CAPACITY-BUILDING STRATEGY AND ACTION PLAN 2025–2030

FOR

EFFECTIVE IMPLEMENTATION OF THE GLOBAL BIODIVERSITY FRAMEWORK (GBF) AND THE CBD PROGRAMME OF WORK ON PROTECTED AREAS (PoWPA) IN THE REPUBLIC OF THE GAMBIA

January 2026

Acronyms

ANR	Agriculture and Natural Resource (ANR).
ADWAC	Agency for the Development of Women and Children
CBD	Convention on Biological Diversity
CBSAP	Capacity Biodiversity Strategy and Action Plan
DoF	Department of Forestry
DPWM	Department of Parks and Wildlife Management
GBF	Global Biodiversity Framework
GCF	Green Climate Fund
GEF	Global Environmental Facilities
IP&LCs	Indigenous Peoples and Local Communities (IP&LCs)
KM-GBF	Kunming-Montreal Global Biodiversity Framework
MECCNAR	Ministry of Environment Climate Change and natural Resources
MEET	Management Effectiveness Tracking Tool
NBAG	National Beekeeping Association, The Gambia
NBCC	National Biodiversity Coordination Committee
NBIS	National Biodiversity Information System
NBSAP	National Biodiversity Strategy and Action Plan
NEA	National Environment Agency
OECMs	Other Effective Area-Based Conservation Measures
PAs	Protected Areas
SO	Strategic Objective
WABSA	West African Bird Study Association

Table of Contents

Executive Summary 5
Section 1: Background to CBSAP Development 8
1.2 Rationale for CBSAP 9
Section 2: Theory of Change (ToC) for CBSAP 10
2.1. Overview 10
2. 2. Problem Statement (Root Causes) 10
2.3. Long-Term Impact of the Change 10
2.4. Key Activities 12
2.5. Inputs (resources needed) 13
2.6. Causal Pathway ("If–Then" Logic) 13
2.7. Assumptions 13
Section 3: Relevance of CBSAP to The Gambia's National Biodiversity Priorities 14
3.1 National Protected Areas and Other Effective Area-Based Conservation Measures (OECM) in The Gambia 14
3.1.1 National Protected Area System 15
3.1.2 Other Effective Area-Based Conservation Measures (OECM) 15
3.1.3 Governance Structure 16
3.1.4 Role of PAs and OECMs in Sustainable Wildlife Management 16
Section 4: Alignment of the NBSAP with the Global Biodiversity Framework (GBF) 18
4.1 Key GBF Targets Directly Addressed 18
4.2 The NBSAP also directly contributes to all (Programme of Work on Protected Areas) PoWPA elements: 19
4.2.1 PA System Planning and Management 19
4.2.2 Guiding Principles 19
Section 5: Situational Analysis 21
5.1 National Biodiversity Status and Trends 21
5.2 Current Protected Area System in The Gambia 21
5.3 Institutional and Policy Framework 22
5.4 Stakeholder Mapping 23
5.4 Capacity Needs and Gap Assessment for The Gambia 23
5.4.1 Institutional Gaps and Needs 23
5.4.2 Technical Gaps and Needs 24
5.4.3 Governance and Social Gaps and Needs 24
5.4.4 Financial Gaps and Needs 24
5.4.5 Climate and Ecological Gaps and Needs 25
5.4.6 Capacity-Building Strategy Framework (CBSF) 25
Section 6: Vision, Goal, and Strategic Objectives of CBSAP 26
6.1 Vision 26
6.2 Goal 26
6.3 Strategic Objectives (SO) 26
Section: 7. Capacity-Building Priorities 28
7.1 Strengthening Governance, Coordination, and Institutional Capacities 29
7.2 Enhancing Technical Capacities for Biodiversity Conservation 30
7.3 Improving Protected Area Management Effectiveness 30
7.4 Community and Indigenous Knowledge Integration 31
7.5 Research, Data, and Monitoring Capacities 31

7.6 Financing and Resource Mobilization 32
7.7 Awareness, Education, and Behavioral Change 32
7.8 Climate Change Resilience and Ecosystem-Based Adaptation 33
7.9 Overview of Priority Actions 33
Section: 8 Implementation Framework for CBSAP 35
8.1 Institutional Roles and Responsibilities 35
8.1.1 Lead Agencies 35
8.1.2 Supporting Institutions 35
8.2 Coordination Mechanisms 36
8.3 Capacity-Building Delivery Modalities 36
8.4 Partnerships and Collaboration 37
8.5 Implementation Arrangements 37
Section 9: Resource Mobilization Strategy 38
9.1 Budget Estimates 38
9.2 Funding Sources 38
9.2.1 Domestic Sources 38
9.2.2 International Sources 39
9.3 Innovative Financing Mechanisms 39
Section 10: Monitoring, Evaluation, and Reporting 40
10.1 M&E Framework 40
10.2 Indicators and Targets 40
10.3 Reporting Requirements under the GBF and CBD 41
10.4 Learning, Adaptation, and Continuous Improvement 41
Section 11: Risk Assessment and Mitigation Measures 42
Section 12. Conclusion 43
Annex 1: CBSAP Action Plan 2025–2030 45
11. References 49

List of Tables

Table 1: showing the Intermediate Outcomes and Outputs for CBSAP (2025–2030) 11
Table 2: Shows the National Parks and Reserves 15
Table 3: Guiding Principles for sustainable biodiversity management 20
Table 4: Protected Area Representation (Excluding Biosphere) 21
Table 5: Protected Area Representation (Including Biosphere) 21
Table 6: Indigenous Community Conservation Areas (ICCA) 22
Table 7: Capacity Building Intervention Logic 25
Table 8: Staff complement and qualifications, Forestry Department 28
Table 9: Staff complement and qualifications, DPWM 29
Table 10: Risk Assessment and Mitigation Measures 42

Executive Summary

The Gambia, located on the western edge of the Guinean Forests of West Africa biodiversity hotspot, hosts an extraordinary array of ecosystems despite its small, predominantly Sahelian geography. Its diverse landscapes including forest patches, riverine corridors, wetlands, mangroves, savanna woodlands, coastal dunes, and estuarine systems support rich biodiversity, including numerous resident and migratory species. These ecosystems underpin ecological balance, provide essential ecosystem services, and sustain the livelihoods of local communities. Central to the country's ecological integrity is the River Gambia, which spans the nation and functions as a critical migration corridor along the African–Eurasian Flyway, supporting aquatic and terrestrial species. Key ecosystems include:

- Mangroves and estuaries**:** Serve as nurseries for fish and shellfish, support water birds, and protect coastlines, though threatened by fuelwood extraction, salinization, and hydrological changes.
- Coastal dunes and beaches**:** Critical for marine turtle nesting and migratory bird stopovers; vulnerable to erosion, sand mining, and unregulated tourism.
- Savanna woodlands**:** Harbor diverse wildlife and provide grazing, firewood, and medicinal plants; increasingly impacted by overgrazing, bushfires, and agricultural expansion.
- Gallery forests and forest parks**:** Contain rich flora and fauna, aid carbon sequestration and soil conservation, but face pressures from clearing, illegal logging, and land-use conflicts.

Marine and freshwater systems are highly productive, supporting fisheries and livelihoods, yet are stressed by overfishing, habitat degradation, and pollution. Ramsar-recognized wetlands, such as the Tanbi Wetland Complex, play crucial roles in hydrological regulation and support globally significant migratory birds, though they are threatened by drainage, urban expansion, and invasive species. The Gambia's biodiversity is increasingly threatened by multiple human and environmental pressures:

- Land-use change**:** Agricultural expansion (rice, groundnuts, shifting cultivation) and urban growth lead to habitat loss, fragmentation, and soil degradation.
- Deforestation**:** Driven by fuelwood and charcoal demand, illegal logging, and land conversion, particularly in West Coast and North Bank Regions.
- Overexploitation of species**:** Wildlife trafficking and unsustainable fisheries threaten species including pangolins, manatees, and marine turtles.
- Climate change**:** Rising sea levels, salinization, flooding, droughts, desertification, and extreme weather events disrupt habitats and species' life cycles.
- Pollution**:** Agrochemicals, untreated sewage, plastics, industrial discharges, and hydrocarbon leaks compromise ecosystem health across terrestrial, freshwater, and marine environments.

These pressures collectively undermine ecosystem resilience, carbon storage, water quality, and food security, threatening both biodiversity and human well-being. The Gambia's National Biodiversity Strategy and Action Plan (NBSAP) aligns closely with the Kunming-Montreal Global Biodiversity Framework (GBF) and focuses on:

- Safeguarding ecosystems and enhancing ecological connectivity.

- Promoting sustainable natural resource use and community-based conservation.
- Strengthening climate resilience through ecosystem-based adaptation.
- Expanding protected areas and Other Effective Area-Based Conservation Measures (OECMs) toward a 30% coverage target.
- Promoting equitable governance, gender mainstreaming, and the participation of Indigenous Peoples and Local Communities (IPLCs).
- Strengthening monitoring, research, and technical capacity to support evidence-based management and GBF reporting.

The Comprehensive Biodiversity Strategy and Action Plan (CBSAP) sets a 10-year roadmap (2025–2035) to conserve biodiversity while supporting sustainable development:

- Vision**:** Establish a resilient, well-connected, and equitably governed network of protected and conserved areas, balancing ecological integrity with human well-being.
- Goal**:** Strengthen technical, financial, institutional, and social capacities to implement GBF targets and the Programme of Work on Protected Areas (PoWPA).
- Strategic Objectives**:**

    1. Strengthen enabling conditions (policy, legal, financial, institutional frameworks).
    2. Build technical capacity for effective PA and OECM management.
    3. Enhance biodiversity monitoring and reporting systems.
    4. Promote inclusive governance, rights, and equity.
    5. Integrate climate resilience and ecosystem restoration into conservation planning.
    6. Foster sectoral collaboration to mainstream biodiversity in development planning.
    7. Empower local communities for sustainable resource management and livelihood support.
    8. Ensure gender equality and inclusive participation in conservation initiatives.

The CBSAP directly supports 15 GBF targets, including spatial planning, ecosystem restoration, protected area expansion, species conservation, climate resilience, resource mobilization, and rights-based governance. By addressing these targets, The Gambia contributes to global biodiversity goals while advancing national priorities, including sustainable livelihoods, climate adaptation, and inclusive governance. The Implementation Pillars are as follows:

- Governance and institutional strengthening**:** Clear roles, robust policies, and coordinated management.
- Capacity building**:** Training, scientific research, and use of modern tools (GIS, remote sensing) for adaptive, evidence-based management.
- Sustainable financing**:** Diversified funding sources, including government budgets, donor support, public-private partnerships, and trust funds.
- Community engagement**:** Inclusive participation of IPLCs, local communities, and civil society to foster ownership, benefit-sharing, and alternative livelihoods.

The CBSAP positions The Gambia on a strategic path toward resilient, adaptive, and inclusive biodiversity conservation. By integrating conservation into national development priorities, strengthening governance, building capacity, and empowering communities, the plan ensures that biodiversity protection and human prosperity are mutually reinforcing. Successful implementation will safeguard the country's rich ecological heritage, enhance climate resilience, and secure sustainable benefits for present and future generations.

Section 1: Introduction to The Gambia's Biodiversity Richness and the Associated Challenges

The Gambia lies on the western edge of the Guinean Forests of West Africa biodiversity hotspot one of the world's most biologically rich and ecologically significant regions. Although the country is geographically small and predominantly Sahelian, its position within this hotspot confers substantial ecological advantages. The landscape features a diverse mosaic of forest patches, riverine corridors, wetlands, mangrove systems, savannah woodlands, and coastal habitats that together support a wide range of resident and migratory species. These ecosystems play a vital role in maintaining ecological balance and underpin the livelihoods of local communities. However, The Gambia, like the broader hotspot, is increasingly challenged by deforestation, unsustainable land use, urban expansion, and the accelerating impacts of climate change.

Central to the country's ecological integrity is the River Gambia, which serves as an ecological backbone spanning its full length. The river and its tributaries sustain varied aquatic and terrestrial species and form a major migration corridor along the African–Eurasian Flyway. In the lower river region, extensive mangrove forests provide critical nursery grounds for fish and shellfish, support large populations of water birds, and protect coastal areas from erosion. These mangroves, however, are under rising pressure from fuelwood harvesting, saltwater intrusion, and changes in hydrology.

Coastal dunes, beaches, and wetlands add further biodiversity value as nesting sites for marine turtles and key stopover habitats for migratory birds. Yet these fragile systems face threats from sand mining, coastal erosion, and unregulated tourism development. Inland, savannah woodlands harbour a wide array of wildlife including ungulates, primates, reptiles, and birds while also supplying communities with grazing land, firewood, and medicinal plants. These landscapes are increasingly vulnerable to overgrazing, agricultural expansion, and frequent bushfires. Narrow gallery forests along waterways contain some of the nation's richest flora and fauna but are heavily affected by clearing and fuelwood extraction.

Forest parks and community-managed forests remain important refuges for biodiversity, supporting carbon sequestration, soil conservation, and sustainable resource use. However, they continue to face challenges such as illegal logging, land-use conflicts, and encroachment. Marine and estuarine environments, shaped by the confluence of riverine and oceanic systems, are highly productive and central to national fisheries, yet they are increasingly threatened by pollution, habitat degradation, and overfishing. Ramsar-recognized wetlands including the Tanbi Wetland Complex play crucial roles in hydrological regulation and water quality, while supporting globally significant migratory bird populations. These areas, however, are jeopardized by drainage, pollution, invasive species, and urban development.

Despite its rich ecological endowment, biodiversity in The Gambia faces mounting pressures that threaten ecosystem stability and resilience. Agricultural expansion remains a dominant driver of habitat loss, particularly where shifting cultivation, wetland rice production, and widespread groundnut farming encroach on woodlands, savannahs, and mangroves. This land conversion fragments habitats, disrupts wildlife corridors, and contributes to soil degradation, especially in the Upper River and Central River Regions. High demand for fuelwood and charcoal intensifies deforestation, particularly in the West Coast and North Bank Regions, reducing carbon storage, degrading wildlife habitats, and weakening watershed protection.

Illegal logging and wildlife trafficking further undermine conservation efforts. The country has become a transit point for trafficked hardwoods such as rosewood, while the capture and trade of birds, primates, and reptiles threatens vulnerable species including pangolins, West African manatees, and several raptors. Coastal and freshwater ecosystems experience additional stress from overfishing, destructive fishing practices, and erosion. Industrial and illegal trawling depletes fish stocks vital to artisanal fishers, and sand mining and mangrove clearing destabilize coastal zones, jeopardizing turtle nesting beaches and estuarine habitats.

Rapid, unplanned urbanization particularly around Greater Banjul encroaches on wetlands, floodplains, and forest groves, often without adequate environmental assessment or planning. This expansion fragments critical ecosystems such as the Tanbi Wetland Complex, alters natural hydrology, and intensifies human–wildlife conflict. Climate change compounds these pressures, with rising sea levels, increasing salinization, flooding, droughts, and more extreme weather events reshaping habitats and disrupting species' breeding and migratory patterns. Desertification in the northern and eastern regions further erodes savannah biodiversity and increases competition for already limited natural resources.

Pollution adds yet another layer of ecological stress. Excessive use of agrochemicals harms pollinators, amphibians, and aquatic species; untreated sewage, industrial waste, plastics, and tourism-related pollutants contaminate wetlands, estuaries, and coastal areas. Hydrocarbon leakage near fish-landing sites threatens marine life, while air pollution from charcoal production and open burning further degrades ecosystem health.

Furthermore, the growing human pressure and environmental change threaten the country's ecological integrity. Strengthening conservation initiatives, enhancing sustainable resource management, and expanding community involvement are critical to safeguarding The Gambia's natural heritage and ensuring resilience for future

1.1 Background to CBSAP Development

In December 2022, the global community adopted the landmark agreement at the UN Biodiversity Conference (COP15) to halt and reverse biodiversity loss by 2030 with endorsement of the Kunming-Montreal Global Biodiversity Framework (KM-GBF). This landmark agreement established a roadmap for humanity and nature to co-exist in harmony, leveraging on four global goals and 23 targets to promote ecosystem restoration, sustainable natural resource exploitation and resource mobilization. Based on this global framework, parties to the conference are obliged to develop and implement strategies and action plans in order to effectively the set goals and targets.

It therefore goes without saying, that The Gambia, being a signatory to the CBD Convention is expected to follow suit to facilitate the speedy rollout of its Capacity Building Strategy and Action Plan (NBSAP). In fact, The Gambia has been a consistent and steadfast on issues regarding biodiversity at global, regional and national levels. The revision and alignment of the CBSAP with the Kunming-Montreal Biodiversity Framework is a testimony to the unflinching commitment of the government of \the Gambia to the ideals and principles of biodiversity conservation.

1.2 Rationale for CBSAP

The main rationale for capacity building is to enable individuals, communities and institutions at the various levels to effectively address and reverse the rapid loss of biodiversity. It is necessary to attain the agreed national targets as specified in the NBSAP by bridging the implementation gap at both the level of government and communities. . One of the major strategies needed for the implementation of the NBSAP is the elaboration of a comprehensive Capacity Building Strategy and Action Plan (CBSAP). Capacity building is crucial in empowering developing countries including The Gambia to acquire skills, knowledge, management systems and resources to meet the target of the ambitious Kunming-Montreal Global Biodiversity Framework. Capacity development comes through strengthening national and local institutions, strengthening ownership and conservation and sustainable use of biodiversity

The Gambia's CBSAP will address gaps in governance, knowledge, data and finance to attain the various and complex targets on ecosystem restoration, protected areas, benefit sharing and integrated planning among others. To achieve these, we need to build capacity in the domains of institutional strengthening and governance, data and knowledge management, access and benefit sharing as well as empowerment and ownership.

Section 2: Theory of Change (ToC) for CBSAP

2.1. Overview

The Theory of Change describes *how* the CBSAP will lead to strengthened national capacity to implement the GBF/NBSAP and PoWPA, resulting in improved biodiversity outcomes, enhanced climate resilience, and equitable governance of protected and conserved areas (PCAs).

It maps the causal pathways and linkages from **inputs** → **activities** → **outputs** → **outcomes** → **impacts**, and outlines key assumptions and risks.

2. 2. Problem Statement (Root Causes)

The Gambia's progress towards the attainment of GBF Targets is constrained by:

- Weak institutional coordination
- Insufficient technical expertise in PA planning, monitoring, restoration
- Limited financing for protected areas
- Inadequate policy and legal frameworks
- Low management effectiveness across PAs
- Limited community participation, equity, and FPIC implementation
- Insufficient climate resilience, restoration, and disaster preparedness

These systemic gaps limit the country's ability to meet the 30×30 target and maintain biodiversity in the face of climate change, increasing human population and livestock population and overall development pressures.

2.3. Long-Term Impact of the Change

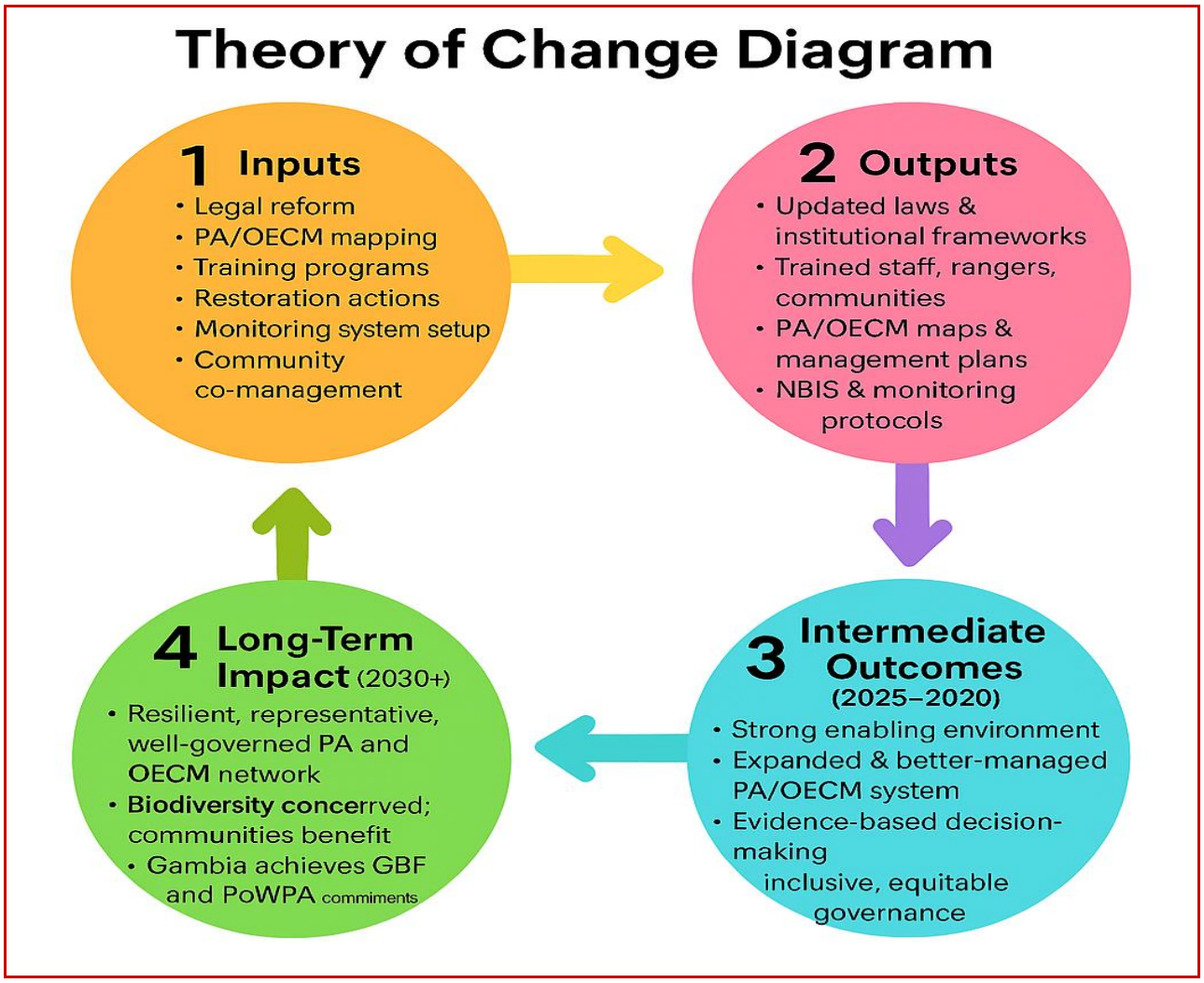
A resilient, representative, well-managed, and equitably governed protected and conserved area system that safeguards biodiversity, enhances climate resilience, and supports sustainable development in The Gambia. This will be in line with **GBF 2050 Goals, which are:**

Goal A: Ecosystems, species, and genetic diversity are resilient and healthy.
Goal B: Biodiversity is sustainably used and managed.
Goal C: Benefits from genetic resources and digital sequence information are shared equitably.
Goal D: Adequate financial, technical, and capacity-building means are available for implementation, and PoWPA Programme Elements 1–4:

Table 1: Intermediate Outcomes and Outputs for CBSAP (2025–2030)

Outcome	Outputs
Outcome 1: Enabling Environment Strengthened • Updated and harmonized laws, policies, and institutions. • Effective national coordination platform in place. • Enhanced manpower within the DPWM • Increased sustainable financing for PAs and OECMs.	**For Outcome 1 — Enabling Conditions** • Revised Wildlife, Forestry, Fisheries, and environmental laws • Established National Biodiversity Coordination Committee • PA & OECM Financing Strategy developed • Staff trained in fundraising (GEF/GCF)
Outcome 2: PA/OECM System Expanded and Effectively Managed • Increased PA and OECM coverage to contribute toward 30%. • Improved management effectiveness (METT+). • Strengthened ranger capacity and site-level planning.	**For Outcome 2 — Technical Capacity** • Ecological gap assessment completed • GIS and remote sensing training done • OECMs identified and mapped • Connectivity corridors designed and established • Updated PA management plans • Fire management systems operational • Human-wildlife conflict reduced
Outcome 3: National Monitoring, Information and Reporting Improved Biodiversity monitoring protocols operational nationwide. A functional national biodiversity information system (NBIS). Timely, evidence-based reporting on GBF indicators.	**For Outcome 3 — Monitoring & Reporting** • Standardized monitoring protocols • NBIS platform established • Species surveys and camera trap network • National GBF reporting templates developed and filled
Outcome 4: Governance, Rights, and Equity Enhanced • Strong participation of communities, women, and youth in PA governance. • FPIC embedded in decision-making. • Fair benefit-sharing mechanisms implemented.	**For Outcome 4 — Governance & Equity** • Co-management agreements signed • FPIC guidelines implemented • Gender mainstreaming framework adopted • Traditional knowledge documented • Community livelihood benefits strengthened
Outcome 5: Climate Resilience and Restoration Strengthened • PAs equipped with climate vulnerability assessments. • Mangrove and forest, restoration expanded. • Fire and drought-risk reduction systems strengthened.	**For Outcome 5 — Climate & Restoration** • Climate vulnerability assessments • Mangrove and forest park restorations • Coastal erosion stabilization activities • Drought & fire early-warning systems

Figure 1: Graphic Representation of Theory of Change



2.4. Key Activities

- Legal reviews and policy harmonization workshops
- National OECM mapping campaigns
- Training programs (GIS, SMART, climate resilience, FPIC)
- Restoration campaigns (mangrove planting, forest park rehabilitation)
- Development and rollout of monitoring protocols
- Establishment of a national biodiversity data platform
- Community awareness and livelihood programs
- Formation and training of fire brigades
- GBF monitoring and reporting capacity-building workshops

2.5. Inputs (resources needed)

- Government staff and technical officers
- Financial resources (national budget, partners and donors)
- Expertise from NGOs, universities, international partners
- Equipment (GPS, drones, camera traps, boats, fire gear)
- Training curricula, manuals and venue
- Data and knowledge (baseline biodiversity assessments)

2.6. Causal Pathway ("If–Then" Logic)

1. **If** laws, regulations, and institutions are strengthened,
   then the enabling environment will support GBF-aligned conservation.
2. **If** technical capacity in PA/OECM planning and management is improved,
   then sites will be better managed, more representative, and more resilient.
3. **If** monitoring systems and data infrastructure are upgraded,
   then decision-making will be evidence-based and reporting more accurate.
4. **If** communities are empowered through FPIC, co-management, and benefits,
   then governance will be more equitable and conflicts will decrease.
5. **If** climate resilience and restoration capacities are strengthened,
   then ecosystems will better withstand climate impacts.

2.7. Assumptions

- Political will remains strong for biodiversity conservation.
- Line ministries cooperate effectively in the NBCC.
- Donor and domestic financing is available and predictable.
- Communities are willing to engage in co-management.
- Climate change impacts do not exceed adaptation capacity.
- Regional cooperation (Senegal, ECOWAS) remains functional for transboundary biodiversity issues.

Section 3: Relevance of CBSAP to The Gambia's National Biodiversity Priorities

The biodiversity context, protected area system, and alignment with the Global Biodiversity Framework (GBF) directly reinforce The Gambia's national priorities as outlined in the National Biodiversity Strategy and Action Plan (NBSAP). These priorities focus on safeguarding ecosystems, promoting sustainable natural resource use, enhancing climate resilience, and strengthening community participation. The information presented above supports several core national objectives by illustrating how the country's diverse ecosystems ranging from mangroves and wetlands to savannah woodlands and riverine forests are essential to ecological stability, while also detailing the pressures they face from deforestation, agricultural expansion, overfishing, and climate change. This provides a strong basis for designing interventions that improve ecosystem integrity and advance sustainable land- and seascape management.

The analysis also highlights gaps in protected area coverage and variations in performance across existing sites, directly informing national efforts to expand the protected area network toward the 30% global conservation target. Strengthening governance, improving law enforcement, and mobilizing resources are central to these efforts and align closely with NBSAP priorities. In addition, recognizing the importance of Other Effective Area-Based Conservation Measures (OECMs) including community-managed forests, sacred sites, and sustainable fisheries zones supports national goals to integrate community-led conservation into the broader landscape. This complements broader priorities to empower Indigenous Peoples and Local Communities (IPLCs), promote co-management, and expand biodiversity stewardship beyond formal protected areas.

Climate-related challenges such as salinization, erosion, flooding, drought, and desertification further underscore the need for ecosystem-based adaptation and the conservation of carbon-rich ecosystems like mangroves and forests. These insights reinforce national climate commitments and contribute directly to NBSAP and GBF-aligned targets. At the same time, documented shortcomings in monitoring, research, staffing, and technical capacity highlight the importance of strengthening biodiversity knowledge systems to improve data-driven decision-making and meet reporting obligations under the GBF and other multilateral environmental agreements.

Moreover, the analysis emphasizes biodiversity's role in sustaining fisheries, tourism, forest products, and agriculture, reinforcing national objectives related to nature-based livelihoods, food security, ecotourism, and sustainable resource use. Finally, the focus on rights, equity, and inclusive governance consistent with GBF Targets 22 and 23 supports national priorities to mainstream gender equality, human rights, and community participation. By highlighting the roles of IPLCs, local committees, and the tourism sector, the analysis further advances the national commitment to multi-stakeholder engagement in biodiversity conservation.

3.1 National Protected Areas and Other Effective Area-Based Conservation Measures (OECM) in The Gambia

The Gambia, despite being one of the smallest countries in mainland Africa, hosts a remarkable diversity of ecosystems, including marine and coastal habitats, dryland forests, riverine forests, savannahs, wetlands, and mangrove systems. Biodiversity conservation in the country relies on a combination of formal Protected

Areas (PAs) and Other Effective Area-Based Conservation Measures (OECMs), which together form the foundation for sustainable wildlife management and ecosystem preservation.

Table 2: Shows the National Parks and Reserves

No.	Name of Protected Area	Year Established	Total Area (ha)	Administrative Area
1	Abuko Nature Reserve	1968	134	KMC/BAC
2	River Gambia National Park	1978	589	Janjanbureh – CRR
3	Niumi National Park	1986	7,758	Kerewan – NBR
4	Kiang West National Park	1987	29,051	Mansakonko – LRR
5	Boa Bolong Wetland Reserve	1993	29,650	Kerewan – NBR
6	Tanji Bird Reserve	1993	612	Brikama – WCR
7	Tanbi Wetland National Park	2001	6,034	Greater Banjul Area
8	Jokadou National Park	2019	19,293	Kerewan – NBR
9	Kassan Conservation Area	2018	2,160	Janjanbureh – CRR
Total Area of National Parks & Reserves: 95,281 ha Coverage: 8.43%				

Source: DPWM

3.1.1 National Protected Area System

The National Protected Area (PA) system constitutes the backbone of The Gambia's conservation strategy. It encompasses a variety of site types designed to protect wildlife, ecosystems, and critical ecological processes:

1) National Parks – Large-scale areas that conserve vital wildlife habitats and ecological processes.
2) Nature Reserves – Areas designated to protect specific ecosystems, species, or ecological features.
3) Forest Parks – Managed by the Department of Forestry, these areas serve multiple functions including conservation, sustainable timber production, and community use.
4) Mangrove Reserves – Crucial coastal ecosystems providing breeding grounds for fish, shoreline protection, and carbon sequestration.
5) Ramsar Sites – Internationally recognized wetlands under the Ramsar Convention, supporting migratory birds and hydrological regulation.
6) Biosphere Reserve – UNESCO-recognized areas promoting harmonized conservation, sustainable development, and research.

Collectively, these protected areas safeguard species such as primates, antelopes, marine mammals, migratory birds, reptiles, and fish stocks. They also maintain essential ecological functions including flood control, nutrient cycling, shoreline stabilization, and carbon storage.

3.1.2 Other Effective Area-Based Conservation Measures (OECM)

In addition to formal PAs, The Gambia employs OECMs to enhance biodiversity conservation across landscapes where formal protection may not exist. OECMs involve areas where long-term biodiversity

conservation occurs even if it is not the primary management objective. In the Gambian context, these include:

a) Community-managed forests and rangelands
b) Sustainable fisheries exclusion zones
c) Privately owned or community-managed eco-tourism sites
d) Sacred groves and culturally protected landscapes
e) Agricultural landscapes that maintain critical habitats (e.g., riparian buffers, woodlots)
f) Areas managed by the tourism industry such as coastal buffer zones and private nature reserves

OECMs contribute to habitat connectivity, species protection, and ecological resilience, complementing the formal PA system and addressing pressures from land-use changes.

3.1.3 Governance Structure

Management of PAs and OECMs in The Gambia is shared across government institutions, local communities, and private stakeholders:

1) Department of Parks and Wildlife Management (DPWM) – Leads wildlife conservation, manages national parks and nature reserves, and enforces wildlife laws.
2) Department of Forestry (DoF) – Oversees forest parks, mangroves, community forests, and woodlands. Implements afforestation, fire management, and forest policies.
3) National Environment Agency (NEA) – Provides environmental oversight, coordinates policies, regulates impact assessments, and pollution control.
4) Department of Fisheries – Manages freshwater and marine resources, protected breeding grounds, and sustainable fishing zones.
5) Community-Based Natural Resource Management (CBNRM) Bodies – Local committees and community groups monitor resources, implement sustainable use, and preserve traditional conservation practices.
6) Tourism Industry – Hotels and eco-lodges maintain natural buffers, birdwatching areas, and private reserves that contribute to conservation while supporting livelihoods.

3.1.4 Role of PAs and OECMs in Sustainable Wildlife Management

Together, PAs and OECMs create an integrated conservation landscape that:

a) Protects critical species and ecosystems
b) Enhances climate resilience through carbon storage and ecosystem services
c) Provides livelihood opportunities via ecotourism, sustainable forestry, and fisheries
d) Promotes ecological connectivity across fragmented habitats
e) Supports national compliance with global biodiversity targets, including the Kunming-Montreal Global Biodiversity Framework

This holistic approach ensures that biodiversity conservation in The Gambia extends beyond strictly protected sites to include multiple land-use types, governance systems, and socio-economic sectors.

Current protected area (PA) coverage remains below the 30% conservation target set under the Global Biodiversity Framework (GBF). Significant ecologically important landscapes continue to lack formal protection, leaving critical habitats and species vulnerable to deforestation, land-use change, and other human pressures. This shortfall underscores the urgent need for strategic expansion of PAs, particularly in biodiversity hotspots and areas that provide essential ecosystem services.

The effectiveness of management across existing PAs is highly variable. While some sites benefit from strong governance, adequate enforcement, and active biodiversity monitoring, others face weak oversight, incomplete management plans, and limited law enforcement capacity. These disparities produce uneven conservation outcomes, with certain areas achieving measurable biodiversity gains while others experience continued habitat degradation or species decline despite their protected status.

Conservation efforts are further constrained by chronic underfunding, insufficient staffing, and limited technical and monitoring capacities. Restricted financial resources impede the implementation of management plans, enforcement of protection measures, and ecological monitoring. Similarly, a lack of trained personnel undermines governance, and gaps in data collection prevent evidence-based, adaptive management, leaving conservation efforts largely reactive rather than proactive.

Other Effective Area-Based Conservation Measures (OECMs), including community-managed forests, sacred natural sites, and informal conservation areas, contribute significantly to biodiversity protection outside formal PAs. However, these areas often lack legal recognition or integration into national conservation strategies, limiting their potential contribution to national and global targets. This under-recognition reduces access to funding and technical support and underrepresents the true extent of effective conservation on the landscape.

Section 4: Alignment of the NBSAP with the Global Biodiversity Framework (GBF)

The National Biodiversity Strategy and Action Plan (NBSAP) serves as The Gambia's primary instrument for translating global biodiversity commitments into national action and the CBSAP serves as a tool for achieving that. It provides a structured framework for implementing the Kunming-Montreal Global Biodiversity Framework (GBF), which outlines 23 action-oriented targets aimed at halting biodiversity loss and promoting sustainable use of natural resources by 2030.

Out of the 23 global targets, The Gambia's NBSAP actively addresses 15, reflecting a strategic focus on areas critical to the country's ecological, social, and economic contexts. The plan integrates these targets into national priorities through policy measures, conservation programs, and community-based initiatives.

4.1 Key GBF Targets Directly Addressed

1) Target 1: Spatial Planning – The NBSAP emphasizes integrating biodiversity considerations into land-use planning and development strategies to reduce habitat fragmentation and promote ecological connectivity.
2) Target 2: Restoration – National programs focus on restoring degraded landscapes, including forests, wetlands, and coastal zones, enhancing ecosystem functionality and resilience.
3) Target 3: 30% Protected/OECM Coverage – Efforts are underway to expand the coverage of protected areas and Other Effective Area-Based Conservation Measures (OECMs), aiming to safeguard at least 30% of terrestrial and marine ecosystems.
4) Target 4: Species Conservation – The plan implements measures to conserve threatened and endemic species, including habitat protection, ex-situ conservation, and species-specific management programs.
5) Target 8: Climate Resilience – NBSAP initiatives aim to strengthen ecosystems' adaptive capacity to climate change, supporting both biodiversity and human communities' dependent on natural resources.
6) Target 11: Ecosystem Restoration – Restoration of degraded ecosystems is prioritized to enhance biodiversity, improve ecosystem services, and mitigate environmental risks such as soil erosion and flooding.
7) Target 19: Resource Mobilization – The plan identifies financial and technical resources required for biodiversity action, promoting partnerships, investment, and capacity-building.
8) Targets 22 & 23: Equity, Gender, IPLCs, Human Rights – The NBSAP recognizes the critical role of Indigenous Peoples and Local Communities (IPLCs), promotes gender equality in biodiversity governance, and ensures that human rights considerations underpin all conservation and management strategies.

Through alignment with these GBF targets, The Gambia's NBSAP not only contributes to global biodiversity goals but also supports sustainable development, climate adaptation, and inclusive governance at the national level.

4.2 The NBSAP also directly contributes to all (Programme of Work on Protected Areas) PoWPA elements:

4.2.1 PA System Planning and Management

The NBSAP provides a strategic framework for establishing, expanding, and managing protected areas (PAs). It identifies priority sites for conservation, sets management objectives, and promotes the integration of PAs into broader land- and seascapes. By aligning national biodiversity targets with PA system goals, the NBSAP guides systematic planning, resource allocation, and management effectiveness. It encourages ecosystem-based approaches, connectivity between sites, and adaptive management strategies to respond to ecological changes and emerging threats.

4.2.2 Guiding Principles

The strategic direction for biodiversity conservation and sustainable use in The Gambia is grounded in a set of guiding principles that ensure interventions are ecologically sound, socially inclusive, economically viable, and aligned with global commitments. These principles guide planning, decision-making, and implementation of the NBSAP, PA/OECM management, and national conservation initiatives.

Table 3: Guiding Principles for sustainable biodiversity management

1	Ecosystem-Based and Landscape-Level Approaches	Conservation actions must consider entire ecosystems and landscape mosaics rather than isolated sites. This approach promotes ecological connectivity, maintains functional ecosystems, and ensures sustained provision of ecosystem services across terrestrial, freshwater, and marine environments.
2	Precautionary Principle	Where scientific certainty is limited, decisions should err on the side of caution to avoid irreversible biodiversity loss. This is particularly relevant for threatened species, fragile ecosystems like mangroves and wetlands, and areas experiencing rapid land-use change.
3	Evidence-Based and Adaptive Management	Policies and management actions should be guided by reliable scientific data, local knowledge, and continuous monitoring. Adaptive management ensures that practices evolve in response to new information, ecological trends, and emerging threats.
4	Community Participation, Equity, and Inclusiveness	Effective conservation requires full engagement of Indigenous Peoples and Local Communities (IPLCs), women, youth, and marginalized groups. Inclusive governance ensures shared benefits, respects traditional knowledge, and builds local ownership.stewardship of natural resources.
5	Recognition of OECMs and Traditional Conservation Systems	Traditional practices, sacred sites, and community-managed landscapes play a significant role in biodiversity conservation. Recognizing these areas as OECMs supports culturally rooted conservation while expanding ecological protection beyond formal PAs.
6	Integration of Biodiversity into National Development Planning	Biodiversity considerations must be mainstreamed into land-use planning, agriculture, fisheries, tourism, infrastructure development, and climate policies. This ensures balanced development that reduces ecosystem pressure and supports sustainable growth.
7	Climate Resilience and Nature-Based Solutions	Conservation strategies should enhance ecosystem resilience to climate change and utilize nature-based solutions such as mangrove restoration, reforestation, and sustainable land management to mitigate and adapt to climate impacts.
8	Sustainable Use and Benefit-Sharing	Natural resources should be used in a manner that maintains ecological integrity while providing equitable socio-economic benefits. This principle supports sustainable fisheries, controlled forest use, ecotourism, and fair distribution of benefits from genetic resources.
9	Good Governance, Transparency, and Accountability	Effective conservation requires strong institutional coordination, clear roles and responsibilities, enforcement of environmental laws, and transparent decision-making processes at all levels.
10	International and Regional Cooperation	The Gambia's biodiversity planning must align with and contribute to global and regional frameworks including the GBF, MEAs, and regional conservation initiatives to ensure shared learning, resource mobilization, and collective action across borders.

Section 5: Situational Analysis

5.1 National Biodiversity Status and Trends

The Gambia's biodiversity reflects a mix of Sahelian and Sudanian ecological zones, supporting a wide range of species, habitats, and ecosystems from coastal and marine environments to riverine zones, wetlands, savannah woodlands, and agricultural mosaics. However, biodiversity is experiencing increasing pressure from land-use change, climate variability, habitat degradation, and unsustainable resource extraction.

Through the National Biodiversity Strategy and Action Plan (NBSAP), The Gambia has established a national framework for assessing biodiversity status and trends. The NBSAP encourages the use of standardized indicators to track species populations, ecosystem health, forest cover changes, and key ecological processes. By integrating monitoring methodologies aligned with international frameworks (e.g., CBD, SDGs), the country is better positioned to detect emerging threats, measure progress toward conservation targets, and guide adaptive management. This results in biodiversity assessments that are more systematic, evidence-based, and responsive to dynamic environmental conditions.

5.2 Current Protected Area System in The Gambia

The Gambia's Protected Area (PA) system includes national parks, forest parks, reserves, and community-managed areas. These PAs form a critical network for conserving species, maintaining ecological functions, and safeguarding ecosystem services such as water regulation, carbon storage, and cultural values.

Table 4: Protected Area Representation (Excluding Biosphere)

Indicator	Value
Number of Protected Areas	27
National Protected Area Coverage	**109,586.47 ha**
PA % Representation	**9.70%**
Terrestrial & Inland Area Protected	**12,205.37 ha** (1.08%)
Coastal & Marine Area Protected	**97,381.1 ha** (8.61%)

Table 5: Protected Area Representation (Including Biosphere)

Indicator	Value
Number of Protected Areas	28
Biosphere Coverage (outside PAs)	**136,905 ha**
Biosphere + PAs Combined	**193,665 ha**
Biosphere % Including PAs	**17.13%**
National Protected Area Coverage (including biosphere)	**246,521.47 ha**
National PA % Representation	**21.81%**
Terrestrial & Inland Area Protected	**12,205.37 ha** (1.08%)
Coastal & Marine Area Protected (including biosphere)	**234,286.1 ha** (20.73%)

Table 6: Indigenous Community Conservation Areas (ICCA)

No.	Community Conservation Area	Year	Area (ha)	Administrative Area
10	Bolong Fenyo Community Wildlife Reserve	2008	320	Brikama – WCR
11	Bamako Community Conservation Area	2014	1,032	Mansakonko – LRR
12	Barrow Kunda Community Conservation Area	2014	359	Mansakonko – LRR
13	Badari Community Conservation Area	2014	2	Basse – URR
14	Demba Kunda Community Conservation Area	2014	7	Basse – URR
15	Kass Wolof Community Conservation Area	2014	24	Janjanbureh – CRR
16	Chamen Community Conservation Area	2014	32	Janjanbureh – CRR
17	Faraba Bantang Community Conservation Area	2014	502	Brikama – WCR
18	Pakau Njogu Community Conservation Area	2014	59	Kerewan – NBR
19	Kassagne Community Conservation Area	2014	132	Brikama – WCR
20	Kanuma Community Conservation Area	2014	47	Brikama – WCR
21	Tintiba & Dumbuto Community Conservation Area	2014	172.3	Brikama – WCR
22	Berefet Community Conservation Area	2014	984.9	Brikama – WCR
23	Bintang Community Conservation Area	2014	1,184.9	Brikama – WCR
24	Jarumeh Koto	2023	1,481.34	Kuntaur – CRR South
25	Jealan Bakadagi	2023	4,117.28	Kuntaur – CRR South
26	Kayai	2023	861.02	Kuntaur – CRR South
27	Sukuta	2023	2,987.73	Kuntaur – CRR South
Total ICCA Area: 14,305.47 ha **ICCA % Representation: 1.3%**				

Source: DPWM

However, many PAs face challenges related to boundary encroachment, weak enforcement, insufficient staffing, and limited financial sustainability. The NBSAP provides mechanisms to strengthen PA monitoring through biodiversity indicators, threat assessments, and performance evaluation tools ensuring that PA management becomes more strategic and results-oriented. By linking PA effectiveness to national conservation targets, the NBSAP helps reinforce the role of PAs as foundational components of the national biodiversity conservation framework.

5.3 Institutional and Policy Framework

The institutional and policy environment for biodiversity conservation in The Gambia involves a range of governmental bodies, including the Ministry of Environment, climate-related agencies, forestry and wildlife departments, and local government structures. Additional support comes from research institutions, NGOs, and international partners.

The NBSAP plays a central role in harmonizing these institutional mandates by integrating PA priorities into national development plans, environmental legislation, land-use policies, and sectoral strategies such as agriculture, fisheries, and tourism. It also encourages the adoption of policies that promote sustainable resource use, recognize community rights, and expand co-management arrangements.

The enabling environment created by the NBSAP strengthens coordination, clarifies responsibilities across institutions, and guides the development of supportive legal instruments, funding mechanisms, research agendas, and cross-sector partnerships vital for effective PA governance.

5.4 Stakeholder Mapping

Biodiversity conservation in The Gambia involves diverse stakeholders whose roles, interests, and capacities directly influence the success of PA management:

1) Government agencies: Lead regulatory enforcement, monitoring, and policy implementation.
2) Local communities and indigenous groups: Hold traditional knowledge, depend on natural resources for livelihoods, and are essential to co-management.
3) Non-governmental organizations (NGOs): Provide technical support, advocacy, monitoring, and community engagement.
4) Private sector actors: Influence land use, tourism development, and sustainable value chains.
5) Research and academic institutions: Generate data, conduct ecological assessments, and develop monitoring tools.
6) Development partners and donors: Support capacity building, finance conservation programs, and strengthen institutional frameworks.

The NBSAP promotes participatory governance by ensuring these stakeholders are actively involved in decision-making processes. It emphasizes equity, access, and rights—including community access to resources and recognition of traditional knowledge. Through conflict-resolution mechanisms, co-management approaches, and transparency standards, the NBSAP fosters legitimacy, social support, and improved compliance within PAs.

5.4 Capacity Needs and Gap Assessment for The Gambia

Effective biodiversity management in The Gambia requires robust institutional, technical, human, and financial capacities across multiple sectors. Current assessments indicate that many protected area (PA) managers, community organizations, and local governance bodies face significant limitations in ecological monitoring, enforcement, data management, and participatory governance. Addressing these gaps is essential for ensuring that The Gambia's National Biodiversity Strategy and Action Plan (NBSAP) is fully aligned with the objectives of the Global Biodiversity Framework and international biodiversity commitments.

5.4.1 Institutional Gaps and Needs

1) Weak interagency coordination: Key agencies including the Department of Parks and Wildlife Management (DPWM), Department of Forestry (DoF), Fisheries Department, tourism, and land use authorities often operate in isolation. This fragmentation results in inefficient resource use, missed opportunities for integrated landscape management, and overlapping mandates, especially in coastal zones.
2) Staff shortages: Chronic understaffing in the DPWM and DoF limits effective monitoring, law enforcement, community engagement, and PA management.

3) Overlapping mandates in coastal zones: Confusion over responsibilities in mangroves, wetlands, and other coastal ecosystems hampers coordinated interventions, creating potential conflicts and reducing conservation effectiveness.

Capacity Needs: Strengthening institutional frameworks, improving interagency coordination, and building human resources are critical. This includes organizational restructuring, enhanced planning platforms, and clear delineation of mandates for all agencies involved in biodiversity management.

5.4.2 Technical Gaps and Needs

1) Inadequate PA system planning: There is a lack of expertise in systematic gap analyses, connectivity assessments, and strategic expansion of the PA network, compromising ecosystem representativeness and resilience.
2) Limited understanding of OECMs and rights-based conservation: Weak knowledge of Other Effective Area-Based Conservation Measures (OECMs) and community rights-based approaches reduces the recognition of community-managed areas in national planning.
3) Weak GIS, remote sensing, and biodiversity monitoring capacity: Limited ability to collect, analyze, and interpret spatial and ecological data undermines monitoring of species populations, habitats, and management interventions.
4) Limited restoration science expertise: Insufficient skills in ecological restoration, particularly for degraded forests, wetlands, and coastal ecosystems, hinder efforts to achieve national ecosystem recovery targets.

Capacity Needs: Training for PA staff in GIS, remote sensing, species identification, patrolling, ecosystem-based management, and restoration science is essential. Support for research and academic programs in biodiversity monitoring and ecosystem assessments is also crucial.

5.4.3 Governance and Social Gaps and Needs

1) Limited community participation: Local communities are underrepresented in PA management, conservation planning, and natural resource decision-making, reducing buy-in and compliance.
2) Incomplete FPIC processes: Free, prior, and informed consent (FPIC) procedures for engaging local communities and Indigenous Peoples are not consistently implemented, potentially undermining social legitimacy and equity.
3) Gender gaps: Women's representation in PA management, technical roles, and community-based initiatives remains low, limiting program inclusivity and effectiveness.

Capacity Needs: Skills development for communities in co-management, sustainable resource use, and conflict resolution is vital. Educational and awareness initiatives targeting local populations can enhance understanding of biodiversity importance and foster participatory governance.

5.4.4 Financial Gaps and Needs

1) Heavy reliance on donor funding: Dependence on external financing exposes national initiatives to funding volatility.

2) Underdeveloped sustainable financing mechanisms: Mechanisms like Payments for Ecosystem Services (PES), ecotourism revenue-sharing, and biodiversity offsets are limited, restricting long-term sustainability.

Capacity Needs: Development of sustainable financing mechanisms and institutional support for long-term funding stability are required.

5.4.5 Climate and Ecological Gaps and Needs

Climate and ecological challenges exacerbate biodiversity risks:

1) Gaps in climate vulnerability assessments: Key ecosystems and PAs lack comprehensive assessments of climate risks, including sea-level rise, temperature increases, and extreme weather events.
2) Limited fire management and mangrove restoration capacity: Inadequate skills and resources threaten critical ecosystems, leaving them vulnerable to degradation and biodiversity loss.

Capacity Needs: Capacity-building for adaptive management, fire prevention, mangrove restoration, and ecosystem resilience is essential to address climate and ecological threats.

5.4.6 Capacity-Building Strategy Framework (CBSF): To address these gaps, the NBSAP proposes a multi-level capacity-building approach:

Table 7: Capacity Building Intervention Logic

Level	Focus Areas	Activities / Strategies	Expected Outcomes
Individual-Level Capacity	Skills & Knowledge	- Training programs (technical and managerial) - Certification courses - Knowledge exchange workshops - Mentorship and peer learning	- Improved technical expertise in natural resource management - Enhanced professional competencies - Stronger capacity for project implementation at the individual level
Institutional-Level Capacity	Organizational Strengthening	- Strengthening key institutions: DPWM (Department of Protected Wildlife Management), DoF (Department of Forestry), NEA (National Environment Agency), Fisheries Department, local councils, research institutions - Institutional training and development - Resource allocation and infrastructure support - Collaboration frameworks between institutions	- More effective, coordinated institutions - Increased institutional resilience - Better implementation of policies and programs - Enhanced inter-agency collaboration
System-Level Capacity	Policy & Systems	- Policy reforms and legal frameworks - Establishment of national coordination platforms - Development of financing mechanisms for sustainability programs - Creation and strengthening of national data systems for decision-making	- Coherent, well-aligned national policies - Integrated governance and coordination - Sustainable financing for long-term initiatives - Improved data-driven policy and management decisions

Section 6: Vision, Goal, and Strategic Objectives of CBSAP

6.1 Vision

The vision of this strategic plan is to establish a resilient, well-connected, and equitably governed network of protected and conserved areas across The Gambia. These networks aim to safeguard the country's rich biodiversity while simultaneously contributing to global and national priorities, including the 2030 Sustainable Development Goals (SDGs) and The Gambia's national development agenda. By fostering ecological integrity, sustainable livelihoods, and inclusive governance, this vision sets a long-term trajectory toward a balanced coexistence between people and nature.

6.2 Goal

The primary goal of this plan is to strengthen national capacities encompassing technical, financial, institutional, and social dimensions to effectively implement the Kunming-Montreal Global Biodiversity Framework (GBF) 2030 Targets. This includes the full and effective implementation of the Programme of Work on Protected Areas (PoWPA) and Other Effective Area-Based Conservation Measures (OECMs). The approach emphasizes participatory engagement, ensuring that diverse stakeholders, including local communities, women, and youth, are actively involved in planning and decision-making processes for biodiversity conservation.

6.3 Strategic Objectives (SO)

The strategic objectives outline in the ten-year (2025–2030) capacity development roadmap for The Gambia, targeting enhanced implementation of the GBF. These objectives aim to reverse biodiversity loss, mitigate threats from overexploitation of natural resources and climate change, safeguard ecosystem integrity, promote equitable benefit sharing, and improve the livelihoods of local communities. The objectives are as follows:

a) SO1: Strengthen Enabling Conditions - Enhance the policy, legal, institutional, and financial frameworks that support the effective management of Protected Areas (PAs) and OECMs. This includes reforms and innovations that ensure governance structures are robust and sustainable.
b) SO2: Build Technical Capacity - Improve planning, establishment, restoration, and management of PAs and OECMs through training, knowledge transfer, and adoption of best practices, ensuring ecosystems are managed effectively and sustainably.
c) SO3: Strengthen Monitoring and Reporting - Develop a national biodiversity monitoring and information system aligned with GBF indicators. This system will provide timely and accurate data to inform management decisions, policy development, and reporting obligations.
d) SO4: Strengthen Governance, Rights, and Equity - Enhance inclusive, rights-based governance in PAs, ensuring strong participation of women, youth, and Indigenous/local communities, and fostering equitable benefit sharing.
e) SO5: Enhance Climate Resilience and Ecosystem Restoration - Build capacity to integrate climate adaptation, ecosystem restoration, and disaster risk reduction into PA management, promoting resilience against environmental changes and natural hazards.

f) SO6: Promote Sectoral Collaboration in Biodiversity Conservation - Facilitate synergies and collaboration across key sectors, particularly Agriculture and Natural Resources (ANR), to mainstream biodiversity considerations into broader development planning.
g) SO7: Enhance Local Communities' Capacities - Strengthen community capabilities in sustainable resource management, improve adaptive capacity to climate change, and support livelihoods that align with conservation objectives.
h) SO8: Enhance Gender Mainstreaming and Participation - Promote gender mainstreaming and ensure women's meaningful participation in implementing the GBF 2030 and PoWPA, thereby fostering inclusive decision-making and equitable access to conservation benefits.

Section: 7. Capacity-Building Priorities

A brief survey conducted to establish a rough status of technical and professional skills within the Department of Forestry and the Department of Parks and Wildlife Management revealed a serious gap in terms in terms of human resource. The number degree holders at both BSC and MSC levels fall far short of what is required to manage the country's natural resource heritage.

Relatively, the Department of Forestry fairs slightly better than DPWM in terms of absolute numbers trained personnel. Forestry has a total technical staff complement of about 100. Out of this number, only six has a post graduate degree. The number of BSc holders is just twelve. There are only eight people with a diploma in forestry. These capacities within the FD are very unevenly distributed across gender. Women fair very poorly in terms of technical qualification. For instance, there are only two female graduate foresters (only at the Bsc level).

Table 8: Staff complement and qualifications, Forestry Department

No.	Certificates (MSc, BSc, Diploma, Basic)	Total #. of Staff	Gender Aggregation		Comments
			M	F	
1	MSc	6	6	0	The MSc obtained by staff are in the areas of - Applied Statistic, Forestry, Economics, CITES Management, Forestry Economics and Management and Tropical Forestry
2	BSc	12	10	2	Currently 3 staff are pursuing their MSc in Forestry and 3 are still left with some semesters to finish their BSc at the University of the Gambia.
3	Diploma	8	7	1	Currently 2 are pursuing their MSc in the of project management and forestry economic and policy
4	Basic Forestry certificate	96	73	23	

Source: Modou Colley, Forestry Department

The DPWM has the mandate of managing 95,281 hectares (National Parks & Reserves combined) which represents 8.43 % of the country. This places a huge burden on the limited human capital of the Department. The good news is that the gender ratio in the Department is more balanced in fact, DPWM looks unique across the government where there seems to be more females than men in absolute terms. In fact, there are more trained women than men.

Table 9: Staff complement and qualifications, DPWM

No.	Certificates (MSc, BSc, diploma, basic)	Total #. Staff	Gender Aggregation		Comments
			M	F	
1	MSc	5	1	4	Currently 1 staff is pursuing his MSc in Germany
2	BSc	3	2	1	Currently 1 staff is still left with some semesters to finish her BSc in India.
3	Diploma	17	5	12	
4	Basic certificate	35	9	26	

Source: Modou Colley, Forestry Department

The case of DPWM is slightly worst in terms of staff roll and the number of trained personnel. The DPWM has the mandate of managing **95, 281 hectares** (National Parks & Reserves combined) which represents 8.43 % of the country. This places a huge burden on the limited human capital of the Department**.** The good news is that the gender ratio in DPWM is more balanced. In fact, DPWM looks unique where there seems to be more females than men quantitatively at least

Achieving long-term biodiversity conservation outcomes requires robust, well-coordinated, and inclusive capacity-building interventions. Over the 2025–2030 period, strategic priorities will focus on strengthening governance structures, enhancing technical proficiency, improving protected area (PA) management, and fostering the integration of community and Indigenous knowledge systems. Together, these measures aim to create a resilient institutional ecosystem capable of responding effectively to emerging environmental challenges while promoting sustainable development.

To mitigate the capacity gap highlighted above, there is need to institutionalize staff training at various levels. National capacity in developing the professional cadre should be strengthened. This would call for the strengthening of the National School of Forestry at Kafuta. The school currently offers only a certificate level course for new school leavers.

7.1 Strengthening Governance, Coordination, and Institutional Capacities

Strengthened governance and institutional coordination form the backbone of effective biodiversity conservation. Between 2025 and 2035, priority actions involve:

a) Policy harmonization and institutional alignment: Streamlining mandates, clarifying roles among key ministries, and ensuring that biodiversity considerations are integrated into land-use planning, climate adaptation strategies, and sectoral policies such as forestry, agriculture, fisheries, and infrastructure development.

b) Interagency coordination platforms: Establishing or revitalizing cross-sectoral biodiversity working groups to enhance information sharing, decision-making, and rapid response mechanisms during environmental emergencies.
c) Regulatory and compliance support: Building capacities within environmental authorities to enforce environmental regulations, monitor compliance, and implement transparent biodiversity impact assessments.
d) Institutional leadership development: Investing in leadership training for senior managers to strengthen strategic planning, negotiation, resource mobilization, and conflict resolution skills.
e) Sustainable financing and resource mobilization: Enhancing capacities to access international climate and biodiversity financing mechanisms, develop innovative finance models (e.g., PES, biodiversity offsets, green bonds), and improve long-term budgetary planning.

7.2 Enhancing Technical Capacities for Biodiversity Conservation

The next decade requires more advanced technical expertise to support data-driven, science-based conservation. Key priorities include:

a) Technical expertise: Build a critical mass trained personnel in forestry, wildlife, to enhance programme design, implementation and monitoring
b) Biodiversity assessment and monitoring: Strengthening skills in ecological survey methods, species identification, genomic tools, GIS and remote sensing, environmental modelling, and the use of digital data platforms.
c) Threat assessments and research: Enhancing national capacity to analyse drivers of biodiversity loss such as habitat degradation, invasive species, climate change, and pollution and conduct applied research to inform conservation interventions.
d) Restoration ecology: Expanding technical knowledge on landscape restoration, native species propagation, nature-based solutions, and ecosystem rehabilitation in degraded terrestrial, freshwater, and marine systems.
e) Climate-biodiversity integration: Training experts to assess ecosystem-based adaptation (EbA), climate-resilient conservation planning, and carbon-rich ecosystem protection (e.g., mangroves, peatlands, old-growth forests).
f) Digital innovation and technology transfer: Building capacity to adopt emerging tools such as drones, AI-assisted biodiversity monitoring, automated acoustic sensors, DNA analysis, and cloud-based environmental databases.
g) Upgrade the National School of Forestry should be overhauled to make it fit a fully fledge diploma course. The teaching professionals and facilities are basic and should be upgraded to improve the standard of instruction
h) Graduate programme: Introduce a BSc programme on natural resource management with a focus on forestry and wildlife at the University of The Gambia.

7.3 Improving Protected Area Management Effectiveness

Protected areas remain central to national conservation strategies, and enhancing their effectiveness is a key 2026–2030 priority. Focus areas include:

a) Management planning and implementation: Supporting PA authorities to develop and apply adaptive management plans, zoning systems, and science-based conservation objectives.
b) Law enforcement and ranger professionalization: Strengthening ranger training in surveillance, patrolling, evidence handling, conflict mitigation, and safety. Expanding the use of smart patrol tools and real-time reporting systems.
c) Infrastructure and operational capacity: Improving PA facilities, communication systems, monitoring stations, and transport equipment, while ensuring adequate staffing and operational budgets.
d) Ecological connectivity and landscape integration: Developing capacities to plan ecological corridors, buffer zones, and community-managed conservation areas to ensure functional connectivity across landscapes.
e) Management Effectiveness Tracking Tools (METT): Institutionalizing regular PA performance evaluations (e.g., METT, RAPPAM, Green List standards) and using results to guide adaptive decision-making and funding priorities.

7.4 Community and Indigenous Knowledge Integration

Inclusive conservation requires fully recognizing the roles, rights, and knowledge of local communities and Indigenous Peoples. Capacity-building priorities for 2025–2035 include:

a) Participatory governance and co-management: Strengthening capacities of communities, Indigenous organizations, and government agencies to engage in joint decision-making, co-governance arrangements, and community-led conservation initiatives.
b) Traditional knowledge documentation and integration: Supporting systematic documentation of Indigenous ecological knowledge, customary practices, and cultural heritage values, and integrating these insights into biodiversity management plans, monitoring frameworks, and restoration activities.
c) Community livelihood and enterprise development: Enhancing skills in sustainable natural resource use, eco-tourism, value-added biodiversity products, and climate-resilient livelihood diversification to reduce pressure on ecosystems.
d) Respectful engagement and rights-based approaches: Building institutional capacity to safeguard Free, Prior and Informed Consent (FPIC), cultural sensitivity, and benefit-sharing mechanisms.
e) Capacity for conflict resolution: Establishing mechanisms for resolving human-wildlife conflict and land-use disputes through training, early-warning systems, and community-based monitoring.

7.5 Research, Data, and Monitoring Capacities

Strengthening research, data, and monitoring systems over the next decade is essential for evidence-based decision-making and adaptive management. A key priority is the establishment of integrated, real-time environmental data platforms that consolidate information across sectors such as biodiversity, water quality, land use, climate conditions, and socio-economic indicators. Modernizing data collection through remote sensing, GIS technologies, environmental sensors, citizen science, and AI-enabled analytics will significantly improve accuracy, coverage, and timeliness.

Equally important is the development of national research agendas aligned with priority thematic areas, including climate resilience, ecosystem health, pollution control, sustainable resource management, and community livelihoods. Investing in local research institutions, universities, and innovation hubs will help

cultivate a skilled pool of professionals capable of generating high-quality scientific outputs. Partnerships with regional and international research bodies will enhance knowledge exchange, provide access to global datasets, and strengthen methodological standards.

Monitoring and evaluation (M&E) frameworks must also be standardized across institutions, with clear indicators, baselines, and reporting cycles. Strengthening enforcement agencies with advanced monitoring tools such as drones, satellite imagery, and automated detection systems will enhance compliance with environmental and natural resource laws. Over the 2025–2035 period, developing open-data policies and ensuring transparent public access to environmental information will deepen accountability, support academic research, and empower communities to engage in environmental governance.

7.6 Financing and Resource Mobilization

Achieving long-term sustainability goals requires diversified, predictable, and innovative financing mechanisms. Traditional government budgets alone will not be sufficient; thus, a strategic priority is to expand financing sources through public-private partnerships, international climate funds, blended finance arrangements, and green investment instruments. Establishing dedicated environmental and climate funds supported by national budgets, donor contributions, carbon taxes, and environmental levies will help secure long-term funding for conservation, restoration, and adaptation initiatives.

Mobilizing private-sector financing is critical. Green bonds, sustainable tourism fees, biodiversity credits, and payment for ecosystem services (PES) schemes offer opportunities to channel investments toward ecosystem restoration, renewable energy, and low-carbon infrastructure. Strengthening financial governance, including transparency, fiduciary systems, and results-based financing protocols, will build investor confidence and increase eligibility for global funds such as the Green Climate Fund (GCF) and Global Environment Facility (GEF).

Local communities and indigenous groups must also be empowered to access microfinance, livelihood grants, and revenue-sharing schemes that support sustainable resource use. Over the period 2025–2030, enhancing financial literacy, institutional capacity, and project-management skills at both national and community levels will be critical for absorbing and effectively utilizing mobilized resources. Ultimately, a robust and diversified financing ecosystem will enable the scale-up of transformative environmental initiatives.

7.7 Awareness, Education, and Behavioral Change

Transformative environmental outcomes depend on informed, engaged, and motivated citizens. From 2025 to 2030, priority will be given to mainstreaming environmental education across school curricula from early childhood to tertiary levels ensuring that learners gain knowledge on climate change, biodiversity, sustainable consumption, and ecosystem stewardship. Teacher training programs must be updated to equip educators with the skills and tools to deliver dynamic, practical, and community-oriented environmental education.

Beyond formal education, large-scale public awareness and behavioral-change campaigns will target households, industries, and local communities to promote practices such as waste reduction, water conservation, pollution prevention, and responsible land use. Modern communication channels including

social media, digital storytelling, community radio, and mobile platforms will be used to reach diverse demographic groups. Traditional knowledge and cultural values will also be integrated, recognizing community-based environmental ethics as a powerful driver of positive behavior.

Engagement strategies should prioritize participatory approaches such as community dialogues, citizen science, volunteer programs, and youth-led environmental clubs. Incentive-based behavior change through recognition programs, green labelling for businesses, or reward schemes for compliance can further motivate sustainable habits. Over the next decade, strengthening environmental advocacy networks, empowering local champions, and promoting multi-stakeholder collaboration will create a society that actively supports and practices sustainability.

7.8 Climate Change Resilience and Ecosystem-Based Adaptation

Building resilience to climate change is a central strategic priority, especially for vulnerable ecosystems and communities. Ecosystem-based Adaptation (EbA) which leverages natural systems to buffer climate impacts will form the backbone of adaptation strategies from 2025 to 2030. This includes restoring mangroves, wetlands, forests, and coral reefs to protect coastlines, regulate water flows, reduce disaster risks, and enhance biodiversity.

Investments in climate-resilient infrastructure and nature-based solutions will help mitigate flooding, landslides, drought impacts, and coastal erosion. Integrating climate risk assessments into land-use planning, agriculture, fisheries management, and urban development will ensure decisions consider long-term climate projections. Local communities must be equipped with climate-smart agricultural practices, drought-resistant crop varieties, water-saving technologies, and livelihood diversification programs to reduce vulnerability.

Institutional capacity building is equally vital. Strengthening early-warning systems, risk-mapping capabilities, and emergency response coordination will improve preparedness and reduce loss and damage during extreme events. Policies and regulatory frameworks will be updated to support carbon-neutral development, protect climate-sensitive ecosystems, and promote low-carbon technologies.

Over the decade, integrating traditional ecological knowledge with modern science will enrich adaptation strategies and foster locally grounded resilience solutions. Ultimately, adopting EbA at scale will enhance ecological integrity, safeguard livelihoods, and support a climate-resilient future.

7.9 Overview of Priority Actions

The priority actions for 2025–2030 outline a coordinated national effort to strengthen biodiversity governance, expand conservation areas, improve monitoring, promote equity, and build climate resilience. Central to this plan is the creation of a strong enabling environment through modernized biodiversity legislation, national coordination mechanisms, and long-term financing systems. Technical capacity development will support protected area expansion, improved site-level management, and advanced ranger training to ensure effective frontline conservation.

Robust biodiversity monitoring and GBF reporting will be achieved by establishing a national monitoring framework, developing an integrated biodiversity information system, building technical data-collection

skills, and ensuring timely international reporting. Governance reforms emphasize equitable participation of communities, women, and Indigenous Peoples and Local Communities through stronger engagement, gender inclusion, and benefit-sharing mechanisms that enhance local livelihoods.

Finally, climate resilience and restoration actions will address vulnerability hotspots, integrate climate risks into planning, restore critical ecosystems at scale, and strengthen disaster-risk reduction systems. Together, these priority actions form an integrated roadmap to safeguard biodiversity while supporting sustainable development and community well-being.

Section: 8 Implementation Framework for CBSAP

Effective implementation of the program hinges on a well-defined framework that clearly assigns roles and responsibilities, establishes coordination mechanisms, strengthens capacity-building, and fosters collaboration among multiple stakeholders. This ensures efficient use of resources, avoids duplication of efforts, and achieves the intended conservation and sustainable development outcomes.

8.1 Institutional Roles and Responsibilities

Successful program delivery requires the active engagement of both lead agencies and supporting institutions. Each entity has a specific mandate to ensure the program operates seamlessly across national, regional, and local levels.

8.1.1 Lead Agencies

Lead agencies are primarily responsible for setting policy direction, enforcing regulations, coordinating program activities, and providing technical oversight:

1) Department of Parks and Wildlife Management (DPWM): DPWM serves as the principal coordinating body for protected area management and wildlife conservation. Responsibilities include enforcing wildlife laws, implementing habitat restoration programs, monitoring biodiversity, and coordinating community engagement initiatives.
2) National Environment Agency (NEA): NEA ensures program compliance with national environmental standards and regulations. It leads environmental impact assessments, policy development, and the monitoring of ecosystem health indicators.
3) Department of Forestry (DoF): DoF manages sustainable forest use, afforestation and reforestation programs, and protection of critical forest ecosystems. It also provides technical guidance for forest conservation practices and facilitates capacity-building programs for local communities.
4) Department of Fisheries: Responsible for the sustainable management of freshwater and marine ecosystems, this department oversees fisheries management, habitat conservation, monitoring of fish stocks, and the promotion of community-based fisheries initiatives.

8.1.2 Supporting Institutions

Supporting institutions complement the efforts of lead agencies by providing technical expertise, research support, advocacy, and community mobilization:

a) Local Government Authorities: Local governments implement conservation initiatives at the grassroots level, provide local oversight, and align activities with district development plans.
b) Universities and Research Institutes: Academic institutions contribute through research, monitoring, and evaluation of program outcomes, as well as the development of innovative solutions for biodiversity conservation and natural resource management.

c) Civil Society and Conservation NGOs: These organizations support policy advocacy, awareness campaigns, technical assistance, and community engagement to strengthen conservation outcomes.
d) Community-Based Organizations (CBOs): CBOs promote participatory conservation, sustainable resource use, and local stewardship of natural resources through direct engagement with local populations.
e) International Organizations (IUCN, UNDP, FAO, UNEP): These agencies provide technical expertise, funding, and global best practices to support program design, implementation, and monitoring. They also facilitate international collaboration and reporting on conservation outcomes.

This multi-stakeholder structure ensures that responsibilities are clearly defined, expertise is effectively leveraged, and conservation interventions are coordinated from national to local levels.

8.2 Coordination Mechanisms

To achieve cohesive and efficient program implementation, structured coordination mechanisms will be established at multiple levels:

1) Inter-Agency Steering Committees: Comprising representatives from all lead and supporting institutions, these committees will provide strategic guidance, monitor program progress, and resolve cross-institutional challenges.
2) Technical Working Groups: These groups will focus on specific thematic areas such as biodiversity conservation, forest management, fisheries, and community engagement, providing specialized guidance and technical recommendations.
3) Regular Reporting and Review: Periodic progress reports, performance evaluations, and field reviews will ensure transparency, accountability, and timely corrective actions.
4) Community Liaison Platforms: Local-level platforms will facilitate dialogue between communities, CBOs, and government agencies, ensuring that local perspectives inform decision-making.

8.3 Capacity-Building Delivery Modalities

A robust capacity-building program will enhance the skills and knowledge of all stakeholders involved in conservation:

1) Training Workshops and Seminars: Targeted programs for government officials, local communities, and NGOs to improve technical and managerial skills.
2) On-the-Job Mentoring: Hands-on mentoring for field staff and community members to reinforce practical conservation skills.
3) Knowledge Exchange Programs: Collaboration with academic institutions and international organizations to adopt best practices and innovative approaches.
4) Digital Learning Platforms: Online courses and e-learning modules to provide continuous professional development for dispersed stakeholders.

8.4 Partnerships and Collaboration

Effective program implementation requires strong partnerships across sectors:

- Government Agencies: Coordination among line ministries ensures integrated management of natural resources, environmental compliance, and policy coherence.
- Non-Governmental Organizations (NGOs): NGOs provide technical expertise, advocacy, and support for community engagement and conservation campaigns.
- Academic Institutions: Universities and research centres contribute to evidence-based decision-making, monitoring, and innovation in conservation practices.
- Local Communities: Engagement of community members through CBOs ensures participatory conservation and sustainable resource management.
- International Organizations: Global agencies provide funding, technical support, and knowledge exchange, enhancing program sustainability and alignment with international conservation standards.

8.5 Implementation Arrangements

A structured implementation arrangement ensures coordinated action across institutions and levels:

1. Clear Roles and Responsibilities: Lead agencies manage policy, coordination, and technical oversight, while supporting institutions provide complementary expertise, research, and community engagement.
2. Multi-Level Coordination: Strategic and technical committees facilitate coordination at national, regional, and local levels.
3. Monitoring and Evaluation Framework: Regular monitoring, reporting, and evaluation of outcomes ensure accountability, measure effectiveness, and inform adaptive management.
4. Resource Mobilization and Utilization: Efficient allocation and use of financial, human, and technical resources are ensured through structured budgeting, expenditure tracking, and financial reporting systems.

This framework establishes a comprehensive, multi-stakeholder approach that promotes effective, transparent, and accountable program delivery from national policy formulation to community-level conservation action.

Section 9: Resource Mobilization Strategy

Effective conservation and sustainable development require a well-coordinated resource mobilization strategy that ensures reliable and diversified funding. This strategy involves detailed budget estimates, identification of potential funding sources, and the deployment of innovative financing mechanisms to support long-term environmental objectives.

9.1 Budget Estimates

A comprehensive budget is critical for planning and implementing conservation initiatives. Budget estimates should account for costs related to:

- Protected area management – staffing, monitoring, and infrastructure maintenance.
- Species protection programs – research, breeding, and habitat restoration.
- Community engagement and capacity building – local stewardship and education programs.
- Climate resilience and ecosystem restoration – reforestation, wetland rehabilitation, and sustainable agriculture practices.

Budgeting must be forward-looking, reflecting multi-year commitments to ensure continuity of programs and reduce dependence on unpredictable external funding.

9.2 Funding Sources

Funding for conservation and sustainable development can be mobilized from domestic, international, and private-sector sources, each playing a complementary role.

9.2.1 Domestic Sources

a) National Budget Allocations – Governments can enhance conservation funding by allocating larger portions of their annual budgets to environmental programs. Increased budgetary support ensures predictable financing, strengthens national ownership, and reduces dependency on external aid.
b) Green Taxes and Levies – Fiscal instruments can generate revenue while incentivizing environmentally responsible behaviour. Examples include:
    a. Pollution taxes on industries with high emissions.
    b. Plastic levies to discourage single-use plastics.
    c. Tourism fees to support park maintenance and biodiversity programs.
c) Eco-tourism and Concessions – Revenues from park entry fees, guided tours, lodging, and other concession operations can be reinvested directly into conservation. This approach aligns economic incentives with environmental protection and benefits local communities.

9.2.2 International Sources

a) Global Environment Facility (GEF-8 & GEF-9) – Provides grants for large-scale projects addressing biodiversity loss, climate change, and land degradation, including policy development and technical support.
b) Green Climate Fund (GCF) – Supports climate mitigation and adaptation initiatives, such as renewable energy, climate-smart agriculture, and ecosystem-based adaptation.
c) Adaptation Fund – Focused on projects that help communities adapt to climate change, including coastal protection, mangrove restoration, and water resource management.
d) Bilateral Partners – Countries such as the EU, Germany, and Japan provide funding and technical assistance through bilateral agreements, enabling capacity building, research, and project implementation.

9.3 Innovative Financing Mechanisms

Innovative mechanisms provide additional avenues for sustainable and long-term funding, leveraging market-based solutions and partnerships:

1. Carbon Finance (Blue Carbon Projects) – Ecosystems such as mangroves, seagrasses, and peatlands sequester carbon, which can be monetized through the sale of carbon credits. These funds can support conservation while contributing to climate mitigation.
2. Biodiversity Offsets – Developers compensate for environmental impacts by financing conservation initiatives elsewhere, maintaining ecological balance and supporting biodiversity protection.
3. Conservation Trust Funds – Endowment funds or national park trust funds provide stable financing by investing capital and using the returns to fund ongoing conservation activities.
4. Public–Private Partnerships (PPPs) – Collaboration with the private sector can include sustainable tourism, green infrastructure, or technology-based conservation projects, blending profitability with environmental stewardship.

Section 10: Monitoring, Evaluation, and Reporting

Effective monitoring, evaluation, and reporting are essential to ensure that conservation interventions achieve their intended outcomes, remain accountable to stakeholders, and provide a basis for adaptive management. This section outlines the framework, indicators, reporting requirements, and mechanisms for learning and continuous improvement.

10.1 M&E Framework

The Monitoring and Evaluation (M&E) Framework provides a structured approach to systematically track progress, assess the effectiveness of conservation activities, and guide adaptive management decisions. It supports evidence-based decision-making by generating timely, reliable, and actionable data on project performance. The framework emphasizes accountability, transparency, and alignment with both national conservation priorities and international biodiversity targets.

The M&E Framework integrates multiple levels of assessment, including:

- Output Monitoring: Tracking activities completed and resources utilized.
- Outcome Evaluation: Assessing the immediate and medium-term effects of interventions on biodiversity, ecosystems, and community engagement.
- Impact Assessment: Measuring long-term biodiversity conservation outcomes and alignment with global biodiversity goals.

10.2 Indicators and Targets

To evaluate progress effectively, the project will track a set of key indicators linked to its conservation objectives. These indicators are designed to be measurable, relevant, and aligned with international targets such as the Global Biodiversity Framework (GBF).

10.2.1 Key Indicators Include:

a) Percentage of Land and Sea under Protected Areas (PA) and Other Effective Area-based Conservation Measures (OECM) – Target 3: Measures the expansion of formally protected and effectively managed conservation areas. Progress is quantified as the proportion of terrestrial and marine areas under formal protection or recognized OECMs relative to national baselines.
b) Number of Staff Trained and Competency Scores: Tracks the reach and effectiveness of capacity-building initiatives. Staff post-training competency assessments ensure personnel possess the skills necessary for effective conservation management.
c) Number of Community Agreements Signed: Reflects stakeholder engagement and collaborative governance. Tracking formal agreements with local communities helps evaluate participatory management and local stewardship.
d) Annual Protected Area Funding Mobilized: Measures financial sustainability by tracking resources secured from government, private sector, and donors for conservation activities.

e) Management Effectiveness Tracking Tool Plus (METT+) Scores: Provides standardized evaluation of protected area management effectiveness. Changes in scores over time inform areas requiring improvement and adaptive management interventions.
f) Species Population Trends for Key Taxa: Monitoring selected indicator species provides insight into ecosystem health and biodiversity outcomes, helping identify threats and prioritize conservation actions.
g) Global Biodiversity Framework (GBF) Reporting Compliance: Ensures alignment with international biodiversity reporting obligations and global conservation standards.

10.3 Reporting Requirements under the GBF and CBD

To maintain compliance with international obligations, the project will adhere to reporting requirements outlined by the Global Biodiversity Framework (GBF) and the Convention on Biological Diversity (CBD). This includes:

- Providing standardized data on conservation outcomes and management effectiveness.
- Documenting progress toward GBF targets, including protected area coverage, species conservation, and stakeholder engagement.
- Submitting periodic reports to national authorities and relevant international bodies to ensure transparency and accountability.

10.4 Learning, Adaptation, and Continuous Improvement

M&E processes are designed not only to track progress but also to foster organizational learning and adaptive management. Lessons learned from monitoring and evaluation activities will guide adjustments in project strategies and operations to maximize effectiveness. Key mechanisms include:

a) Annual Internal Progress Reports: Summarize achievements, challenges, and lessons learned to inform decision-making and resource allocation.
b) Mid-term Evaluation (2027): Provides a comprehensive assessment of project effectiveness, reviews progress against targets, and recommends course corrections where necessary.
c) Final Evaluation (2030): Measures overall impact on biodiversity, management effectiveness, and stakeholder engagement, informing future conservation planning and policy development.

By integrating monitoring, evaluation, and reporting into project management, the initiative ensures accountability, transparency, and continuous improvement, contributing to the achievement of long-term biodiversity conservation goals.

Section 11: Risk Assessment and Mitigation Measures

This section provides a comprehensive evaluation of potential risks associated with the project and outlines proactive measures to minimize their impact. A thorough risk assessment ensures that the project team is prepared to handle uncertainties, maintain project continuity, and achieve objectives efficiently.

Table 10: Risk Assessment and Mitigation Measures

Risk	Description / Implications	Mitigation Measures
Funding gaps	Insufficient or delayed funding may halt project implementation, affecting timelines and outcomes.	Diversify financing sources (government, private sector, donors), phased implementation to match available resources, establish contingency funds, and regular financial monitoring.
Land-use conflicts	Conflicts may arise with local communities, private landowners, or commercial interests over land rights.	Strengthen community agreements, apply Free, Prior, and Informed Consent (FPIC), conduct participatory land-use planning, and engage local leaders in dispute resolution.
Climate disasters	Floods, droughts, fires, or extreme weather events can damage infrastructure or ecosystems.	Integrate climate risk assessments in project planning, implement climate-resilient infrastructure, early warning systems, and disaster response plans.
Weak enforcement	Ineffective monitoring may lead to illegal activities like poaching, logging, or encroachment.	Increase ranger capacity, cross-agency coordination, use technology (drones, satellite monitoring), community-based monitoring, and strengthen legal penalties.
Political changes	Policy shifts or changes in government priorities may disrupt project continuity.	Institutionalize reforms in legislation, secure multi-party support, document processes and agreements, and engage policymakers continuously.
Social resistance	Local communities may oppose interventions due to perceived negative impacts.	Conduct awareness campaigns, participatory decision-making, benefit-sharing mechanisms, and capacity-building for local stakeholders.
Technical capacity gaps	Lack of skilled personnel can delay or compromise implementation quality.	Training programs, knowledge transfer partnerships, hiring consultants for specialized tasks, and continuous capacity development.
Environmental degradation	Activities may unintentionally harm ecosystems or biodiversity.	Conduct environmental impact assessments, implement adaptive management strategies, and monitor ecological indicators regularly.
Market fluctuations	Changes in commodity prices or demand may affect project sustainability.	Diversify economic activities, establish market linkages, financial risk assessments, and insurance mechanisms for key assets.
Legal and regulatory risks	Non-compliance with laws or changing regulations can cause delays or penalties.	Regular legal reviews, maintain compliance tracking, advocacy for supportive regulations, and legal training for staff.
Health and safety risks	Occupational hazards or disease outbreaks could affect personnel and communities.	Implement health and safety protocols, provide PPE, vaccination programs, emergency medical plans, and health awareness campaigns.
Technology failures	Dependence on specific technology may cause delays if systems fail.	Have redundant systems, regular maintenance, staff training, and backup plans for critical technologies.

Section 12. Conclusion

The Capacity Building Strategy and Action Plan (CBSAP) positions The Gambia on a clear and strategic path toward the effective conservation of its biodiversity, ecosystems, and natural resources. By providing a structured framework aligned with the Global Biodiversity Framework (GBF) 2030 Targets and the Programme of Work on Protected Areas (PoWPA), the CBSAP offers both a vision and practical roadmap for sustainable biodiversity management at national, regional, and local levels. The Plan emphasizes that biodiversity conservation is not only an environmental imperative but also a critical component of national development, climate resilience, and social well-being.

Central to the CBSAP is the recognition that effective governance and institutional strengthening are essential for successful conservation outcomes. By clearly defining institutional roles, enhancing policy coherence, and establishing robust monitoring and reporting mechanisms, The Gambia can ensure coordinated, transparent, and adaptive management of its protected and conserved areas (PCAs). Strengthened inter-agency collaboration, coupled with integration of biodiversity priorities into broader development planning, will create a governance environment capable of addressing complex ecological challenges while ensuring accountability and inclusivity.

The CBSAP further underscores the importance of enhancing technical and human capacities as a foundation for evidence-based and adaptive conservation. By investing in training for conservation professionals, supporting scientific research, and adopting modern tools such as Geographic Information Systems (GIS) and remote sensing, The Gambia will be equipped to assess ecosystem health accurately, monitor biodiversity trends effectively, and implement management strategies with precision. Such capacity-building ensures that interventions are not only scientifically robust but also responsive to emerging environmental threats.

Equally critical is the focus on sustainable financing, which underpins the long-term viability of conservation initiatives. The CBSAP identifies multiple funding avenues including government allocations, donor contributions, public-private partnerships, and innovative financing mechanisms such as biodiversity offsets and trust funds to provide predictable and consistent financial support. These resources will enable the effective management and expansion of PCAs, facilitate the implementation of management plans, and allow for adaptive responses to ecological changes without compromising the integrity of natural systems.

The Plan recognizes that community empowerment and inclusive participation are central to resilient and equitable conservation. By engaging local communities, indigenous groups, and civil society organizations in decision-making, planning, and management processes, the CBSAP ensures that conservation efforts are socially inclusive and culturally appropriate. Promoting local knowledge, benefit-sharing mechanisms, and alternative livelihoods reduces dependency on natural resources, fosters community ownership, and strengthens the long-term resilience of both ecosystems and human populations.

Collectively, these strategic pillars enable The Gambia to establish a resilient, adaptive, and inclusive network of protected and conserved areas that secures biodiversity while delivering vital ecosystem services essential for human health, economic stability, and climate resilience. The CBSAP integrates

conservation into national development priorities, creating a synergy between environmental stewardship and socio-economic progress.

In conclusion, the CBSAP embodies The Gambia's commitment to global biodiversity conservation, national ecological security, and sustainable development. Its successful implementation will ensure that biodiversity conservation and human prosperity reinforce each other, safeguarding the country's rich natural heritage for present and future generations. By operationalizing the strategies and actions outlined in this Plan, The Gambia affirms its role as a responsible steward of its biodiversity, setting a foundation for a sustainable, inclusive, and ecologically resilient future.

Annex 1: CBSAP Action Plan 2025–2030

Strategic Objective (SO)	Sub-Head	Objectives	Key Activities	Outputs	Responsible Institutions	Time line (2025–2030)	Indicative Budget (USD)	Key Performance Indicators (GBF-Aligned)
SO1: Strengthen Enabling Conditions	**1.1 Policy & Legislative Reform**	Strengthen legal & policy environment for GBF implementation	• Review/update Wildlife, Forest & Fisheries Acts • Integrate OECMs into national legislation • Harmonize land-use planning with biodiversity objectives • Develop national biodiversity offset guidelines • Strengthen EIA/SEA regulations	• Revised and updated laws • OECMs legally recognized • National land-use plan updated • Biodiversity offsets guideline published • Updated EIA/SEA regulations	Ministry of Environment; Ministry of Lands; Department of Parks & Wildlife; Forestry; Fisheries; NEA	2026 – 2027	**1,000,000**	• Revised biodiversity laws enacted • OECM integration complete • Land-use plan adopted • Offsets guideline published • EIA/SEA rules updated
	1.2 National Coordination Platform	Strengthen cross-sector governance	• Establish National Biodiversity Coordination Committee (NBCC) • Develop inter-agency MoUs • Form thematic sub-working groups (forestry, wildlife, marine, climate)	• Operational NBCC • Signed MoUs • Functional thematic groups	MoECCNAR; Department of Parks & Wildlife;	2026	**350, 000**	• NBCC operational • # of MoUs signed • Functional sub-groups
	1.3 Sustainable Financing	Establish long-term biodiversity financing system	• Develop PA & OECM Financing Strategy ▪ Donor conference • Establish trust fund, PES, eco-tourism & blue-economy partnerships • Strengthen access to GEF/GCF • Develop private-sector partnerships • Create biodiversity investment pipeline	• Financing Strategy approved • Biodiversity trust fund/PES functional • Increased donor submissions • Private-sector contributions mobilized • Investment pipeline	MoF; MoECCNAR; Tourism Board; Private Sector	2026 – 2029	**2,000,000**	• Strategy endorsed • Trust fund/PES launched • # GEF/GCF proposals submitted • Private-sector funding volume • Pipeline established
SO2:	**2.1 PA**	Expand and	• Conduct ecological gap analysis	• Gap analysis report	DPWM;	2026	**1,200, 000**	• Gap analysis completed

Technical Capacity Development	**System Expansion & OECM Recognition**	secure ecologically representative conservation areas	• Identify corridors & connectivity zones • Map & validate OECMs • Develop PA expansion roadmap • Conduct climate-integrated spatial planning	• Connectivity map • Validated OECMs • PA expansion roadmap	Forestry; Marine Dept; MoECCNAR	– 2028		• Corridors mapped • # of validated OECMs • Expansion roadmap approved
	2.2 Site-Level Management Planning	Improve PA-level planning & management	• Update PA management plans • Introduce METT+ • Strengthen fire management • Improve invasive species guidelines • Develop PA business plans	• Updated management plans • METT+ implemented • Fire-management protocols • Invasive species control programs • Business plans	DPWM; Forestry; Marine & Coastal Management	2026 – 2029	**1,500, 000**	• % of PAs updated • METT+ score increases • Fire-management protocols activated • Invasive-species programs implemented
	2.3 Ranger & Staff Training	Build technical and operational staff capacity	• Law-enforcement training • SMART monitoring tool • HWC mitigation • Species ID/anti-poaching • Marine/coastal surveillance • First-aid & field safety • Climate-risk & emergency training ▪ Scholarships	• Trained rangers & staff • SMART system operational • Improved enforcement	DPWM; Security Agencies; Marine Units	2026 – 2030 (Continuous)	**1,000, 000**	• % of certified rangers • SMART data uploaded monthly • Reduction in poaching/HWC incidents
SO3: Biodiversity Monitoring & GBF Reporting	**3.1 National Monitoring Framework**	Establish national biodiversity monitoring system	• Develop protocols for fauna and ecosystems • Forest & land-use change monitoring • Wetland/mangrove & coastal monitoring • Establish National Red List Committee • Promote citizen science	• National monitoring framework • Annual biodiversity reports • Updated Red List	MoECCNAR; DPWM; Universities; NGOs	2026 – 2028	**2,000.000**	• Framework approved • Annual reports published • Updated Red List
	3.2 National Biodiversity Information System (NBIS)	Develop centralized biodiversity data system	• Develop GIS-enabled NBIS • Integrate with GBIF/APAD • Establish data-sharing protocols	• Functional NBIS • Data sharing agreements • Integrated datasets	MoECCNAR; ICT Ministry; Research Institutions	2026 – 2027	**700,000**	• NBIS operational • # integrated datasets • GBIF/APAD links active
	3.3 Capacity Building	Strengthen technical capacity for species & ecosystem	• Training in GIS/RS • Drones, camera traps • Socio-economic survey tools • Laboratory training for eDNA	• Skilled national experts • Standardized datasets • eDNA pilot	Universities; DPWM; Marine Dept	2026 – 2030	**900, 000**	• # staff trained • Increase in datasets • eDNA results published

		monitoring						
	3.4 Reporting	Strengthen national & international biodiversity reporting	• Strengthen CBD NR8 & GBF reporting • Capacity building for KM-GBF templates • Annual GBF progress scorecards	• NR8 submitted • GBF indicator reports • GBF scorecards	MoECCNAR; NBCC	2026 – 2030	**400, 000**	• Timely NR8 submission • GBF reports produced • Annual scorecards
SO4: Governance, Rights & Equity	**4.1 IPLC Engagement**	Enhance community participation & rights	• Co-management agreements • Document traditional knowledge • Improve FPIC • Develop IPLC enterprise incubator	• Co-management agreements • TK documentation • FPIC guidelines • Supported enterprises	MoECCNAR; MoL; Community Institutions	2026 – 2029	**1,100,000**	• # co-management agreements • TK products • FPIC adopted • # enterprises supported
	4.2 Gender Inclusion	Promote gender-responsive conservation	• Gender-sensitive staffing • Support women-led groups • Gender-disaggregated data • Leadership programs	• Increased women participation • Women-led projects • Gender reports	MoGCSW; MoECCNAR; NGOs	2026 – 2030	**650,000**	• % women in workforce • # women-led initiatives • # women in leadership
	4.3 Benefit-Sharing Mechanisms	Increase biodiversity-derived community benefits	• Community eco-tourism • Mangrove honey value chain • Community forestry markets • Employ community rangers • Climate adaptation micro-grants	• Community income opportunities • Value chains established • Community ranger units • Micro-grants	MoT; MoECCNAR; Community Groups	2026 – 2030	**2,000,000**	• Increase in community income • # new value chains • # households benefitting
SO5: Climate Resilience & Ecosystem Restoration	**5.1 Vulnerability Assessments**	Identify climate-risk hotspots & integrate into PA management	• Assess erosion/salinization/flooding/drought • Prioritize vulnerable PAs • Integrate climate-risk into plans	• National vulnerability map • PA climate profiles • Climate-risk integrated plans	MoECCNAR; Climate Dept; DPWM	2026 – 2027	**850, 000.00**	• Vulnerability map completed • # PAs with risk profiles • % PAs using climate-risk data
	5.2 Restoration Initiatives	Restore degraded ecosystems	• Mangrove restoration • Forest park rehabilitation • Riverine restoration • Coral-reef pilots • Invasive species removal	• Restored ecosystems • Increased mangrove cover • Forest regeneration	DPWM; Forestry; Marine Parks	2026 – 2030	**3,000.000**	• Hectares restored • Mangrove cover rate • Coral pilot sites
	5.3 Disaster Risk Reduction (DRR)	Reduce climate-driven risks in communities	• Early-warning systems • Fire units & brigades • Community resilience training	Resilience to climate related risks like bushfires	DPWM, Forestry, CSOs, Local communities	2026 - 2030	**800, 000.00**	
Grand estimated total							**19,450,000**	

11. References

Baxter, P., & Scherren, K. (2020). *Mangrove ecosystems of West Africa: Ecology, services, and threats*. Wetlands International.

Benson, L., & Camara, A. (2019). *State of the Environment Report: The Gambia*. National Environment Agency (NEA), Government of The Gambia.

Burgess, N. D., Hales, J. D. A., Underwood, E., Dinerstein, E., Olson, D., Itoua, I., ... & Newman, K. (2004). *Terrestrial Ecoregions of Africa and Madagascar: A Conservation Assessment*. Island Press.

Convention on Biological Diversity (CBD). (2022). *Kunming-Montreal Global Biodiversity Framework*. CBD Secretariat.

Convention on Biological Diversity (CBD). (2004). *Programme of Work on Protected Areas (PoWPA)*. CBD Secretariat.

Critical Ecosystem Partnership Fund (CEPF). (2015). *Ecosystem Profile: Guinean Forests of West Africa Biodiversity Hotspot (2015 Update)*. CEPF.

Department of Parks and Wildlife Management (DPWM). (2018). *Protected Areas Status Report*. Ministry of Environment, Climate Change and Natural Resources, The Gambia.

Food and Agriculture Organization (FAO). (2020). *Global Forest Resources Assessment: The Gambia Country Report*. FAO.

Global Mangrove Alliance. (2021). *The State of the World's Mangroves 2021*. Global Mangrove Alliance.

International Union for Conservation of Nature (IUCN). (2020). *West Africa Marine and Coastal Ecosystems: Status and Threats*. IUCN Regional Office for West and Central Africa.

Ministry of Environment, Climate Change and Natural Resources (MECCNAR). (2017). *The Gambia National Biodiversity Strategy and Action Plan (2016–2020)*. Government of The Gambia.

Ministry of Environment, Climate Change and Natural Resources (MECCNAR). (2023). *Draft National Biodiversity Strategy and Action Plan (NBSAP) for GBF Implementation*. Government of The Gambia.

Ramsar Convention Secretariat. (2018). *Ramsar Sites Information Service: Tanbi Wetland Complex*. Ramsar Secretariat.

UNEP-WCMC & IUCN. (2023). *Protected Planet Report 2023*. United Nations Environment Programme World Conservation Monitoring Centre.

West Africa Biodiversity and Climate Change (WABiCC). (2020). *Illegal Wildlife Trade and Forest Crime in The Gambia*. USAID.

World Bank. (2021). *Climate Risk Profile: The Gambia*. World Bank Climate Change Knowledge Portal.

WWF & BirdLife International. (2020). *African–Eurasian Migratory Flyways: Species, Habitats and Threats*. WWF.