



NATIONAL ENVIRONMENT MANAGEMENT AUTHORITY

**NATIONAL BIODIVERSITY
CLEARING-HOUSE MECHANISM
(CHM)**

**STRATEGY AND ACTION PLAN FOR KENYA
(2026-2030)**



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ABBREVIATIONS AND ACRONYMS

ABS	Access and Benefit-Sharing
AWF	African Wildlife Foundation
BMS	Biodiversity Monitoring System
BMES	Biodiversity Monitoring and Evaluation System
CBD	Convention on Biological Diversity
CBOs	Community-Based Organizations
CHM	Clearing-House Mechanism
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COP	Conference of the Parties
EA	Environmental Audit
EIA	Environmental Impact Assessment
EMCA	Environmental Management and Coordination Act (Cap 387)
GBF	Global Biodiversity Framework
GIS	Geographic Information System
ICT	Information and Communication Technology
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPLCs	Indigenous Peoples and Local Communities
IUCN	International Union for Conservation of Nature
KALRO	Kenya Agricultural and Livestock Research Organization
KEPHIS	Kenya Plant Health Inspectorate Service
KEFRI	Kenya Forestry Research Institute

KFS	Kenya Forest Service
KMFRI	Kenya Marine and Fisheries Research Institute
KMGBF	Kunming–Montreal Global Biodiversity Framework
KNATCOM	Kenya National Commission for UNESCO
KWS	Kenya Wildlife Service
MDAs	Ministries, Departments, and Agencies
MEAs	Multilateral Environmental Agreements
NACOSTI	National Commission for Science, Technology and Innovation
NBMS	National Biodiversity Monitoring System
NBSAP	National Biodiversity Strategy and Action Plan
NGOs	Non-Governmental Organizations
NMK	National Museums of Kenya
Ramsar	Convention on Wetlands of International Importance (Ramsar Convention)
SEA	Strategic Environmental Assessment
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TNC	The Nature Conservancy
TWG	Technical Working Group
UNEP	United Nations Environment Programme
WCMC	World Conservation Monitoring Centre
WWF	World Wide Fund for Nature

FOREWORD

It is my distinct honor to present the Kenya National Biodiversity Clearing-House Mechanism (CHM) Strategy and Action Plan 2026–2030. This Strategy marks a significant step forward in strengthening the management, sharing, and accessibility of biodiversity information in Kenya, in alignment with our commitments under the Convention on Biological Diversity (CBD) and the Kunming-Montreal Global Biodiversity Framework (KMGBF).

Biodiversity forms the foundation of our ecosystems and sustains our livelihoods, culture, and national development. Effective conservation and sustainable use of our rich biological resources require timely, reliable, and accessible information that informs evidence-based decision-making across all sectors. The CHM provides a strategic and coordinated approach to achieving this goal by facilitating the collection, management, and dissemination of biodiversity data nationally, regionally, and globally.

This Strategy has been developed through a highly consultative and inclusive process, involving government ministries, departments and agencies, research institutions, universities, civil society organizations, local communities, and international partners. Their expertise, insights, and active participation in workshops and validation meetings have ensured that the Strategy is both practical and responsive to Kenya’s biodiversity priorities.

The Strategy leverages the Bioland platform, enabling the rapid establishment of a functional national CHM portal. This platform ensures that biodiversity information is organized, accessible, and linked to the global CHM, promoting knowledge sharing, technical cooperation, and capacity building.

I commend the Technical Working Group, the CHM Desk at NEMA, and all stakeholders for their dedication in producing a comprehensive Action Plan, which includes a 36-month operational roadmap, clear roles and responsibilities, and measures for monitoring, evaluation, and sustainability.

I urge all stakeholders to actively engage in the implementation of this Strategy, contribute data, and use the CHM as a tool to strengthen biodiversity governance, enhance policy development, and support sustainable development. By working collaboratively, we can ensure that Kenya’s biodiversity is effectively managed, safeguarded, and utilized for the benefit of current and future generations.

EMILIO MUGO

Board Chairman,

National Environment Management Authority (NEMA)

PREFACE

It gives me great pleasure to present the Kenya National Biodiversity Clearing-House Mechanism (CHM) Strategy and Action Plan 2026–2030, a critical instrument in strengthening Kenya’s national capacity to manage and share biodiversity information. This Strategy is a practical response to our obligations under the Convention on Biological Diversity (CBD) and the Kunming-Montreal Global Biodiversity Framework (KMGBF), and a strategic tool for enhancing evidence-based decision-making and governance in biodiversity management.

The development of this Strategy has been guided by extensive stakeholder consultations, expert workshops, and multi-institutional engagements, reflecting a whole-of-government and whole-of-society approach. The process has brought together government ministries, departments and agencies, research institutions, universities, civil society organizations, indigenous peoples and local communities, and international partners. Their participation has ensured that the Strategy is inclusive, actionable, and grounded in Kenya’s biodiversity priorities.

This Strategy introduces a practical and phased approach to operationalizing the National CHM. In particular, it leverages the Bioland platform, which provides a user-friendly, scalable, and rapidly deployable national CHM portal. This approach ensures that Kenya’s biodiversity data is organized, accessible, and linked to the global CHM, fostering technical cooperation, capacity-building, and knowledge exchange at national, regional, and global levels.

The Strategy sets out a clear vision, mission, strategic objectives, and a 36-month operational Action Plan, highlighting roles, responsibilities, timelines, and expected outputs. It also addresses potential risks, mitigation measures, and sustainability mechanisms to ensure the long-term institutionalization of the CHM within NEMA and across key biodiversity stakeholders.

As Director-General of NEMA, I reaffirm our commitment to providing the leadership, technical support, and institutional coordination necessary for the successful implementation of this Strategy. I call upon all stakeholders to embrace this Strategy, contribute data, actively participate in CHM activities, and work collaboratively to strengthen Kenya’s biodiversity governance and safeguard our natural heritage for present and future generations.

DR.MAMO B. MAMO, EBS.

Director-General

National Environment Management Authority (NEMA)

CHAPTER ONE: INTRODUCTION

1.1 Background

Biodiversity forms the foundation of Kenya's natural wealth and supports livelihoods, food security, ecosystem stability, and economic development. However, increasing pressure from land use change, climate change, pollution, and unsustainable exploitation of natural resources continues to threaten ecosystems and species globally and nationally. Addressing these challenges requires informed decision-making based on reliable biodiversity data, coordinated knowledge management, and effective sharing of information among institutions and stakeholders.

The Convention on Biological Diversity (CBD), adopted in 1992, provides the global framework for biodiversity conservation, the sustainable use of its components, and the fair and equitable sharing of benefits arising from the use of genetic resources. Parties to the Convention are required to take appropriate measures to conserve biodiversity and ensure that decisions affecting biodiversity are informed by sound scientific knowledge and accessible information.

Recognizing the importance of information exchange, Article 18 of the Convention calls upon Parties to promote technical and scientific cooperation, including through the establishment of a Clearing-House Mechanism (CHM). The CHM serves as a platform for sharing biodiversity-related data, knowledge, experiences, and best practices. It enables countries to connect institutions, researchers, policymakers, and other stakeholders, while facilitating access to information needed to support biodiversity conservation and sustainable use.

The role of the CHM has become even more important following the adoption of the Kunming–Montreal Global Biodiversity Framework (KMGBF) in 2022. The Framework provides a global roadmap for halting and reversing biodiversity loss through four long-term goals and twenty-three global targets to be achieved by 2030. Achieving these targets requires countries to strengthen their systems for collecting, managing, and sharing biodiversity information, as well as improving collaboration among institutions involved in biodiversity monitoring and reporting.

At its sixteenth meeting, the Conference of the Parties to the CBD adopted Decision 16/9 on the Clearing-House Mechanism and Knowledge Management,

which establishes a programme of work for the CHM for the period 2024–2030. The decision underscores the importance of the CHM in supporting the implementation of the Global Biodiversity Framework by facilitating technical and scientific cooperation, enabling access to biodiversity information, and strengthening knowledge management systems at national and global levels. Parties are encouraged to establish or strengthen their national CHM systems and ensure that they are sustainable, interoperable, and accessible to relevant stakeholders.

The decision also highlights the importance of emerging digital tools and platforms that support biodiversity information management. In this regard, the CBD Secretariat has developed the Bioland platform, which provides countries with tools to establish and strengthen national CHM portals and improve interoperability between biodiversity databases and information systems.

In addition, CBD Decision 16/31 on the Monitoring Framework for the Global Biodiversity Framework calls upon Parties to strengthen national biodiversity monitoring systems and improve the coordination of data collection and reporting across institutions. The decision emphasizes the need for consistent national approaches to ecosystem monitoring, encourages the use of internationally recognized ecosystem classifications such as the Global Ecosystem Typology, and highlights the importance of collaboration among governments, research institutions, indigenous peoples and local communities, and other stakeholders in biodiversity monitoring.

Kenya is a Party to the Convention on Biological Diversity and continues to implement its commitments through national policies, strategies, and institutional frameworks. The Ministry of Environment, Climate Change and Forestry serves as the National Focal Point for the Convention on Biological Diversity and is responsible for coordinating the overall implementation of the Convention and its protocols in the country. The Ministry provides policy direction, facilitates national reporting to the CBD Secretariat, and coordinates the development and implementation of national biodiversity policies and strategies, including the National Biodiversity Strategy and Action Plan (NBSAP).

Within this institutional framework, the National Environment Management Authority (NEMA), established under the Environmental Management and Coordination Act, serves as the National Focal Point for the Clearing-House Mechanism (CHM) of the Convention. In this role, NEMA coordinates the development and management of the national CHM platform and facilitates the

collection, management, and dissemination of biodiversity information from various institutions. The Authority works closely with government agencies, research institutions, civil society organizations, and other stakeholders to ensure that biodiversity information is accessible and can support evidence-based decision-making, policy development, and national reporting obligations under the Convention.

In light of the increasing demand for reliable biodiversity information to support the implementation of the Global Biodiversity Framework and the National Biodiversity Strategy and Action Plan, there is a need to strengthen the national CHM system. This strategy provides a framework for improving the governance, coordination, accessibility, and sustainability of the Kenya National Biodiversity Clearing-House Mechanism.

The development of a National CHM Strategy and Action Plan is therefore crucial for:

- Ensuring coordination and standardization of biodiversity information management across institutions.
- Supporting evidence-based policy and decision-making at national and sub-national levels.
- Enhancing reporting on Kenya's progress towards KMGBF targets and CBD obligations.
- Promoting stakeholder engagement and knowledge sharing within the country and with global partners.

A key innovation in this strategy is the adoption of the **Bioland platform**, a ready-to-deploy tool designed to enable countries to rapidly establish operational national CHM websites. By using Bioland, Kenya can overcome technical barriers, streamline biodiversity data management, and strengthen its reporting capabilities under the CBD and KMGBF.

1.2 Rationale for the Strategy

The effective conservation and sustainable use of biodiversity depend on the availability of reliable information, accessible knowledge systems, and strong collaboration among institutions and stakeholders. In Kenya, biodiversity data and information are generated by numerous institutions including government agencies, research institutions, universities, civil society organizations, and international partners. However, these data are often fragmented, stored in

different formats, and not always easily accessible to policymakers, practitioners, and the public. This situation can limit the ability of institutions to make informed decisions, coordinate actions, and track progress towards national and global biodiversity commitments.

The national Clearing-House Mechanism (CHM) provides an opportunity to address these challenges by serving as a central platform for biodiversity information management, knowledge exchange, and technical cooperation. By strengthening the national CHM, Kenya can improve access to biodiversity information, enhance coordination among institutions, and support evidence-based decision-making for biodiversity conservation and sustainable development.

The need to strengthen the CHM has become more pressing following the adoption of the Kunming–Montreal Global Biodiversity Framework, which calls upon countries to improve systems for planning, monitoring, reporting, and review of biodiversity actions. Effective implementation of the Framework requires countries to have robust knowledge management systems capable of supporting the collection, management, and sharing of biodiversity data across sectors and institutions.

In addition, decisions of the Conference of the Parties to the Convention on Biological Diversity have emphasized the importance of strengthening national clearing-house mechanisms to facilitate technical and scientific cooperation and promote knowledge exchange. The programme of work for the CHM for the period 2024–2030 encourages Parties to establish or strengthen national CHM systems, enhance interoperability among biodiversity information platforms, and promote the sharing of data and knowledge in support of the implementation of the Convention and the Global Biodiversity Framework.

At the national level, Kenya continues to implement the National Biodiversity Strategy and Action Plan (NBSAP 2019–2030), which provides the country's framework for biodiversity conservation and sustainable use. Implementation of the NBSAP requires coordinated access to biodiversity information to support policy development, monitoring of ecosystem trends, reporting on national indicators, and evaluation of conservation outcomes.

The strengthening of the national CHM is also important for improving Kenya's capacity to meet its reporting obligations under the Convention, including the preparation of national reports and the monitoring of progress towards global biodiversity targets. A well-functioning CHM will facilitate the collection and

sharing of biodiversity data from different institutions and support national monitoring systems that contribute to global biodiversity assessments.

Furthermore, strengthening the national CHM will enhance public access to biodiversity information and promote awareness of biodiversity issues among policymakers, researchers, educators, and the wider public. This will contribute to improved understanding of biodiversity values and support the mainstreaming of biodiversity considerations into national development planning and sectoral decision-making.

In view of these considerations, the development of this strategy is necessary to provide a clear framework for strengthening the Kenya National Biodiversity Clearing-House Mechanism. The strategy seeks to enhance coordination among institutions, improve biodiversity information management, promote knowledge exchange, and ensure that the national CHM effectively supports Kenya's implementation of the Convention on Biological Diversity, the Global Biodiversity Framework, and the National Biodiversity Strategy and Action Plan.

The National CHM Strategy and Action Plan address these challenges by:

1. Providing a clear framework for coordinated management of biodiversity data.
2. Standardizing data collection, storage, and reporting practices.
3. Integrating the Bioland platform as the national CHM portal.
4. Building institutional and human capacity for biodiversity knowledge management.
5. Aligning Kenya's biodiversity information systems with the KMGBF and NBSAP targets.

1.5 Scope of the Strategy

The strategy covers the following key areas:

- National CHM website development and management using Bioland.
- Institutional and stakeholder engagement to ensure inclusive participation in biodiversity information management.
- Standardization of biodiversity data collection and reporting procedures to improve data quality, facilitate information sharing through the national

CHM, and enable accurate tracking of Global Biodiversity Framework (GBF) indicators.

- Capacity building programs for government agencies, research institutions, NGOs, and community-based organizations.
- Monitoring, evaluation, and feedback mechanisms to assess CHM performance.
- Linkages to KMGBF and NBSAP targets to ensure alignment with national and international biodiversity commitments.

1.6 Methodology

The strategy was developed through a participatory and evidence-based approach, including:

1. **Situational Analysis and Needs Assessment:** Mapping existing biodiversity information systems, identifying gaps, and assessing institutional and human capacity.
2. **Stakeholder Consultations:** Engaging government ministries, research institutions, NGOs, community groups, and development partners through surveys, interviews, and consultative meetings.
3. **Workshops:** Conducting multi-stakeholder workshops to develop the draft CHM strategy, define strategic objectives, and draft a preliminary action plan.
4. **Validation:** Reviewing and finalizing the strategy through stakeholder validation workshops, ensuring consensus and alignment with national and global biodiversity priorities.
5. **Integration of Bioland Platform:** Designing the CHM operational framework around Bioland functionalities, ensuring rapid deployment and standardization.

The approach ensured that the strategy is practical, implementable, and reflective of Kenya's national priorities, while also meeting CBD obligations and global standards.

1.7 Technical Note: Bioland Platform

The Bioland platform is a ready-to-use solution for countries facing technical barriers in establishing operational CHM sites. Key features include:

- Centralized biodiversity data storage and management.
- Interoperability with the CBD central CHM.
- Standardized templates for data entry, metadata, and reporting.
- User-friendly interface for stakeholders, including government agencies, NGOs, and research institutions.
- Tools for knowledge sharing, networking, and collaboration.

Adopting Bioland enables Kenya to:

- Quickly establish a functional CHM website.
- Ensure compatibility with global biodiversity data standards.
- Strengthen national coordination and reporting.
- Provide equitable access to biodiversity information for stakeholders across sectors.

CHAPTER 2: SITUATIONAL ANALYSIS AND NEEDS ASSESSMENT

2.1 Introduction

Effective biodiversity conservation requires reliable, accessible, and well-managed information. Kenya has a wealth of biodiversity information generated by government institutions, research centers, universities, non-governmental organizations (NGOs), and community-based organizations. However, this information is often fragmented, stored in different formats, and lacks standardized management frameworks.

This chapter reviews the current biodiversity information and monitoring systems in Kenya, identifies gaps, and highlights opportunities for improvement in line with the Bioland-based CHM framework. The review provides the foundation for designing an operational, coordinated, and sustainable national CHM.

2.2 Status of Biodiversity Data Management in Kenya

2.2.1 Existing Systems and Platforms

Kenya's biodiversity data is managed through a combination of sectoral and thematic monitoring systems. Key institutions and platforms include:

- **Kenya Wildlife Service (KWS):** Maintains species-specific databases, park management data, and ecological monitoring reports.
- **National Museums of Kenya (NMK):** Holds extensive taxonomic, ecological, and museum specimen records.
- **Kenya Forest Service (KFS):** Manages most of the Forest protected areas in Kenya, forest inventory data and remote sensing-based monitoring systems.
- **Kenya Forestry Research Institute (KEFRI):** Conducts research on forest ecosystems, tree genetic resources, and forest biodiversity, generating data on forest species diversity, restoration, and agroforestry systems that supports national biodiversity knowledge, policy development, and ecosystem conservation.
- **Kenya Agricultural and Livestock Research Organization (KALRO):** Generates research data on agricultural biodiversity, crop genetic resources, soil biodiversity, and climate-resilient farming systems.

- **Kenya Marine and Fisheries Research Institute (KMFRI):** Conducts research and maintains databases on marine and freshwater biodiversity, fish stocks, aquatic ecosystems, and coastal habitat monitoring.
- **Ministry of Mining, Blue Economy and Maritime Affairs:** Oversees policies and programmes related to marine resources and blue economy sectors, contributing to marine biodiversity information and policy frameworks.
- **Ministry of Environment, Climate Change and Forestry :** Provides policy leadership and national coordination on biodiversity conservation, climate change, forestry management, and environmental monitoring systems.
- **Kenya Plant Health Inspectorate Service (KEPHIS):** Maintains databases on plant genetic resources, phytosanitary data, invasive species monitoring, and crop biodiversity.
- **National Environment Management Authority (NEMA):** Serves as the national coordinating authority for environmental management and maintains environmental monitoring data, EIA/EA reports, and biodiversity-related policy information.
- **Directorate of Resource Surveys and Remote Sensing:** Produces environmental and land-use data for planning and conservation. The datasets are important for biodiversity monitoring.
- **Kenya National Bureau of Statistics (KNBS).** Collecting and managing national statistical data. Providing data used for environmental indicators and sustainable development monitoring
- **National Commission for Science, Technology and Innovation (NACOSTI):** Regulates and coordinates research in Kenya and maintains records of scientific research projects and outputs, including studies related to biodiversity, ecosystems, and natural resource management.
- **National Biosafety Authority (NBA):** Regulates and oversees biosafety matters in Kenya, including the safe development, transfer, handling, and use of genetically modified organisms (GMOs). The Authority maintains biosafety information and regulatory data relevant to biotechnology and biodiversity conservation.

- **Kenya Industrial Property Institute (KIPI):** Responsible for the administration and protection of industrial property rights in Kenya, including patents, utility models, industrial designs, and technovations. KIPI plays a role in protecting innovations related to biodiversity, biotechnology, and genetic resources, thereby supporting knowledge management and intellectual property aspects linked to biodiversity research and innovation.
- **Nature Kenya:** Generates biodiversity monitoring data through citizen science and bird monitoring programmes, including Important Bird and Biodiversity Areas (IBAs).
- **Kenya Youth Biodiversity Network:** Engages youth in biodiversity conservation and supports knowledge-sharing initiatives, awareness campaigns, and community-based biodiversity documentation.
- **Indigenous Information Network:** Documents and promotes indigenous knowledge systems related to biodiversity conservation, ecosystem management, and traditional ecological practices.
- **World Wide Fund for Nature (WWF Kenya):** Supports biodiversity research, ecosystem monitoring, and conservation data systems across key landscapes and marine ecosystems.
- **African Wildlife Foundation (AWF):** Generates biodiversity data through landscape conservation programmes, wildlife monitoring, and community-based conservation initiatives.
- **International Union for Conservation of Nature (IUCN):** Provides global biodiversity knowledge resources, conservation assessments such as the IUCN Red List, and technical guidance for biodiversity monitoring.
- **Conservation International:** Contributes scientific research, spatial biodiversity data, and ecosystem monitoring tools supporting conservation planning and decision-making
- **The Nature Conservancy:** Supports biodiversity data generation through ecosystem mapping, natural capital assessments, and landscape conservation initiatives.
- **Wetlands International:** Generates data and research on wetland ecosystems, waterbird monitoring, and wetland conservation planning.

- **Universities:** Kenyan universities conduct research and generate biodiversity data on ecosystems, species diversity, conservation, climate change, and natural resource management. Through academic research, field studies, and postgraduate theses, universities contribute important scientific information that supports biodiversity monitoring, policy development, and conservation planning in the country.
- **NGOs and Community Conservancies:** Non-governmental organizations and community conservancies generate biodiversity data through conservation programmes, species monitoring, ecosystem restoration activities, and community-based natural resource management initiatives. They also contribute important local knowledge and field-based information that supports biodiversity conservation, research, and policy development.

While these systems contain valuable information, they often operate in isolation, resulting in **data silos**. Accessing and integrating data across institutions is difficult due to inconsistent data formats, outdated hardware/software, and lack of central coordination.

2.2.2 Data Management Challenges

The assessment identified several challenges in biodiversity information management in Kenya:

Fragmented data systems: Biodiversity information is scattered across multiple institutions and databases with limited integration. However, these systems often operate independently with limited interoperability, making it difficult to integrate datasets and provide comprehensive national biodiversity information for monitoring of biodiversity trends and accurate reporting on Global Biodiversity Framework (GBF) indicators.

Lack of standardization: Different methodologies, formats, and protocols are used for data collection, storage, and reporting, making harmonization difficult. This inconsistency makes it difficult to harmonize datasets or compare biodiversity information across sectors and ecosystems.

Limited technical capacity: Some institutions lack skills, infrastructure, and resources to manage and maintain modern biodiversity information systems. In some cases, there are insufficient skills, infrastructure, and financial resources

to support modern biodiversity data systems, including digital databases, geographic information systems (GIS), and data-sharing platforms.

Restricted accessibility: Much of the biodiversity data is not readily available to policymakers, researchers, or the public. In many cases, biodiversity datasets remain in internal reports, unpublished research outputs, or isolated institutional databases.

Weak incorporation of local knowledge: Indigenous and community-based knowledge on ecosystems and species is rarely integrated into national systems. Community-based knowledge on ecosystems, species, and traditional conservation practices is often not adequately documented or incorporated into national data platforms, despite its importance for biodiversity conservation and sustainable resource management.

Poor institutional coordination: Limited collaboration among institutions leads to duplication of effort and inefficiencies in data collection and sharing. Without a central coordinating platform, institutions may conduct similar monitoring activities without mechanisms for consolidating and sharing their findings.

Inadequate monitoring and reporting mechanisms: There is no coordinated system for tracking national biodiversity indicators and reporting progress on targets including those under the **Kunming–Montreal Global Biodiversity Framework** national level.

The use of **Bioland** addresses many of these challenges by providing a standardized, interoperable, and user-friendly platform for data management and sharing.

2.3 Management Framework for Biodiversity Data

2.3.1 National Coordination

Legal and Policy Framework Governing Biodiversity Information Management in Kenya

Biodiversity information management in Kenya is guided by sector-specific mandates under a variety of laws, policies, and regulations. Key instruments include:

- **Environmental Management and Coordination Act (EMCA), Cap. 387** is the principal framework law for environmental management in

- Kenya. – Provides the overall framework for environmental management, monitoring, and reporting.
- **Wildlife Conservation and Management (Amendment) Act, 2025 Act No. 24 of 2025**- provisions for wildlife protection, management of protected areas, and biodiversity conservation. The amendment enhances data collection, monitoring, and reporting obligations.
 - **Forest Conservation and Management Act, 2016 (No. 34 of 2016) (Cap 385)**. – Governs forest management, conservation, and associated biodiversity information.
 - **Plant Protection Act, (Cap. 324)** – Covers plant health monitoring and protection of plant genetic resources.
 - **Science, Technology and Innovation Act, 2013 (No. 28 of 2013, Cap. 250)** – Establishes the legal framework for promoting and coordinating science, technology, and innovation in Kenya. The Act supports the generation, management, and dissemination of scientific data, including biodiversity-related research, and encourages collaboration among research institutions, universities, and government agencies.
 - **National Museums and Heritage Act (Cap. 216)**– Governs collection, storage, and management of natural history specimens and biodiversity data.
 - **Water Act, 2016 (No. 43 of 2016)** – Provides the legal framework for sustainable management, protection, and conservation of water resources in Kenya. The Act supports the monitoring of aquatic ecosystems, promotes data collection on freshwater biodiversity, and guides integration of water and biodiversity management in planning and reporting processes.
 - **Biosafety Act Cap. 320**. – Provides the legal framework for regulating biotechnology and genetically modified organisms (GMOs) in Kenya. The Act ensures that activities involving GMOs are conducted safely, protecting biodiversity, human health, and the environment. It supports monitoring, reporting, and information management relevant to biodiversity conservation and risk assessment.
 - **National Biodiversity Strategy and Action Plan (NBSAP), 2025–2030** – Provides the updated national framework for biodiversity

conservation, monitoring, and reporting. It sets out Kenya's priorities and targets aligned with the Kunming–Montreal Global Biodiversity Framework, guiding the development of national biodiversity knowledge systems, including the CHM.

- **Climate Change (Amendment) Act, 2023.** – Provides a legal framework for climate change adaptation and mitigation in Kenya. The Act mandates the integration of climate and biodiversity considerations into national planning, reporting, and monitoring systems, supporting ecosystem resilience and sustainable natural resource management.
- **Fisheries Management and Development Act, 2016:** Guides the sustainable use and monitoring of marine and aquatic biodiversity resources.
- **Protection of Traditional Knowledge and Cultural Expressions Act, 2016 (Cap. 218A)** – Provides a framework for safeguarding traditional knowledge, cultural expressions, and indigenous practices. The Act promotes the documentation and protection of community-based biodiversity knowledge, supporting its integration into national biodiversity information systems and the CHM.

While these laws provide institutional mandates, there is no fully integrated national framework for biodiversity data management. Coordination is largely ad hoc, with limited harmonization across sectors.

2.3.2 Institutional Roles

Key institutions contributing to biodiversity monitoring include:

- **NEMA:** Oversight of environmental and biodiversity data, including implementation of CBD obligations.
- **KWS, KFS, NMK:** Sector-specific monitoring and reporting.
- **Universities and Research Institutions:** Data collection, analysis, and technical support.
- **NGOs and Community-Based Organizations:** Field-based data and local biodiversity monitoring.

Despite the presence of these institutions, responsibilities are often overlapping, and mechanisms for joint planning, data sharing, and reporting are weak. The

Bioland-based CHM will provide a centralized platform to coordinate these efforts effectively.

2.4 Situational Analysis and Needs Assessment Report

Based on the context of the **Situational Analysis and Needs Assessment for the Development of Kenya’s National Biodiversity CHM Strategy and Action Plan**,

This Situational Analysis and Needs Assessment was undertaken to inform the development of the Kenya National Biodiversity Clearing-House Mechanism (CHM) Strategy and Action Plan (2026–2030). The assessment examined existing biodiversity information systems, institutional arrangements, capacity gaps, data management practices, and technological readiness. Importantly, the assessment was conducted within the context that Kenya will utilize the Bioland Tool, a CBD-supported platform that enables Parties to rapidly establish and operationalize a basic but functional national CHM website without heavy ICT infrastructure investment.

Key findings include:

- Kenya possesses substantial biodiversity data across ministries, agencies, research institutions, and NGOs.
- Data fragmentation, inconsistent standards, limited interoperability, and weak coordination remain major challenges.
- Institutional capacity exists but requires coordination strengthening and targeted technical support.
- The Bioland Tool provides an immediate and cost-effective pathway to operationalize the national CHM.
- Major needs lie in governance structures, content management workflows, data-sharing protocols, and sustained institutional ownership rather than in advanced ICT development.

The report concludes that Kenya does not require development of a complex standalone CHM platform; instead, priority should be given to structured content aggregation, metadata standardization, institutional coordination, and integration of national biodiversity information into the Bioland-based CHM system.

The findings of this report directly inform the CHM Strategy priorities for 2026–2030.

2.4.1 Recommendations

Based on the review, the following recommendations were made:

1. Establish a national CHM on Bioland: Serve as the central repository for biodiversity information in Kenya.
2. Standardize biodiversity data and metadata: Align with CBD guidelines to ensure interoperability.
3. Strengthen institutional coordination: Formalize roles and responsibilities for data management and reporting.
4. Build human and technical capacity: Train staff in database management, GIS, and Bioland functionalities.
5. Enhance stakeholder engagement: Involve government agencies, universities, NGOs, community groups, and conservancies in data collection and sharing.
6. Implement monitoring and evaluation frameworks: Track the effectiveness, usability, and sustainability of the CHM.

2.5 Integration of Boland into Kenya's CHM

The Bioland platform provides Kenya with a practical solution to the challenges identified above. Key benefits include:

- Rapid deployment: Establishes a functional national CHM website without complex ICT infrastructure.
- Interoperability: Ensures data compatibility with the CBD central CHM and regional/national networks.
- Standardized data management: Provides templates for metadata, data entry, and reporting.
- Knowledge sharing: Facilitates access for all stakeholders, including policymakers, researchers, and local communities.
- Sustainability: Reduces maintenance costs while supporting continuous updates and improvements.

2.6 SWOT Analysis for Biodiversity Information Management in Kenya

Strengths	Weaknesses
Existence of many national institutions generating biodiversity data	<ul style="list-style-type: none"> • Biodiversity data is fragmented across institutions with limited coordination and integration.
Strong legal and policy framework supporting biodiversity conservation, including the Environmental Management and Coordination Act	<ul style="list-style-type: none"> • Lack of standardized methodologies for biodiversity data collection, storage, and reporting.
Availability of research institutions and universities generating biodiversity knowledge and datasets	<ul style="list-style-type: none"> • Limited technical capacity in some institutions for biodiversity data management and digital platforms
Kenya has a National Biodiversity Coordination Mechanism (NBCM).	Low level of public awareness and use of biodiversity information platforms.
Presence of international and national conservation organizations supporting biodiversity monitoring and research.	<ul style="list-style-type: none"> • Limited interoperability between existing biodiversity databases and information systems.
Increasing use of GIS, remote sensing, and digital technologies for environmental monitoring.	<ul style="list-style-type: none"> • Insufficient documentation and integration of indigenous and local knowledge.
Opportunities	Threats
Implementation of the Kunming–Montreal Global Biodiversity Framework, which encourages stronger biodiversity monitoring and reporting systems	<ul style="list-style-type: none"> • Continued fragmentation of biodiversity data systems may limit effective decision-making and policy development.
Emerging global biodiversity knowledge platforms such as the Bioland Platform that can support national biodiversity data integration and reporting.	Institutional reluctance to share biodiversity data due to ownership concerns or lack of data-sharing policies.
Development of a national Biodiversity Clearing-House Mechanism platform to integrate biodiversity information and improve data sharing	<ul style="list-style-type: none"> • Inadequate and inconsistent funding for biodiversity monitoring and information management.
Growing interest from development partners and conservation organizations in supporting biodiversity information systems.	<ul style="list-style-type: none"> • Rapid environmental changes, including climate change and land-use change, increasing pressure on ecosystems and biodiversity
Advances in information technology and digital data platforms for knowledge management.	<ul style="list-style-type: none"> • Loss of traditional ecological knowledge due to limited documentation and generational changes.
Increasing recognition of biodiversity data for policy development, environmental impact assessments, and national	<ul style="list-style-type: none"> • Limited awareness among some stakeholders on the importance of biodiversity data sharing and open

CHAPTER 3: VISION, MISSION, GOALS, AND STRATEGIC OBJECTIVES

3.1 Vision and mission

Vision

“A well-coordinated, accessible, and sustainable national platform that organizes, shares, and disseminates biodiversity information to support evidence-based decision-making, research, and conservation and sustainable use of biodiversity in Kenya.”

Mission

“To facilitate the collection, management, integration, sharing, and dissemination of biodiversity information among all stakeholders at national and international levels, strengthening coordination, knowledge exchange, and reporting under the Convention on Biological Diversity and the Kunming–Montreal Global Biodiversity Framework.”

3.2 Goals

- Strengthen governance and coordination of biodiversity information
- Enhance capacity for data collection, management, and analysis
- Ensure accessibility and use of biodiversity information for decision-making
- Support national and international biodiversity reporting obligations

3.3 Strategic Objectives

1. Institutional and governance strengthening
2. Knowledge management and data standardization
3. Capacity building for CHM personnel and partners
4. Integration and operationalization of Bioland platform

4.0 STRATEGIC INTERVENTIONS

This section outlines the key interventions required to operationalize the Kenya National Biodiversity Clearing-House Mechanism (CHM) and strengthen

biodiversity information management in the country. The interventions are aligned with the strategic objectives and aim to improve institutional coordination, data management, technical capacity, and accessibility of biodiversity information to support decision-making and reporting under the Convention on Biological Diversity and the Kunming–Montreal Global Biodiversity Framework.

4.1 Institutional and Governance Strengthening

To ensure effective coordination and sustainability of the national CHM, strong governance arrangements will be established and maintained.

Strategic Interventions

- Establish and operationalize the National Biodiversity Coordination Mechanism (NBCM).
- Constitute a CHM Technical Working Group (TWG) within the framework of the National Biodiversity Coordination Mechanism (NBCM) composed of representatives from key biodiversity institutions.
- Develop clear institutional roles and responsibilities for biodiversity data generation, management, and sharing.
- Develop and adopt national biodiversity data-sharing guidelines and protocols.
- Strengthen collaboration among key biodiversity institutions including Government agencies , NGOs and development partners
- Promote inter-agency coordination to reduce duplication of biodiversity monitoring efforts.

4.2 Knowledge Management and Data Standardization

Effective biodiversity knowledge management requires standardized systems for collecting, managing, and sharing biodiversity information. This will improve data quality, facilitate information sharing through the national CHM, and enable accurate tracking of Global Biodiversity Framework (GBF) indicators.

Strategic Interventions

- Establish a national biodiversity data repository linked to the CHM platform. Within which we have a national biodiversity indicator framework aligned with CBD and Global Biodiversity Framework (GBF) indicators to guide institutions in collecting and reporting standardized biodiversity data.
- Develop metadata standards to improve the quality, interoperability, and traceability of biodiversity data.
- Develop national standards and protocols for biodiversity data collection, documentation, and reporting. Requiring key biodiversity institutions to regularly submit biodiversity datasets and indicator information to the national CHM platform.
- Integrate biodiversity datasets from key national institutions into the national CHM platform.
- Promote open-access policies for non-sensitive biodiversity information to enhance data sharing and use.
- Facilitate documentation and integration of indigenous and local ecological knowledge relevant to biodiversity conservation.

4.3 Capacity Building for CHM Personnel and Partners

Effective implementation of the CHM requires strengthening technical and institutional capacity for biodiversity information management.

Strategic Interventions

- Conduct training programmes on biodiversity data management, GIS, remote sensing, and digital information systems.
- Build technical capacity of national institutions to monitor, analyze, and report biodiversity indicators required for national and global reporting obligations.
- Build capacity of national and county-level institutions to contribute biodiversity data to the CHM.
- Develop training materials and guidelines on CHM operations and biodiversity information management.

- Facilitate knowledge exchange and learning among biodiversity institutions, universities, and conservation organizations.
- Promote awareness among policymakers and stakeholders on the importance of biodiversity information for decision-making.

4.4 Integration and Operationalization of the Bioland Platform

The CHM strategy will leverage emerging digital technologies to enhance biodiversity data management and knowledge sharing.

Strategic Interventions

- Adopt and integrate the Bioland Platform developed by the Convention on Biological Diversity Secretariat into Kenya's national CHM web portal for biodiversity information sharing.
- Link existing biodiversity databases and monitoring systems to the CHM platform.
- Promote the use of digital tools for biodiversity data visualization, mapping, and reporting.
- Strengthen ICT infrastructure to support national biodiversity information systems.

4.5 Monitoring, Evaluation and Sustainability

A strong monitoring and evaluation framework will ensure that the CHM strategy remains effective and responsive to emerging biodiversity information needs.

Strategic Interventions

- Develop a Monitoring and Evaluation (M&E) framework for tracking the implementation of the CHM strategy.
- Establish indicators to monitor progress in biodiversity data management, knowledge sharing, and institutional coordination.
- Conduct periodic assessments of the CHM system to evaluate performance and identify improvement areas.
- Mobilize financial and technical resources to sustain CHM operations.

- Strengthen partnerships with development partners, research institutions, and conservation organizations to support CHM implementation.
- Promote long-term sustainability through integration of CHM activities into national biodiversity programmes.

CHAPTER 5: ACTION/IMPLEMENTATION PLAN

5.1 Introduction

The Action/Implementation Plan provides a roadmap for operationalizing the Kenya National Biodiversity Clearing-House Mechanism (CHM) over the 36-month period 2026–2028, with a view to supporting full GBF implementation by 2030. It translates the strategic objectives into specific interventions, responsible institutions, timelines, and expected outputs, ensuring measurable progress. The plan is aligned with national biodiversity priorities, global commitments under the Convention on Biological Diversity (CBD), and the Kunming–Montreal Global Biodiversity Framework (KMGBF).

The Action Plan is structured around the four strategic objectives:

1. Institutional and governance strengthening
2. Knowledge management and data standardization
3. Capacity building for CHM personnel and partners
4. Integration and operationalization of Bioland platform

5.2 Implementation Principles

The Action Plan is guided by the following principles:

- **Country ownership:** Activities align with Kenya’s NBSAP and national biodiversity priorities.
- **Inclusivity:** Government agencies, research institutions, NGOs, community conservancies, and other stakeholders participate actively.
- **Efficiency:** Bioland is used as the central platform to minimize ICT complexity and duplication.
- **Sustainability:** Activities include measures for long-term maintenance, capacity development, and financial sustainability.

- **Monitoring and adaptive management:** Performance indicators are defined for all activities, and progress will be reviewed periodically.

5.3 Action Plan Matrix with Costs

Strategic Objective	Key Activities	Responsible Institutions	Timeline (Months)	Expected Outputs	Estimated Cost (KES)
1. Institutional & Governance Strengthening	Establish CHM Technical Working Group (TWG)	NEMA, CBD Focal Point, Key	1–3	Functional CHM TWG with defined roles	1,500,000
	Develop CHM governance framework	NEMA, Legal & Policy Dept., MDAs	3–6	Approved CHM governance and coordination framework	2,000,000
	Formalize	NEMA, MDAs	3–6	Documented	1,000,000

	institutional roles and responsibilities			roles and MoUs among institutions	
	Develop national biodiversity data-sharing guidelines	NEMA, TWG, ICT Dept.	4–8	Standardized data-sharing protocol adopted	1,200,000
2. Knowledge Management & Data Standardization	Develop national biodiversity indicator framework aligned to GBF	NEMA, TWG,MDAs	2-6	Standardized indicator framework for reporting	1,800,000
	Standardize data collection & reporting protocols	NEMA, TWG, MDAs	3–9	SOPs for biodiversity data management	1,500,000
	Integrate biodiversity datasets into CHM platform	NEMA,MDAs, Bioland team	6–12	Centralized national biodiversity data repository	3,000,000
	Document indigenous and	NEMA, IPLC networks, NGOs	6–12	Indigenous biodiversity	1,200,000

	local biodiversity knowledge			knowledge database	
3. Capacity Building for CHM Personnel & Partners	Conduct training on CHM operations & Bioland platform	NEMA, TWG,	6–18	Trained CHM personnel and partners	2,500,000
KES (~24,600 USD)	Build capacity in data management, GIS & M&E	NEMA,	6–18	Improved technical competence in biodiversity monitoring	2,800,000
	Awareness workshops for policymakers & stakeholders	NEMA, NGOs	9–24	Increased stakeholder awareness and uptake	2,000,000
4. Integration & Operationalization of Bioland Platform	Customize Bioland platform for national use	NEMA, CBD Secretariat, ICT Dept	3–12	Operational Kenya CHM platform	1,500,000
	Link sectoral databases to Bioland	NEMA, MDAs	6–18	Integrated data sources accessible via	1,500,000

				CHM	
	Launch CHM national portal	NEMA, ICT Dept., TWG	12–18	Publicly accessible CHM web portal	2,500,000
	Promote use of digital tools for data visualization & reporting	NEMA, TWG, ICT Dept., MDAs	12–24	Interactive dashboards and reporting tools	1,800,000

CHAPTER 6: MONITORING AND EVALUATION (M&E)

6.0 Overview

Monitoring and Evaluation (M&E) is a critical component of the Kenya National Biodiversity Clearing-House Mechanism (CHM) Strategy and Action Plan. It ensures that the implementation of the CHM is effective, efficient, and responsive to national biodiversity needs, while also meeting reporting obligations under the Convention on Biological Diversity (CBD)

and the Kunming–Montreal Global Biodiversity Framework (KMGBF). The M&E framework is designed to track progress, identify challenges, and support adaptive management, ensuring that the CHM remains a reliable platform for biodiversity knowledge management and decision-making.

6.1 Objectives of M&E

The M&E framework for the CHM has the following objectives:

1. Track implementation progress of CHM activities against defined objectives and timelines.
2. Assess the quality and usability of biodiversity information generated and shared through the CHM.
3. Ensure compliance with national, regional, and international biodiversity reporting standards.
4. Inform adaptive management by identifying gaps and recommending corrective actions.
5. Strengthen accountability to stakeholders, including government agencies, development partners, and the public.

6.3 Monitoring Framework

The monitoring framework focuses on tracking outputs, outcomes, and impact across the CHM system. Key components include:

Monitoring Level	Focus Area	Indicators	Frequency	Responsible Institution
Output	CHM platform functionality and accessibility	Number of datasets integrated; CHM uptime; number of active users	Quarterly	NEMA, ICT Dept., CHM TWG
Outcome	Use of biodiversity data for decision-making and reporting	Number of policies or plans informed by CHM data; citations in research publications, National reports	Annually	NEMA, TWG, MDAs
Impact	Contribution to	Progress towards	Every 2 years	NEMA, CBD Focal

	national biodiversity goals and GBF targets	national biodiversity targets; improvement in data completeness and reporting accuracy		Point, MDAs
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CHAPTER 7: MOBILIZING SUSTAINABLE FINANCING

7.0 Overview

Sustainable financing is critical to ensuring the long-term operationalization, maintenance, and growth of the Kenya National Biodiversity Clearing-House Mechanism (CHM). While initial setup and capacity-building can be supported through donor funding and project grants, the CHM must develop a robust strategy to mobilize predictable and reliable financial resources from multiple sources. This will ensure that the CHM continues to support biodiversity knowledge management, decision-making, and national reporting obligations under the Convention on Biological Diversity (CBD) and the Kunming-Montreal Global Biodiversity Framework (KMGBF).

7.1 Strategies for Mobilizing Sustainable Financing

1. Integration into National Planning:

- Align CHM activities with NEMA’s strategic priorities and national biodiversity targets to secure government budget allocations.

2. Partnership Development:

- Establish agreements with development partners, private sector actors, and NGOs to co-fund specific initiatives.

3. Fundraising and Proposal Development:

- Develop well-structured proposals for multilateral and bilateral funding.
- Leverage CHM outputs, such as data dashboards, to demonstrate value to potential funders.

4. Revenue-Generating Services:

- Provide specialized data services, GIS mapping, and analytical tools to institutions for a fee while keeping public data freely accessible.

5. Periodic Financial Reviews:

- Conduct annual audits and cost-benefit analyses to optimize expenditure and identify new financing opportunities.

CHAPTER 8: REFERENCES

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