The reports will describe actions taken by the various departments toward achieving specific targets and strategies of the plan. Highlights of major achievements will be communicated to stakeholders as appropriate.

5.3 Linkages and collaboration

For the implementation of the Plan to be effective, the M&E will be an integral part of NBA's performance contracts signed between the Board and the National Government. The M&E will also form an integral part of the NBA's performance management system and will be linked to staff appraisal and reward systems. NBA will monitor and evaluate its activities and performance in the process of reporting on its performance contract on a quarterly and annual basis.

5.4 Risk and Risk Management

The implementation of this Strategic Plan faces potential risks that have to be mitigated if the Authority's mandate is to be realized. Therefore, it is imperative to identify possible risks that can have adverse impacts on the organization and plan for some mitigation strategies to put in place to manage potential risks. Possible risks were identified, ranked and suggested mitigation strategies provided in Table 7.

Heads of Directorate shall be responsible for identifying, assessing, and managing the risk within their areas of control and for ensuring that appropriate risk management activities are functioning effectively. The risk register will be constantly updated to ensure continuous management of risks. Below is the Authority's risk profile.

Table 7: Risk Analysis

Probability / Likelihood	
1	Low
2	Medium
3	High
4	Very High
Impact / Consequence	
1	Low
2	Medium
3	High

4	Very High
---	-----------

Risk Matrix					
		PROBABILITY			
		1	2	3	4
IMPACT	4	4	8	12	16
	3	3	6	9	12
	2	2	4	6	8
	1	1	2	3	4

Risk Level Cluster		Colour code
1 – 4	Low	Blue
5 – 8	Medium	Yellow
9 – 12	High	Orange
13 – 16	Very High	Red

Risk Treatment Response

LOW	Accept and monitor and does not go to the risk log
MEDIUM	Mitigate / treat to reduce the risk to low level or eliminate the risk totally

HIGH	Transfer/share the risk with 3rd party
VERY High	Avoid/terminate task/activity

S/ No.	Type of Risk	Risk Identified	Impact	Probability	Risk Level	Mitigation
1	Strategic Risk	New and emerging Biotechnology Techniques	2	3	Medium	Develop policies to address emerging technologies Adapt existing policies to cope with new technologies.
		Stakeholders perception that the Authority promotes Biotechnology	3	3	High	Act and be seen as neutral regulator Create awareness about Authority's mandate
		Organizational resistance to change	2	2	Medium	Adopt change management in the Authority
		Loss and damage of physical assets	3	1	Low	Insure assets
		Low corporate visibility	2	2	Medium	Up-scale public awareness creation Carry out corporate rebranding
		Weak biosafety Coordination framework	3	2	Medium	Strengthen Biosafety Coordination framework
		Negative corporate image	3	1	Low	Sustain good media relations Constant communication with public through diverse channels Organize open days/fora Put in place a crisis

						communication system
		Lack of Board of Directors	3	3	High	Consultation with line Cabinet Secretary, Head of Public Service and SCAC.
2	Operational risk	Inadequate equipment and infrastructure	3	2	Medium	Plan to procure key equipment and optimal use of available infrastructure
		Loss of professional staff	2	3	Medium	Improve terms and conditions of service Recruit more competent staff to optimal level Succession management
		Illegal GMO entry through porous border	3	2	Medium	Increase collaboration with partner border government agencies
		Lack of institutional GMO testing laboratory	3	3	High	Use of third party (Regulatory agencies) testing labs
		Corruption	3	1	Low	Internal controls Conducting integrity audits Sensitization of staff on ethical practices
3	Financial risk	Inadequate budgetary allocation	3	3	High	Negotiate for enhanced budget allocation Diversify sources of financial resources
		Financial losses due to fraud	3	1	Low	Comply with internal financial controls
		Inadequate resources to procure physical	3	2	Medium	Enhance resource mobilization

		assets				Diversify sources of financial resources
		Late disbursement of funds from Exchequer	2	3	Medium	Have various sources of funding Engage with line Parent Ministry and the National Treasury
4	Technological risk	Inefficient ICT operations Inefficient ICT infrastructure Limited resources to acquire modern information communication systems	3	2	Medium	Resource allocation for equipment and personnel training
		Low level of automation of processes and procedures Suboptimal operations	3	2	Medium	Upscale and upgrade technology
		Loss of manual and electronic records	3	2	Medium	Establish and implement information security management system (ISMS) Develop and implement a disaster management policy.
		Breach of systems security	3	3	High	Review and upgrade ISMS
5	Political risk	Political instability	3	2	Medium	Regularly scan the political climate and adapt appropriately

		Change government policies and priorities	3	2	Medium	Negotiate, adapt and/or influence policy formulation
6.	Legal risk	Overlapping Biosafety Regulatory mandate amongst agencies	2	3	Medium	Review and harmonize policy and legal framework
		Litigation against the Authority	2	2	Medium	Adhere to the laws and regulations Negotiations and use of alternative dispute resolution mechanisms Liaise with the Attorney General's office for support

CHAPTER 6: MONITORING, EVALUATION AND REPORTING

6.1 Monitoring Evaluation and Reporting framework

The implementation of this plan requires a framework for monitoring and evaluation which also entails determination of timelines and assignment of responsibilities. Monitoring the implementation of this plan constitutes systematic tracking of activities to assess progress. An effective Monitoring, Evaluation and Reporting system is critical to the successful implementation of this Strategic Plan. The system will seek to measure progress towards achievement of planned strategies and activities and provide feedback on the status of the implementation of informed decision making by Board and Management. An effective and result based Monitoring and Evaluation system will be set up that will ensure continuous monitoring using the identified indicators.

While monitoring will be an ongoing process to keep track on how a program is performing, evaluation shall be undertaken periodically to assess the strengths and weaknesses of programs, their capacities to achieve the goals assigned to them, and their impacts on those for whom they are intended to benefit. As such, evaluation will focus on, among other things, the processes of the programmes, their outcomes and its extended impacts. It will give overall sense of how well each program is working towards the attainment of associated goals and objectives and whether a need exists at a point in time for certain aspects of the program to be modified to increase efficiency and effectiveness.

Data will be collected on set targets and analysed regularly. This will ensure that any variances are detected early and remedial actions taken through resource allocation. Through monitoring; NBA shall obtain valuable data that will give indication of the extent of success of the program implementation. It therefore provides a quality control mechanism for a program.

Regular reporting at all levels is necessary for follow up and take early corrective actions.

6.2 Strategies for Monitoring and Evaluation

Monitoring and Evaluation (M&E) will provide the Management, stakeholders and implementation partners with data and information to measure progress, determine whether expected impacts have been achieved, and provide timely feedback in order to ensure that problems are identified early in implementation and that appropriate actions are taken. Monitoring will be an integral activity of all objectives and aims to assess the capacity of NBA and partnership and collaboration effectiveness in addressing the health sector issues. NBA and its programmes will be subject to evaluation in accordance with the policies and procedures established. The following strategies will be employed to monitor and evaluate the Strategic Plan;

a. Strategic Plan Implementation Committee

A Strategic Plan Implementation Committee composed of Management and other members will be responsible for following up and ensuring successful implementation of the Strategic Plan. The committee shall meet once per quarter.

b. Communicating the strategic plan to staff and stakeholders

The Strategic Plan shall be communicated to staff to help them plan and implement set targets in the respective departments. Additionally, the plan shall be shared with our stakeholders and partners and will be available in the NBA website.

c. Annual work plans and Performance Contracts.

The Authority shall develop annual work plans and set performance contracts targets based on the Strategic plan. This will help in the implementation of set targets in the strategic plan.

d. Data collection and analysis

The Strategic Plan Implementation Committee will develop data and information collection templates and procedures to measure performance as per the indicators and reports to management. The reports will describe the actions taken by the various departments towards achieving the set targets. Achievements shall be highlighted and negative variances shall be evaluated with a view to addressing the challenges.

6.3 Monitoring Tools

The Strategic Plan Implementation Committee shall employ both quantitative and qualitative methods to monitor implementation and performance of this Strategic Plan from various departments. The Strategic Plan Implementation Committee shall employ the logical framework as the preferred monitoring tool; however, other tools listed below may be used from time to time as appropriate;

a. Logical Framework tool (log frame)

The Strategic Plan Implementation Committee will use the logical framework (Annex 3) to monitor and evaluate the implementation of this strategic plan. The log frame will help in tracking the implementation and achievement of NBA's Strategies. It will assist in the identification of the expected causal links in the following results chain: inputs, activities, processes, outputs, outcomes and impact.

b. Variance Analysis

This will entail comparing the performance target with the actual achievements to reveal any variances. In case of any negative variance, NBA shall take remedial actions.

c. Ratio Analysis

Ratio analysis is concerned with efficiency related objectives. NBA will calculate the ratios quarterly, semi-annually and annually and the actual results compared with the standards (targets) that were established in the objectives. The differences between targets and actual levels will be identified and further analysis carried out to identify causes of the differences. This analysis will invoke appropriate remedial action by NBA's management. Trend analysis of the ratios will be used to clearly show the performance plan implementation and performance.

d. Budgetary Control

Under budgetary control, actual results will continually be checked against planned results and variances carefully investigated. If necessary, action plans will be changed so that they are brought in line with the budgeted results or the budget will be amended to take account of new developments.

6.4 Performance Review

Performance review shall be undertaken annually, mid-term and at the end of plan period.

a. Annual Review

At the end of each financial year, the Strategic Plan Implementation Committee will generate status reports on the implementation of the plan and communicate to the Board.

b. Mid Term Review

A midterm review will be undertaken after two and a half years giving a status report on the implementation of the plan and communicated to the Board.

c. End term review

At the end of five years, an end term review of the implementation of the strategic plan to determine the extent to which set targets have been achieved, any variances, challenges faced, lessons learnt and proposals for subsequent plan.

6.5 Linking M&E to Performance Management

For the implementation of the Plan to be effective the M&E will be an integral part of NBA's performance contracts signed between the Board and National Government. The M&E will also form an integral part of NBA's performance management system and will be linked to staff appraisal and reward system. NBA will monitor and evaluate its activities and performance in the process of reporting on its performance contract on quarterly and annual basis.

6.6 Reporting

Reporting the progress of the implementation of the strategic plan is critical in adjusting strategic directions and measuring performance. Reports of the implementation status shall be compiled by the Planning Department in consultation with other departments and availed to the Strategic Plan Implementation Committee. This shall be done on quarterly and annual basis.

The reports will describe actions taken by the various departments toward achieving specific targets and strategies of the plan. Highlights of major achievements will be communicated to stakeholders as appropriate.

ANNEXES

ANNEX 1: Implementation matrix

NATIONAL BIOSAFETY AUTHORITY STRATEGIC PLAN 2020-2025

STRATEGY PLAN IMPLEMENTATION MATRIX

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
Key Result Area 1: Biosafety management system												
Strategic Objective 1: To carry out risk assessment and socio-economic impact assessments of GMOs												
1.1	Strengthen biosafety risk assessment and risk management systems of GMOs	Development of appropriate guidance materials for carrying out risk assessment and risk management Review of appropriate guidance materials for carrying out risk assessment and risk management Development and review of guidelines on regulation of new and emerging technologies Development and review of guidelines in respect to	No. of guidance documents No. of reviewed guidance documents No. of guidelines developed/reviewed No. of guidelines developed/reviewed	Annually annually 2 years Annually	5 5 3 5	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	1 1 1 1	DTS DTS DTS DTS	3,000,000 3,000,000 1,800,000 3,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
		environmental release of GMOs e.g. coexistence policy, LLP										
		Review all received GMO applications using the developed guidance documents	% of reviewed applications	Quarterly	100%	100	100	100	100	100	DTS	20,000,000
		Develop training materials on risk assessment and risk management	No. of training materials developed/ reviewed	Annually	5	1	1	1	1	1	DTS	5,000,000
		Review of training materials on risk assessment and risk management	No. of reviewed guidance documents	Annually	5	1	1	1	1	1	DTS	5,000,000
1.2	Strengthen social economic impact assessment systems of GMOs for environment release	Development of guidelines on social economic considerations	No. of guidelines developed	Once	1	1					DTS	1,000,000
		Review of guidelines on social economic considerations	No. of guidelines reviewed	Every 2 years	2	1		1			DTS	2,000,000
		Develop training materials on socio-economic considerations	No. of training materials developed	Once	1	1					DTS	400,000
		Review training materials on socio-economic considerations	No. of training materials reviewed	Once	1			1			DTS	400,000
		Review GMO applications for environmental release on social economic aspects	% of reviewed applications	Quarterly	100%	100	100	100	100	100	DTS	4,500,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
Strategic Objective 2: To enhance compliance and enforcement capacities on biosafety												
2.1	Strengthen monitoring and surveillance program to ensure compliance to the Biosafety Act	Inspect all containment facilities and confined field trial sites prior to commencement of a GMO research project	No. of inspection reports	Quarterly	20	4	4	4	4	4	DTS	5,000,000
		Conduct monitoring and inspection of contained use GMO projects	No. of inspection reports	Bi annual	10	2	2	2	2	2	DTS	6,000,000
		Conduct monitoring and inspection of confined GMO projects	No. of inspection reports	Bi annual	10	2	2	2	2	2	DTS	6,000,000
		Conduct monitoring and inspection of National Performance Trials sites	% of NPTs monitored and inspected, reports	Bi annual (2 rounds per year)	100%	100	100	100	100	100	DTS	5,000,000
		Conduct post release monitoring during commercialization of GMOs	% of commercialized GMOs	Annually	100%	100	100	100	100	100	DTS	10,000,000
		Conduct GMO market surveillance	No. of reports per region	Annually	60	12	12	12	12	12	DTS	10,000,000
		Review quarterly and annual progress reports on GMO projects	% of submitted reports	Annually	100%	100	100	100	100	100	DTS	Nil
		Development and review of post-release monitoring guidelines of GMOs in Kenya	Guidelines, No. of reports	After every 2 years	2	1		1			DTS	5,500,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
		Inspect all containment facilities and confined field trial sites prior to commencement of a GMO research project	No. of inspection reports	Quarterly	20	4	4	4	4	4	DTS	5,000,000
2.2	Strengthen operations at points of entry to ensure compliance with the Biosafety Act	Inspection of cargo at ports of entry Integration and use of the online cargo clearance system to screen and clear consignment of interest Participation in border management committee meetings	% of consignments inspected % of consignment clearance No. of meetings attended	Quarterly Quarterly Quarterly	100% 100% 100	100	100	100	100	20	DTS DTS DTS	3,000,000 4,000,000 10,000,000
		Open and operationalize new points of entry	No. of new opened points of entry	Biennial	2	-	-	1	1	-	TMT	33,000,000
2.3	Contribute to facilitation of trade involving GMOs	Issuance of GMO-free certificates and no objection letter Participate in national trade facilitation committee and national trade negotiation council activities	% of reviewed applications, No. of GMO-free certificates No. of reports	Quarterly Annually	100% 5	100	100	100	100	100	DTS DTS	10,000,000 500,000
2.4	Certification of	Develop and review inspection checklists	No. of checklists	Biennial	2	1	1	1	1	1	DTS	2,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
2.5	facilities conducting GMO research and registration of Institutional Biosafety Committees (IBCs)	Carryout inspection of the GMO facilities	% of inspected facilities, Inspection reports	Bi annual	100%	100	100	100	100	100	DTS	2,000,000
		Certification of facilities that meet NBA requirements	% of certified facilities, reports	Quarterly	100%	100	100	100	100	100	DTS	8,000,000
		Registration of IBCs	No. of registered IBCs	Annually	10	5					DTS	400,000
		Renewal of IBC registration certificates	% of renewed certificates	Annually	100%	100	100	100	100	100	DTS	400,000
		Train the NBA Board and staff on risk assessment, risk management and socio-economics	No. of trainings held	Annually	5	1	1	1	1	1	TMT	15,000,000
		Training on risk assessment, risk management and socio economics to stakeholders	No. of trainings held	Bi annual	10	2	2	2	2	2	DTS	5,000,000
		Train different target groups on biosafety compliance	No. of sensitizations held	Quarterly	10	2	2	2	2	2	DTS	7,000,000
		Training of biosafety inspectors and stakeholders on the use of the online cargo clearance system	No. of trainings held	Annually	5	1	1	1	1	1	DTS	9,000,000
		Training of biosafety inspectors and laboratory staff on sampling, detection and identification of GMOs	No. of trainings held	Annually	10	2	2	2	2	2	DTS	14,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
		Training of customs and border control officials and other relevant stakeholders on sampling, detection and identification of GMOs	No. of trainings held	Annually	25	5	5	5	5	5	DTS	15,000,000
		Training of biosafety experts in the region	No. of biosafety experts trained	Biennial	2	1				1	TMT	14,000,000
		Capacity build different target groups on the use of the BCH	No. of trainings	Annually	5	1	1	1	1	1	TMT	15,000,000
		Train the NBA Board and staff on risk assessment, risk management and socio-economics	No. of trainings held	Annually	5	1	1	1	1	1	TMT	12,500,000
		Training on risk assessment, risk management and socio economics to stakeholders	No. of trainings held	Bi annual	10	2	2	2	2	2	DTS	15,000,000
		Train different target groups on biosafety compliance	No. of sensitizations held	Quarterly	10	2	2	2	2	2	DTS	10,000,000
Strategic Objective 3: To serve as a regional Centre of Excellence on biosafety management												
3.1	Position NBA as a regional biosafety Centre of Excellence	To establish a platform for hosting regional BCH	% of completion	Once	100%					100		3,000,000
		Regular update of the regional BCH platform	% of updated BCH platform	Annually	100%	100	100	100	100	100	DTS	500,000
		Create a regional pool of biosafety	No. of biosafety experts identified	Twice	20	10		10			DTS	500,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget		
						Y1	Y2	Y3	Y4	Y5				
3.2	Establish a regional reference laboratory for GMO detection *	experts (Food safety, ERA, SE)												
		Development of concept note for establishment of reference GMO Testing Lab	No. of concept note developed	Once	2							DTS	400,000	
		Capital costs (Consultancy and fees, site access, fencing, preparation and utility)	Percentage of completion of construction and equipping till commissioning	Quarterly	20	20	20	20	20	20				45,000,000
		Construction of a molecular laboratory for the detection and identification of GMOs	Percentage of completion of civil works	Annually		25	25	50	50			TMT	443,000.00	
3.3	Establish a	Procurement of equipment and consumables	Percentage of completion of procurement of equipment and consumables	Once	100%			100			TMT	295,000.00		
		Recurrent costs (Labour cost, Operating costs, Maintenance costs, Calibrations, Certifications and Servicing).	Fully functional molecular laboratory	Continuous from year 4	100%	-	-	50	50	50			195,000.00	
		Development and review of GMO sampling and testing Protocols	No. of protocols developed	Biennial	2		1					DTS	1,500,000	
		Testing of samples for GMO presence	% of samples tested	Annually	100%			100	100	100		DTS	8,000,000	
		Host regional	No. of	Annually	5	1	1	1	1		DTS	1,000,000		

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	platform for regional study tours on biosafety	delegations on study tours on biosafety Showcasing past, present and future study tours/events in NBA website	delegations hosted Percentage of events posted in the website	Annually	100%	100	100	100	100	100	DTS	100,000
		Establish exchange programmes and study tours with other biosafety agencies	No. exchange programmes and/or study tours held by NBA Board and Secretariat	Annually	5	1	1	1	1	1	DTS	7,000,000
Key Result Area 2: Legal and Regulatory Frameworks												
Strategic Objective 4: To review the legal and regulatory framework on biosafety												
4.1	Determine the appropriateness of the existing legal and regulatory framework in addressing new and emerging biotechnology and biosafety issues	List the emerging issues not covered under the existing policy on biotechnology, laws and regulations Prepare an advisory brief to the relevant agency on the pertinent policy areas for review	Number of regulatory documents reviewed Submitted brief	Once Biennial	100% 2	100%				1	DTS CS/DL CEO DTS CS/DL	400,000 Nil
4.2	Assess the gaps in the existing legal and regulatory	Analyse the statutes and regulations vis-à-vis the international and/or regional conventions and	Number of regulatory documents and conventions/protocols reviewed	Twice	100%	10%	90%				DTS CS/DL	400,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	framework for adequacy and compliance with the international and regional biosafety requirements.	protocols. List the identified gaps and seek concurrence of the relevant stakeholders	Number of issues for inclusion in the revised document	Once	100%	100%					CEO DTS	50,000
4.3	Revise the legal framework with participation of stakeholders	NBA Board review on the proposed amendments Prepare the Bill with guidance and in consultation with the relevant government agency Convene stakeholder participation forums Submit the draft Bill for approval and enactment	Number of forums held, meeting report Draft of the Bill	Once Quarterly	1 100%	1	25%	25%	25%	1	TMT CEO CS/DL	2,000,000 2,500,000
			Number of forums held	Biannually	2		1	1	1	1	TMT	1,500,000
			Draft Bill submitted to the relevant government agency	Once	1				1		CEO CS/DL	Nil
Strategic Objective 5: To advise the Government on biosafety policy issues												
5.1	Develop policy briefs on emerging biotechnology and biosafety issues	Draft policy briefs on emerging biotechnology and biosafety issues	Draft policy brief	Annually	5	1	1	1	1	1	DTS CS/DL	1,000,000
5.1	Develop policy briefs on emerging biotechnology and biosafety issues	Stakeholder review on draft policy briefs on emerging biotechnology and biosafety issues	Reviewed policy brief	Annually	5	1	1	1	1	1	DTS CS/DL	5,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
		biosafety issues										
		Publishing of developed policy briefs	Published policy briefs	Annually	5	1	1	1	1	1	CEO CS/DL	Nil
		Submit policy briefs on emerging issues	Number of briefs	Annually	5	1	1	1	1	1	CEO DTS	Nil
5.2	Contribute in the review process of relevant policies on biotechnology and biosafety matters	Prepare proposal briefs on areas of focus	Number of briefs submitted to relevant agencies	Annually	5	1	1	1	1	1	CEO DTS	500,000
Key Result Area 3: Institutional capacity and resource mobilization												
Strategic Objective 6: To enhance staff and infrastructure capacities												
6.1	Attract, recruit, and retain qualified, competent and cohesive workforce for high efficiency and productivity	Undertake efficient staff recruitment	Recruitment process approvals Recruitment reports 100% compliance of vetting	Annually	5	1	1	1	1	1	DFA	9,000,000
		Formulate and implement Rewards and retention policy	Approved Rewards and retention policy	Once	1	1	100%	100%	100%	100%	DFA	8,000,000
		Team building	Team building reports	Annually	5	1	1	1	1	1	DFA	9,000,000

No	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
			Staff meeting Minutes	Semi-Annually	10	2	2	2	2	2	DFA	400,000
		Review rewards and retention policy	Review Rewards policy	Every 5 years	1					1	DFA	1,000,000
		Review HR Instruments	Reviewed HR policy and HR Instruments (organogram, HR career progression, staff establishment)	Once	4	4					DFA	2,000,000
		Implementation of HR Instruments	HRMAC Minutes on Promotions, Staff Performance and Staff compensation and Welfare Matters	Annually	100%	100%	100%	100%	100%	100%	DFA	432,500,000
		Provide a conducive staff work environment	Work Environment Audit reports	Annually	100%	100%	100%	100%	100%	100%	DFA	10,000,000
		Formulate and Implement Institutional Succession policy	Implementation Reports	Annually	1	1	100%	100%	100%	100%	DFA	5,000,000
6.2	Continuous	Formulation and	Approved	Once	1	1	100%	100%	100%	100%	DFA	5,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	learning and development for strengthened competencies and skills	implementation of training and development policy	training and development policy									
		Review training and development policy	Reviewed policy	Every three years				1			DFA	3,000,000
		Formulation and implementation of a Coaching Mentorship policy	Mentorship and coaching policy	once	1			100%		100%	DFA	3,000,000
6.3	Institutionalize Result based performance management system and reward-based approach for organizational performance	Review coaching and mentorship policy	Reviewed policy	Every two years							DFA	2,000,000
		Implement a PC aligned vibrant staff performance management system	Signed JDs by all staff Signed Individual work-plans by all staff Signed Staff Performance Appraisal tools and Reports	Annually	5	1	1	1	1	1	DFA	3,500,000
		Formulate and Implement Talent management policy	Approved Talent Management Policy	Once	1					100%	DFA	3,500,000
6.4	Embrace/adopt HR best practice for efficiency and productivity	Adopt Resource Information System	Module/Program performance reports Review/Maintenance reports	Annually	100%	100%	100%	100%	100%	DFA	6,000,000	

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
6.5	Leveraging on ICT for efficiency and effectiveness in the Authority's operations	Develop ICT strategy	Approved ICT Strategy	Once	100%	100%					DFA/ HICT	2,000,000
		Implement and monitor effectiveness of ICT Strategy	Implementation reports	Annually	5	1	1	1	1	1	DFA/ HICT	2,500,000
		Review the ICT Policies	Reviewed ICT Policies	Once	100%	100%					DFA/CS/ HICT	
		Acquire ICT Equipment's	Staff to computer ratio 1:1	Annually	100%	100%	100%	100%	100%	100%		6,000,000
		Develop and implement ISMS	ISMS Certification	Once	100%	100%					DFA/ HICT	4,000,000
		Maintain and continually improve ISMS	Operational ISMS	Annually	100%	100%	100%	100%	100%	100%	DFA/ HICT	2,000,000
		Upgrade and enhance ERP system	Licensed, upgraded and Functional ERP system.	Once	100%	100%	100%	100%	100%	100%	DFA/ HICT	5,000,000
		Increase internet connectivity bandwidth	Signed contract in place	Twice	2	1				1	DFA/ HICT	2,000,000
		Upgrade and	Upgraded Servers	Once	100%	100%					DFA/	3,500,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
6.6	Develop and institutionalize an efficient procurement system	maintain system servers									HICT	
		Offsite backup maintenance	Service report	Annually	5	1	1	1	1	1	DFA/HICT	1,500,000
		Review of supply chain manual/policy	Reviewed policy	Once	1	-	1	-	-	-	CEO,CS,SCM	2,000,000
		Prepare annual procurement/disposal plans	No. of annual plans	Annually	5	1	1	1	1	1	CEO,SCM	Nil
		Submission of compliance reports to the relevant oversight Bodies	No. of reports submitted	Quarterly/semi-annually and annually	20	4	4	4	4	4	CEO,SCM	Nil
6.7	Develop and implement asset and	Procurement of goods, works and services as per the annual procurement plans	%of compliance with annual procurement plans	Annually	100%	100%	100%	100%	100%	100%	CEO,TM T,SCM	85,000,000
		Registration/prequalification of suppliers	Approved prequalification list	Thrice	3	1	1	1	1	1	CEO,SCM	6,000,000
		Continuous updating of inventory register	Up to date inventory register	Quarterly	20	4	4	4	4	4	SCM	Nil
		Annual stocktaking	No. of reports	Quarterly	20	4	4	4	4	4	SCM	NIL
		Disposal Of Unserviceable, Obsolete And Surplus Stores And Equipment	No. of Reports	Annually	5	1	1	1	1	1	1	CEO,SCM
6.7	Develop and implement asset and	Continuous updating of asset register	Up to date asset register	Quarterly	20	4	4	4	4	4	DFA/PHRO/ADM	NIL
		Undertaking annual	No. of Inspection	Annually	5	1	1	1	1	1	DFA/	4,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	fleet management framework	vehicle valuations	reports									
		Routine service and maintenance of fixed asset	No. of Reports.	Quarterly	20	4	4	4	4	4		7,000,000
		Review of the transport manual	Approved reviewed Manual	Once	1	-	-	-	-	-		2,000,000
		Repairs of damaged fixed assets	No. of reports	Quarterly	20	4	4	4	4	4		
6.8	Enhance provision and maintenance of appropriate working environment	Provision of adequate staff working tools	Distribution list	Semi annually	10	2	2	2	2	2		3,600,000
		Acquiring a more spacious and permanent office premise	Own office building	Once		-	-	-	-	1		
		To carry out annual safety audits as per the OSHA Act and	Occupational safety certificate	Annually	5	1	1	1	1	1		
		Implement recommendations from the safety audits	Implementation reports	Annually	5	1	1	1	1	1		
		Staff sensitization on disaster preparedness health, environment and safety issues	Staff sensitization reports	Annually	5	1	1	1	1	1		1,000,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
Strategic Objective 7: To mobilize, optimally allocate and prudently utilize financial resources												
7.1	Diversify sources of finance	Develop and implement resource mobilization strategy	No. of Approved Strategies	Once	1	1						1,000,000
		Develop funding proposals	No of proposals	Annually	25	5	5	5	5	5		
		Engage in the annual government budgeting process	Annual GOK estimates	Annually	1.2bn	250m	250m	300m	300m	300m		3,500,000
7.2	Develop elaborate mechanism for allocation of resources to prioritized programs	Develop and disseminate annual priority programs	No. of approved annual programs reports	Annually	5	1	1	1	1	1		
		Review implementation of prioritized programs	Implementation reports	Quarterly and Annually	25	5	5	5	5	5		
		Develop budget preparation guidelines/ manual	No. of guidelines/manual	Once	1	1						1,000,000
		Develop and approve annual budget	No. of Approved Annual Budgets	Annually	5	1	1	1	1	1		1,000,000
		Budget implementation review management reporting	No. of management reports	Quarterly	20	4	4	4	4	4		1,000,000
7.3	Ensure	Compliance with	Expenditure	Quarterly/	20	4	4	4	4	4		NIL

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	prudent utilization of resources through enhanced financial management practices	approved annual institutional budgets Adhere to statutory financial reporting requirements	variance reports No. of financial statements submitted	Annually Quarterly/Annually	25	5	5	5	5	5	DFA/PFO	
7.4	Strengthen internal controls in the financial management	Review existing internal controls for adequacy, effectiveness and efficiency Design new /improve existing internal controls	No. of reviews No. of new/improved internal controls	Once Twice	1 2	1		1		1	DFA/PFO CEO/DF A/PFO	700,000 1,500,000
		Implement approved new/improved internal controls	Implementation reports	Annually	5	1	1	1	1	1	DFA/PFO	
Strategic Objective 8: To improve quality management and good corporate governance systems												
8.1	Enhance NBA Board capacity	Training of Board members Benchmarking for best Corporate Governance practices	Number of training reports Benchmarking reports	Annually Twice	5 2	1	1	1	1	1	TMT/IA TMT	2,700,000
8.2	Enhance the risk management framework	Initiate development of additional Risk Management guidelines Initiate review of existing Risk	New approved guidelines Approved revised guidelines	Once Once	1 1	1					CEO/RIS K COMM CEO/RIS K	1,500,000 1,500,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
		Management guidelines									COMM	
		Oversee implementation of approved Risk Management guidelines	Implementation report	Quarterly	20	4	4	4	4	4	IA	5,223,000
		Conduct impromptu and routine audits at the NBA offices and regional offices	Number of Audit Reports	Quarterly	20	4	4	4	4	4	IA	6,527,500
8.3	Maintain quality management systems for continual improvement	Maintain quality management systems for continual improvement	Conduct surveillance Audits	Audit reports	Bi annual	10	2	2	2	2		QMR
Key Result Area 4: Knowledge management and corporate branding												
Strategic Objective 9: To enhance Knowledge Management framework												
9.1	Establish a Knowledge Management system	Create an Information Centre	Operational office to be established	Annually	1	1					DFA	1,600,000
			Number of reports to be generated	Quarterly	4	1	1	1	1	1	RD	NIL
		Develop an EDMS	Operational EDMS	Once	100%	100%					DFA/RD/ICT	2,500,000
		Implement the EDMS	Signed contract in place	Annually	4	1	1	1	1	1	DFA/RD/ICT	1,000,000
9.2	Establish a framework for access	Develop an access to information policy	Access to information guideline or	Once	100%	100%					TMT	3,000,000

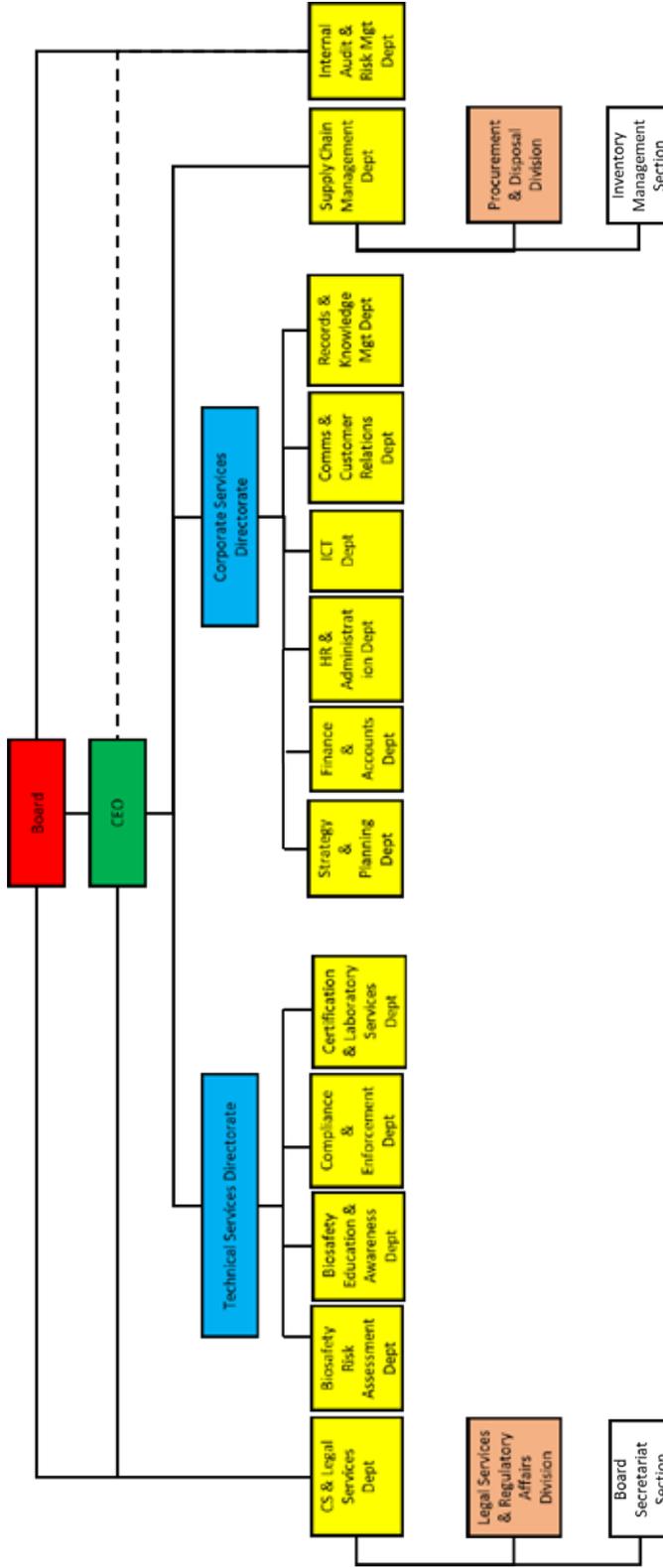
No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	to information		policy									
		Implement Access to Information policy and guidelines	Reports	Quarterly	4		1	1	1	1		3,000,000
9.3	Ensure transparency and accountability in information sharing	Avail accurate information on appropriate platforms	The level of access to accurate information	Annually	100%	100%	100%	100%	100%	100%		1,000,000
Strategic Objective 10: To promote public awareness and public participation on biosafety												
10.1	Engage the public when making decisions on GMOs environmental release applications.	Organize/sponsor Seminars and conferences	Reports	Annually	5	1	1	1	1	1		10,000,000
		Participate in Exhibitions	Reports	Annually	5	1	1	1	1	1		6,000,000
		Participate in Field days/visitors' days	Reports	Biannual	2	1	1	1	1	1		8,000,000
10.2	Develop mechanisms to promote public awareness and education on biosafety.	Use of social media and digital platforms	Reports	Quarterly	100%	100%	100%	100%	100%	100%		NIL
		Review of the Communication Strategy	Revised communication strategy	Biannual	2	1	1	1	1	1		8,000,000
		Participating in public outreach campaigns	Reports	Annually	5	1	1	1	1	1		5,000,000
		Utilize traditional media (print, outdoor	Reports	Annually	5	1	1	1	1	1		17,000,000

No	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
Strategic Objective 11: To enhance visibility and corporate image												
11.1	Enhance the Authority's online presence	& broadcast)										
		Web redesigning	Redesigned website,	Biannual	2	1		1			CD,ICT	1,500,000
		Develop social media policy	Social media policy,	Biannual	2	1		1			TMT/CD	3,000,000
		Acquire social media monitoring tool	social media monitoring tool in place	Once	100%	100%					CD/ICT	4,000,000
		Maintain the social media monitoring tool	Payment of subscription fee.	Annually	5	1	1	1	1	1	CD/ICT	2,000,000
11.2	Enhance Corporate visibility and image	Developing crisis communication plan/policy;	Operational Crisis communication plan/policy,	Biannual	2	1		1			TMT/CD	3,000,000
		Developing a Branding policy;	Operational Branding policy,	Biannual	2		1		1		TMT/CD	3,000,000
		Sustaining a vibrant social Media presence;	Reports	Quarterly	100%	100%	100%	100%	100%	100%	CD	NIL
		Sustain Quality customer service;	Reports	Quarterly	100%	100%	100%	100%	100%	100%	CD	NIL
		Conduct CSR;	Reports	Annually	5	1	1	1	1	1	CS/CD	2,000,000
		Vibrant Advertising;	Reports	Quarterly	100%	100%	100%	100%	100%	100%	CD	NIL

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
		Sustain media relations;	Reports	Quarterly	100%	100%	100%	100%	100%	100%	CD	NIL
Key Result Area 5: Partnership, linkages and collaborations												
Strategic Objective 12: To enhance synergies through collaboration with stakeholders and partners												
12.1	Develop instruments for collaboration and partnership	Draft, review and execute agreements	No. of agreements signed	Annually	5	1	1	1	1	1	DTS, TMT	2,500,000
12.2	Establish and maintain linkages with County Government and other relevant agencies	Enter into collaborations and MOUs with county governments	No. of MOUs signed	Annually	5	1	1	1	1	1	DTS, TMT	5,000,000
Strategic Objective 13: To strengthen linkages with partners and compliance with international obligations												
13.1	Establish and strengthen global and regional linkages and partnership on biosafety matters	Enter into agreements with global and regional partners	No. of agreements executed	Annually	5	1	1	1	1	1	DTS, TMT	1,000,000
13.2	Compliance with international	Participate in international forums on biosafety	No. of forums attended	Quarterly	20	4	4	4	4	4	CEO, DTS	1,500,000

No.	Strategy	Activities	Output indicators	Reporting schedule	Target for 5 years	Annual Targets					Responsible	Total Budget
						Y1	Y2	Y3	Y4	Y5		
	al obligations and agreements on biosafety	including COP-MOPs										
		Carry out activities set out in compliance action plans of the Cartagena protocol on biosafety	% of compliance	Quarterly	100%	100	100	100	100	100	DTS	1,000,000
		Submit complete national reports within the established deadlines	No. of reports	Annually	1		1				DTS	450,000
		Gather and Provide accurate and complete information in the BCH in accordance with the obligations under the Cartagena Protocol	% of compliance	Quarterly	100%	100	100	100	100	100	DTS	1,000,000
		Publish biosafety information and decisions in the central portal and national BCH	No. of decisions posted in the BCH	Quarterly	20	4	4	4	4	DTS	50,000	
ESTIMATED TOTAL FIVE-YEAR BUDGET : 2,089,000,500												

Annex 2: NBA Organogram



Annex 3: Log Frame for Monitoring the Implementation of the Strategic Plan

Project description		Objectively verifiable indicators of achievement	Sources and means of verification (split sources and means)		Assumptions
Theme		<i>What are the key indicators related to the theme</i>	<i>What are the sources of information for these indicators</i>		<i>What are the external factors necessary to sustain objectives</i>
Strategic objective					
Output					
Activities	<i>Activity 2</i>		<i>Inputs (means to implement activities)</i>	<i>Cost (Action cost to implement activities)</i>	
	<i>Activity 2</i>				
	<i>Activity 3</i>				

Quality Statement



NATIONAL BIOSAFETY AUTHORITY

QUALITY POLICY STATEMENT

The National Biosafety Authority (NBA) is mandated to provide supervision and control over the development, transfer, handling and use of genetically modified organisms (GMOs). The Authority is committed to being a world-class biosafety agency that meets and exceeds needs and expectations of its clients and other stakeholders to ensure and assure safety of human and animal health as well as the provision of adequate level of protection to the environment.

The Authority shall comply with Quality Management System (QMS) based on ISO 9001:2015 Standard and other requirements. To deliver on its mandate, the Authority shall ensure that:

- a. An effective Quality Management System is established, implemented and continually improved,
- b. A level of quality that enhances its image is maintained,
- c. Relevant statutory, regulatory requirements and best practices are complied with.

The Authority shall also ensure that quality objectives associated with this policy are established and reviewed periodically for continuing suitability, taking into account changes in the Quality Management System and other relevant practices.

The management shall also ensure that this policy is communicated and understood within the Authority.

Sign: _____

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CHIEF EXECUTIVE OFFICER

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