NATIONAL DIALOGUE
KENYA

KUNMING MONTRÉAL-GLOBAL BIODIVERSITY FRAMEWORK TARGET 2 PILOTS PROJECT

17TH-19TH JULY 2024 | NAIVASHA - KENYA

Kunming - Montreal
GLOBAL BIODIVERSITY FRAMEWORK

EXECUTIVE SUMMARY

The national dialogue, organized by the Center for International Forestry Research and World Agroforestry (CIFOR-ICRAF) with funding from the Food and Agriculture Organization (FAO) of the United Nations, was held on July 7–9, 2024, in Naivasha, Kenya. Attended by 39 participants from state and non-state actors, the dialogue focused on enhancing Kenya's ecosystem restoration monitoring efforts aligned with the Kunming-Montreal Global Biodiversity Framework (KM-GBF) Target 2.

Objectives of the national dialogue:

- Review Kenya's progress toward the National Biodiversity Strategy and Action Plan (NBSAP).

- Provide targeted feedback on the Target 2 Resource Guide to support CBD parties.

- Discuss tools, platforms, and processes for accurate monitoring and reporting on restoration actions, including engagement with non-state actors.

- Identify major challenges, capacity gaps, and solutions for ecosystem restoration monitoring.

- Introduce the Framework for Ecosystem Restoration Monitoring (FERM) as the official reporting platform for the UN Decade and Target 2.

- Examine the alignment of national platforms, restoration planning and prioritization, funding gaps, and challenges in implementation and ecosystem classification.

- Lay the groundwork for FAO to explore data interoperability between state and non-state actor systems.

- Develop short case studies for the resource guide and outline plans for capacity-building efforts.

In her opening remarks, Dr Lucy Nganga emphasized the importance of baseline data for tracking restoration progress and highlighted the Ministry of Environment, Climate Change and Forestry's (MECCF) commitment to partnering with stakeholders to establish an effective reporting system. The dialogue underscored the linkage between KM-GBF Target 2 and the UN Decade on Ecosystem Restoration, which aims to restore degraded ecosystems. FAO is supporting the development of methodological guidance for monitoring and reporting on areas under restoration for Target 2. Kenya was selected as a pilot country under the KM-GBF Target 2 project, addressing critical data and information gaps in restoration monitoring while supporting target setting for NBSAP. This initiative also involves developing short case studies on effective restoration for the Target 2 Resource Guide.

Regarding the development of the NBSAP, the meeting was informed that Kenya's strategy was in its final review, with submission expected by August 1, 2024. MECCF is also preparing to launch the National Biodiversity Coordination Mechanism (NBCM) and develop key implementation and action plans, along with strategies to ensure effective execution of the NBSAP. Kenya is already implementing the National Ecosystems and Landscapes Restoration Strategy (2023–2032), which aims to restore 10.6 million hectares of degraded ecosystems and landscapes and achieve 30% tree cover across eleven priority restoration areas. These areas were identified using the Restoration Opportunities Assessment Methodology (ROAM) and the Restoration Barometer tools, contributing significantly to KM-GBF Target 2. For effective restoration, coordinated and

structured monitoring and reporting, harmonization of existing strategies and frameworks, adequate funding, and strong policy coherence, synergies, and advocacy are essential.

The IUCN Global Ecosystem Typology (GET) provides a harmonized framework for structured monitoring and reporting. Participants confirmed that most GET classifications are applicable to Kenya, with detailed reporting possible at levels 2 and 3. Kenya has several restoration monitoring tools and frameworks available for Target 2 reporting, including the Clearing House Mechanism (CHM) for biodiversity, the Jaza Miti app for tracking the 15 billion tree-growing target, the Regreening Africa App, and the National Ecosystems and Landscapes Restoration Monitoring Framework, which provides indicators for monitoring and reporting restoration efforts. However, each tool and framework has gaps, and there is a need to fully align and harmonize these tools to improve coordinated monitoring and data sharing, address fragmented restoration reporting across ecosystems, and increase impacts through improved stakeholder collaboration.

The roadmap for effective restoration under KM-GBF Target 2 aims to address identified capacity and funding gaps, harmonize data platforms for ecosystem reporting, tackle policy gaps, improve coordination mechanisms, establish data exchange platforms, and develop clear definitions of "effective restoration" for Kenya's diverse ecosystems.

ABBREVIATIONS

AFR-100	African Forest Landscape Restoration Initiative
CBD	Convention on Biological Diversity
CBO	Community-Based Organization
CFA	Community Forest Association
CHM	Clearing House Mechanism
CIDP	County Integrated Development Plan
CIFOR-ICRAF	Center for International Forestry Research and World Agroforestry
CoG	Council of Governors
COP	Conference of Parties
CSO	Civil Society Organizations
DRSRS	Directorate of Resource Surveys and Remote Sensing
EMCA	Environmental Management and Coordination Act
FAO	Food and Agriculture Organization of the United Nations
FERM	Framework for Ecosystem Restoration Monitoring
FLLOCA	Financing Locally-Led Climate Action
FLR	Forest and Landscape Restoration
GEF	Global Environment Facility
GET	Global Ecosystem Typology
GIS	Geographic Information System
ICRAF	International Council for Research in Agroforestry
IIN	Indigenous Information Network
ILRI	International Livestock Research Institute
IPLCs	Indigenous Peoples and Local Communities
IUCN	International Union for Conservation of Nature
JACOM	Joint Agricultural Sector Consultation and Coordination Mechanism
KALRO	Kenya Agricultural and Livestock Research Organization
KEFRI	Kenya Forestry Research Institute

KEMFRI	Kenya Marine and Fisheries Research Institute
KM-GBF	Kunming-Montreal Global Biodiversity Framework
KWS	Kenya Wildlife Service
MECCF	Ministry of Environment, Climate Change and Forestry
M&E	Monitoring and Evaluation
MTWG	Monitoring Technical Working Group
NBCM	National Biodiversity Coordination Mechanism
NBSAP	National Biodiversity Strategy and Action Plan
NEMA	National Environmental Management Authority
NMK	National Museums of Kenya
ONEDD	National Observatory for Sustainable Development
PELIS	Plantation Establishment and Livelihood Improvement Scheme
RCMRD	Regional Centre for Mapping of Resources for Development
ROAM	Restoration Opportunities Assessment Methodology
SBSTTA	Subsidiary Body on Scientific, Technical, and Technological Advice
SDGs	Sustainable Development Goals
SLM	Sustainable Land Management
TNC	The Nature Conservancy
TWG	Technical Working Group
UNCCD	United Nations Convention to Combat Desertification
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNGA	United Nations General Assembly
WDPA	World Database on Protected Areas
WWF	World Wide Fund for Nature

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INTRODUCTION

The Kunming-Montréal Global Biodiversity Framework (KM-GBF) provides a strategic and operational framework to halt and reverse biodiversity loss. Under this framework, countries have committed to a global restoration target—Target 2—aiming for at least 30% of degraded terrestrial, inland water, and marine and coastal ecosystems to be under effective restoration by 2030. Target 2 includes qualifiers for effective restoration, which must enhance biodiversity, ecosystem integrity and connectivity, as well as ecosystem functions and services.

On March 1, 2019, the United Nations General Assembly (UNGA) proclaimed the UN Decade on Ecosystem Restoration (2021–2030) with the mission of supporting and scaling up efforts to prevent, halt, and reverse the degradation of all types of ecosystems worldwide. Led by the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Environment Programme (UNEP), the UN Decade contributes substantially to achieving global restoration goals.

The UN Decade, KM-GBF, the 2030 Agenda, and its Sustainable Development Goals (SDGs) must be aligned to accelerate collective efforts toward ambitious ecosystem restoration commitments and ensure transparent monitoring and reporting.

Target 2 is now the official target of the UN Decade, supported by the Task Force on Monitoring under the UN Decade on Ecosystem Restoration. This tTask Force provides technical support and develops methodologies for monitoring Target 2 under the Convention on Biological Diversity (CBD). The Target 2 working group, led by FAO and its partners, formed an informal partnership in early 2023 to support the implementation, planning, and monitoring of Target 2 in collaboration with the CBD Secretariat.

The KM-GBF Target 2 pilot project is designed to support five pilot countries in addressing critical data and information gaps in restoration monitoring and supporting target setting for National Biodiversity Strategies and Action Plans (NBSAP) for submission by COP 16. It will also highlight successful restoration projects by developing case studies for the Target 2 Resource Guide, fostering joint learning among stakeholders.

National-level dialogues will serve as the primary engagement mechanism, with their outputs feeding directly into the 26th meeting of the Subsidiary Body on Scientific, Technical, and Technological Advice (SBSTTA 26), COP 16, and related guidance documents.

ACCOUNT OF THE PROCEEDINGS

Session 1 Session 2 Session 3 Session 4 Session 5 Session 6 Session 7 Session 8 Session 9 Closing Remarks

OPENING OF THE NATIONAL DIALOGUE

The national dialogue commenced with opening remarks from Dr Lucy Nganga of the State Department of Environment and Climate Change, followed by Khalil Walji on behalf of CIFOR-ICRAF. Khalil Walji presented the national dialogue's background and objectives, after which participants were invited to introduce themselves and share their expectations for the dialogue.

Objectives of the National Dialogue

The objectives were as follows:

- **Explore Kenya's progress** toward the NBSAP.

- **Introduce and provide targeted feedback** on the Target 2 Resource Guide in support of CBD parties.

- **Create a connected space or network for knowledge exchange** between pilot countries and national actors to discuss tools, platforms, and processes for accurate monitoring and reporting on restoration actions, including non-state actor engagement.

- **Identify major challenges, capacity gaps, and solutions** for monitoring ecosystem restoration, with a focus on terrestrial, inland water, and coastal and marine ecosystems, as outlined in the KM-GBF.

- **Introduce the Framework for Ecosystem Restoration Monitoring** (FERM) as the official reporting platform for the UN Decade and Target 2. Review the alignment of national platforms, restoration planning and prioritization, funding gaps, and challenges related to implementation and ecosystem classification.

- **Establish the foundation and momentum for FAO to explore data interoperability** between state and non-state actor systems.

- **Develop short case studies for the Target 2 Resource Guide** and create proposals or plans for further capacity-building efforts.

Expectations Setting

Participants expressed the following expectations for the national dialogue:

- Gain a better understanding of the KM-GBF Target 2 process, and how Kenya is aligning with it.

- Build strategic partnerships, networks, and platforms for continued collaboration on implementing ecosystem restoration, including the 23 targets of the KM-GBF.

- Identify areas requiring more effort and key lessons to increase impact.

- Develop a deeper understanding of aspects related to monitoring and reporting for Target 2, including tools such as FERM.

- Elucidate, discover, or develop a clear roadmap for implementing ecosystem restoration with synergies from partners.

- Identify and address bottlenecks for Target 2 to enhance efficiency, and share knowledge and information across institutions and experts, including leveraging skills.

- Understand the science-policy interface, requirements for tracking progress, and reporting on Target 2 from local to national levels.

- Establish a coordinated national structure to address biodiversity challenges.

> The participants were asked, **"What does effective restoration help us achieve?"** They identified the following outcomes:
> - Strong partnerships and reduced conflicts with communities.
> - Enhanced ecosystem conservation and protection, including thriving and restored habitats and wildlife.
> - Improved community benefits, sustainable development, and livelihoods, including the creation of green jobs.
> - Harmony between humans and nature.
> - Clear policies, roadmaps, and frameworks for stakeholders and parties.
> - Larger national-level restoration forums to coordinate actors.
> - Reversal of biodiversity loss and its underlying drivers.

Opening Remarks

Dr Lucy Nganga of the Ministry of Environment, Climate Change, and Forestry (MECCF) acknowledged the ministry's significant responsibility in coordinating biodiversity conservation in Kenya. She noted that the ministry is in the process of finalizing the NBSAP to align with and update the 23 targets of the KM-GBF, which were largely adapted from the previous Aichi Targets.

Dr Nganga emphasized that building partnerships is pivotal to achieving these targets. Referring to Target 2 on the restoration of degraded ecosystems, she stressed the importance of baseline data as a foundation for determining progress and setting goals for monitoring periods. She highlighted that accurate data is essential for informed reporting on KM-GBF targets and reaffirmed the ministry's commitment to working with FAO, CIFOR-ICRAF, and other partners to ensure structured and effective reporting.

She also emphasized the critical role of the Council of Governors (CoG), given that restoration efforts are primarily occurring at the county level and expressed eagerness to engage with counties. In conclusion, she acknowledged the invaluable contributions of various partners toward the development of Kenya's Biodiversity Conservation Strategy, including Conservation International (CI), Nature Kenya, The Nature Conservancy (TNC), FAO, and others.

SESSION 1: KM-GBF AND THE UN DECADE ON ECOSYSTEM RESTORATION

Zhuo Cheng from FAO provided background information on the **UN Decade on Ecosystem Restoration**,[1] its linkage to KM-GBF Target 2, and the support being provided to guide its implementation. She informed participants that the UNGA proclaimed 2021–2030 as the UN Decade on Ecosystem Restoration, with the primary aim of "supporting and scaling up efforts to prevent, halt, and reverse the degradation of ecosystems worldwide and raising awareness of the importance of successful ecosystem restoration." Five task forces were established to support the implementation of ecosystem restoration targets, including one on monitoring led by FAO. The FAO monitoring task force supports the development of methodological guidance for reporting and monitoring areas under restoration for Target 2.

Questions and Answers

Rudolf Makhanu from Nature Kenya inquired whether one can join the global monitoring task force as an individual or as an institution. Zhuo Cheng responded that one can join both as an individual and as an institution.

Meshack Muga from FAO Kenya asked why Kenya was selected as a "Target 2 pilot country." Khalil Walji from CIFOR-ICRAF explained that Kenya has made significant progress in ecosystem restoration, including leadership in the development of a Forest and Landscape Restoration Strategy and Monitoring Framework, positioning it as a restoration leader or champion whose lessons can be shared with other parties.

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SESSION 2: PRESENTING THE KM-GBF TARGET 2 'PILOTS' PROJECT, AND OBJECTIVES

Mr Khalil Walji of CIFOR-ICRAF presented the background, objectives, and outputs of the Target 2 pilot project,[1] as well as progress made to date. He informed participants that the KM-GBF Target 2 project supports four pilot countries (Kenya, Burkina Faso, Peru, Viet Nam, and Brazil) to address critical data and information gaps in restoration monitoring and to support target setting for NBSAP. The project also leverages government interactions to highlight successful restoration projects, identify common challenges and capacity bottlenecks, and create opportunities for joint learning among all actors.

The pilots aim to develop short case studies exemplifying progress made across various aspects of effective restoration, which will be featured in the Target 2 Resource Guide. FAO, CIFOR-ICRAF, the Society for Ecological Restoration (SER), and the CBD Secretariat will collaborate to develop a technical resource guide. This guide will provide definitions, outline implications for national target setting, and offer guidance to parties monitoring Target 2.

Mr Walji outlined the next steps for Kenya under the pilot project, which include: i) Conducting a system analysis of Kenya's alignment with Target 2, specifically exploring interoperability with the FERM platform, ii) Mapping data flows across ecosystems and systems to identify common challenges, iii) Identifying prioritized critical gaps and capacity needs for Target 2, iv) Developing a roadmap outlining next steps leading up to COP 16.

Questions and Answers

A participant inquired whether stakeholders are allowed to contribute to the KM-GBF Target 2 manual. Khalil Walji assured participants that contributions to the guide remain open for feedback.

Dr Lucy Nganga from MECCF shared that the NBSAP task force would convene in Naivasha the following week (week of July 22, 2024) to finalize Kenya's NBSAP targets. She noted that the finalized strategy, including its targets, would be submitted by August 2024. Dr Nganga invited the CIFOR-ICRAF team to support the Ministry of Environment, Climate Change, and Forestry (MoECC&F) in advancing Target 2 and identifying national indicators.

Rudolf Makhanu from Nature Kenya following up on Khalil Walji's response about the manual, emphasized the importance of ensuring that the restoration guide addresses areas of "effective" restoration.

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1   Session 2_Target 2 Restoration Pilots Summary

SESSION 3: KENYA'S TARGET 2 PROGRESS – PRESENTATION AND PANEL DISCUSSION

Ms Faith Nyokabi from MECC&F presented an **Overview of Kenya's NBSAP Review and Target Setting Process.**[2] She highlighted the NBSAP as the primary instrument for implementing the KM-GBF targets. Ms Nyokabi explained that Kenya's ongoing NBSAP review process provides an opportunity to: a) Outline new national targets, b) Align with global goals and targets, c) Detail actions to achieve the new targets, d) Identify indicators to monitor progress, e) List non-state actor commitments, f) Assess means and barriers to implementation. She outlined the NBSAP review roadmap, challenges encountered, ongoing processes (such as rapid baseline data collection and policy and institutional alignment assessment), and the next steps. The ministry's next steps include submitting national targets by August 1, 2024, launching the National Biodiversity Coordination Mechanism (NBCM), completing the NBSAP, and developing an implementation plan, communication strategy, gender action plan, and resource mobilization strategy.

Ms Susan Boit from MECC&F provided an overview of the **National Landscape and Ecosystem Restoration Strategy, 2023–2032**.[3] The strategy's overall objective is to restore and conserve 10.6 million hectares of degraded ecosystems and landscapes to achieve 30% tree cover by 2032. Seven key ecosystems are the focus of the strategy: forests, water towers, wetlands, rangelands, agroecosystems, marine ecosystems, and settled ecosystems.

Ms Boit also explained the 11 priority areas, each with specific restoration targets. The national government aims to contribute 63.4% of the tree-growing target, with counties contributing 22.2% and the private sector 14.5%. Achieving the goal of planting 15 billion trees is expected to improve biodiversity conservation, environmental sustainability, livelihoods, socio-economic development, climate resilience, and Kenya's commitments to regional and global conventions.

Questions and Answers

Mutune Masai from Kenya Marine and Fisheries Research Institute (KMFRI) urged MECC&F to synchronize efforts across non-terrestrial ecosystems, such as marine ecosystems and wetlands, including freshwater systems, to ensure all activities are integrated into the national ecosystems and landscapes restoration strategy beyond tree planting. He also emphasized the need to address invasive fauna as comprehensively as invasive flora.

A participant raised concerns about the lack of clarity regarding the involvement of community-based organizations (CBOs) in the strategy. The participant acknowledged the critical nature of community engagement and ownership for successful forest restoration efforts. Ms. Boit noted that the national government works with structures it directly controls, such as grassroots government institutions, which collaborate with communities on restoration efforts.

Mr Joseph Njue from International Union for Conservation of Nature (IUCN) presented an **Overview of the Restoration Opportunities Assessment Methodology (ROAM) and the Restoration Barometer.**[4] He highlighted the key aspects and utility of the ROAM methodology, including its role in identifying and prioritizing eleven Forest and Landscape Restoration (FLR) opportunities in Kenya. Key components of ROAM include drivers of degradation, stakeholder mapping and engagement, stocktaking of past successes and challenges, identification of FLR opportunities, priorities, and transitions, as well as data collection and spatial analysis, among others. In addition, its key outputs include institutional commitments, multiscale capacity building, technical analysis, evaluation, and the communication of practical restoration information and knowledge, among others. Mr Njue also highlighted the Restoration Barometer, a practical and user-friendly tool that identifies effective restoration actions and their reasons for success, reveals obstacles to further progress, and provides a foundation for scaling up efforts and increasing investments in restoration.

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2 Session 3_ Overview of Kenya's NBSAP review process and target setting process
3 Session 3_Kenya Landscape and Ecosystem Restoration Strategy
4 Session 3_ Overview of the ROAM and Restoration Barometer

Plenary Discussion on Kenya's Target 2 Progress

The session, facilitated by Laura Mukhwana of CIFOR-ICRAF, aimed to explore Kenya's progress toward Target 2 through a panel discussion with stakeholders, including representatives from the MECC&F: Susan Boit and Dr Lucy Nganga. The discussion was guided by five key questions.

How do you see the NBSAP and National Ecosystem Strategy working in tandem to strengthen whole-of-society and whole-of-government support for biodiversity and specifically for Target 2?

Dr Lucy Nganga emphasized the importance of structured and coordinated monitoring and reporting of ecosystem restoration efforts, as well as mapping stakeholders in the restoration space to understand who is working on what, where, and the targets or milestones involved. She stressed the need to package restoration data effectively to inform decision-making. Dr Nganga also highlighted that tools and frameworks should blend seamlessly, with the NBSAP integrating into all other tools developed for restoration monitoring. Collaboration among stakeholders was emphasized as critical to achieving restoration goals.

How do you envision the KM-GBF Target 2 supporting the implementation of the National Landscape and Ecosystem Restoration Strategy and vice versa?

Susan Boit noted the linkage between the National Ecosystems and Landscapes Restoration Strategy (2023–2032) and KM-GBF Target 2, which target the restoration of 10.6 million hectares of degraded landscapes by 2032 and at least 30% of Kenya's degraded ecosystems, respectively. Both strategies share a focus on restorative actions, underscoring the need for synergy between them. She emphasized the importance of developing a standard monitoring and reporting framework, securing funding, and strengthening advocacy and policy for KM-GBF implementation. While the government has developed the Jaza Miti app as a monitoring tool for tree planting, it is not comprehensive enough to monitor all restoration actions. There is still an opportunity to integrate existing monitoring tools to collect data that can support both restoration targets.

Anastacia Mwaura from Kenya Wildlife Service (KWS) commended the restoration approaches in the national ecosystems and landscape restoration strategy but expressed concern that tree planting alone may not work in all contexts, as different ecosystems require specific approaches. She emphasized expanding the strategy's scope beyond tree planting to include other restoration actions.

Norah Koima from Kenya Forestry Research Institute (KEFRI) Highlighted efforts to ensure the right tree species are raised for the right places and purposes. KEFRI has launched a tree nursery registration programme and is deploying experts to advise nursery operators on best practices and suitable tree species for restoration efforts, ensuring quality seedlings for diverse ecosystems.

Veronicah Wanyora from the CoG pointed out a disconnect in cascading restoration activities at the grassroots level, particularly the lack of involvement of county governments despite restoration work being conducted at the county level. She emphasized the need for robust consultation mechanisms with key stakeholders to secure buy-in and to include county-specific restoration activities in budgets.

Faith Mutwiri from Kenya Forest Service (KFS) confirmed that all counties have been involved in the national ecosystems and landscapes restoration process. She noted the issue might stem from Council of Governors representatives failing to relay information back to their counties for action.

Rudolf Makhanu from Nature Kenya inquired about the accuracy of basing restoration opportunities on data from the 2016 degradation assessment using ROAM.

Faith Mutwiri, a Geographic Information System expert from KFS confirmed that while the 2016 data was used for initial mapping, it was reviewed and updated with statistical data collected in 2021, which clarified areas requiring restoration.

Pauline Wairimu from the State Department of Fisheries, Aquaculture and Blue Economy- (SDFAB) sought clarification on the reported 400 million seedlings under the 15 billion tree-growing target, asking whether these represent distributed, planted, or surviving seedlings. Susan Boit confirmed that the 400 million seedlings figure represents those distributed and planted.

Sheilla Mulili from The Nature Conservancy (TNC) raised concerns about seedlings availability for tree growing efforts, cost, and ensuring the correct species are grown. Norah Koima responded that KEFRI is working to ensure seeds of suitable species for specific ecosystems are available. However, she acknowledged a shortage of high-quality genetic materials, which could impact survival rates. She emphasized the need for sufficient training on preparing and caring for planting materials for restoration efforts.

Elijah Korir from Wild Wide Fund (WWF) Kenya Asked how the government ensures a balance between indigenous and exotic species for restoration. Susan Boit assured participants that the strategy includes provisions specifying which tree species should be grown and where, ensuring an appropriate balance.

Opening of the meeting

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Session 2

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Session 9

Closing Remarks

SESSION 4: IUCN GLOBAL ECOSYSTEM TYPOLOGY FOR TARGET 2

Ms Temitope Abisola from FAO presented the new International Union for Conservation of Nature (IUCN) **Global Ecosystem Typology(GET)**[5] classification, explaining its three levels: Realm, Biomes, and Ecosystem Functional Groups. She outlined how the typology was developed as the first comprehensive ecosystem classification and mapping system at the functional level. The GET has been recommended by the CBD technical advisory group for use across the KM-GBF, although its adoption has not yet been agreed upon due to its technical nature and the resources required to nationalize the framework. The GET aims to identify the most important ecosystems for biodiversity conservation, research, management, and human well-being. Ms Abisola explained that the typology defines the main biophysical characteristics of 110 major ecosystem types across oceans, freshwater, and land, describing the processes that support them and their global distribution.

Questions and Answers

Khalil Walji asked about the value of using GET and who is currently using it. Ms Abisola clarified that the typology is recommended for unified reporting across countries, with Levels 2 and 3 being the most applicable. However, no country is currently using the IUCN typology for monitoring and reporting, although South Africa and others have started aligning their national systems with the global framework.

Anastacia Mwaura inquired whether "Realm" is a biodiversity term or an acronym. Ms Abisola explained that "Realm" refers to an aggregation of biomes, while functional groups represent finer ecosystems relevant to specific countries for monitoring and reporting purposes.

Unpacking GET for Target 2

Participants engaged in breakout group sessions to discuss the three major realms (aquatic, transitional, and terrestrial ecosystems). Groups were formed based on key ecosystem types and tasked with reviewing the ecosystem functional groups listed for Kenya. The discussions aimed to gather feedback on the viability of the GET at the national level.
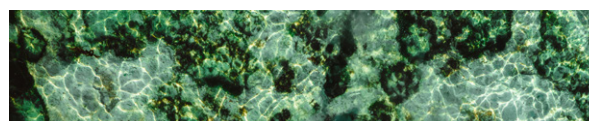
Aquatic Group: The group concluded that all ecosystem functional groups were present in Kenya except for ephemeral salt lakes, based on the global analysis of Kenya using GET. The group noted that reporting at Level 2 (Ecosystem Functional Groups) is feasible, provided overlapping reporting is avoided, which can be achieved by defining metrics for reporting. However, reporting at Level 2 (Biomes) may lead to a loss of details, such as those related to Kenya's six Ramsar sites. Compared to classifications in the Kenya National Ecosystems and Landscapes Restoration Strategy (2023–2032), GET is more detailed and would require additional resources and capacity to gather data if Level 3 is adopted[6] (refer to Annex II).
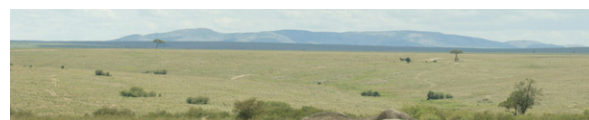
Terrestrial Rangeland Group: This group confirmed that all ecosystem functional groups under this realm are present in Kenya. However, they noted that the land use classification is very Western and not fully applicable to the African or Kenyan context. For example, the breakdown of rangelands into finer functional groups may not be relevant. While reporting at Level 3 is possible, further support is needed to align GET with Kenya's current national ecosystem classifications. Reporting at Level 1 is already in place[7] (refer to Annex II).

5   Session 4_The Global Ecosystem Typology for Target 2
6   IUCN GET Freshwater Group Summary
7   IUCN GET Terrestrial Rangeland Groupwork

Terrestrial Group: The group confirmed that all ecosystem functional groups listed in the table are present in Kenya except for T6.1, and possibly T1.2[8] according to the IUCN GET classification. Kenya's ecosystems can be aligned with IUCN GET to some extent, with Level 2 reporting already feasible. The group emphasized that more detailed reporting is desirable but would require additional capacity. Key challenges include: a) Fear of double counting, particularly for annual croplands and plantations, b) Limited financial and human capacity, and c) Lack of baseline data. Despite these limitations, the group welcomed the uniformity offered by using a common classification system, which could be applied by all stakeholders involved in restoration (refer to Annex II).
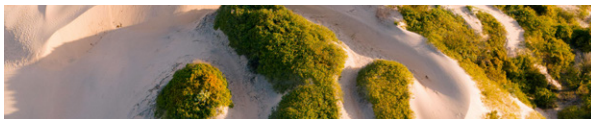
Transitional Group: The group confirmed that most ecosystem functional groups under the IUCN GET were accurately listed and present in Kenya, except for reed banks, salt marsh ecosystems, and permanent marshes. There was debate among members about the presence of shrubland grasslands in the supralittoral coastal biome. While reporting at both Levels 2 and 3 is possible, moving to Level 3 should be considered a long-term goal to be achieved by 2030. Members recommended conducting baselines for broader ecosystems before focusing on specific functional groups. Piloting and capacity building would be necessary, alongside hands-on training to navigate the GET website, which currently lacks user-friendly navigation. The group also stressed that GET must align with national priorities to ensure its relevance. Consistency across ecosystems for national, regional, and global reporting is critical, and the harmonization and dissemination of the GET framework are necessary for successful adoption[9](refer to Annex II).

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8   IUCN GET Terrestrial Groupwork
9   IUCN GET Transitional_ Groupwork

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SESSION 5: MONITORING FRAMEWORKS AVAILABLE FOR TARGET 2

Joseph Masinde from NEMA presented an **Overview of Kenya's National Biodiversity Clearing House Mechanism (CHM).**[10] NEMA serves as the CHM focal point. The CHM's core purpose is to promote and facilitate technical and scientific cooperation, knowledge sharing, and information exchange, establishing a fully operational network of Parties and partners as per Article 18.3 of the Convention on Biological Diversity (CBD), which Kenya ratified on June 26, 1994. Mr Masinde explained that Kenya's CHM includes a fully operational website and an online platform for biodiversity reporting. The CHM plays a critical role in developing resources and tools to support the national implementation of the KM-GBF, ensuring consistency and efficiency in reporting across countries. He outlined Kenya's CHM priorities, including the adoption of the KM-GBF, the revision of the NBSAP through a committee under MECC&F, the formulation of national indicators, the launch of the National Biodiversity Coordination Mechanism, and the use of the Bioland tool to enhance CHM functionality as a comprehensive reporting platform. Additionally, priorities include showcasing Kenya's best practices at CBD COP16 in Colombia, facilitating knowledge sharing and adoption of science-based biodiversity technologies, and ensuring monitoring, evaluation, and reporting are aligned with CBD requirements.

Questions and Answers

Sheilla Mulili inquired about who reports to the World Database on Protected Areas (WDPA) under CHM. Joseph Masinde clarified that the National Museums of Kenya serves as the national focal point for WDPA reporting. Once finalized, updates are shared on the national CHM portal. Martin Nyoro from the Regional Centre for Mapping of Resources for Development (RCMRD) added that RCMRD and the UN World Conservation Monitoring Centre (WCMC) also update the WDPA.

Khalil Walji asked about major gaps in CHM reporting for the targets. Mr Masinde acknowledged that it is a learning process and expressed hope that the KM-GBF would address these gaps. He reiterated that the CHM's purpose is to provide data to inform restoration decision-making.

A participant sought clarification on how the CHM can better harmonize data reporting for KM-GBF. Mr Masinde emphasized the importance of relevant stakeholders collaborating to align frameworks from various initiatives, such as the Forest and Landscape Restoration (FLR) monitoring framework, KM-GBF, NBSAP, and CHM. He also confirmed that CHM accepts environmental management plans.

Norah Koima presented the Jaza Miti App,[11] the official platform for reporting the 15 Billion Tree Growing Initiative by the Kenyan government. The app includes several key features, such as tree species to site matching, documentation and tracking of planting activities, data validation and verification tools, real-time monitoring and progress insights, nursery registration and location tracking, stakeholder ranking through gamification, and an administration module. Launched by H.E. the President of Kenya on December 21, 2022, the app is available on Android and iOS, supports offline mode, leverages AI for initial validation, and includes a customizable BI dashboard for generating reports on demand. Opportunities presented by the app include (i) awareness creation through stakeholders training, (ii) collaboration on verifying seedling survival rates, and (iii) nursery registration and certification campaigns.

A participant inquired whether data input into the app is represented as an individual or organization. Ms Koima clarified that the app allows organizations to associate their names with tree-planting activities but also supports individual data entry for personal initiatives on private farmland.

Khalil Walji inquired about species data for the 15 Billion Tree Growing Initiative and proposed extending AI functionality to identify species planted, particularly to enhance biodiversity considerations in addition to providing incentives to encourage farmers to grow trees.

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10 Session 5_Kenya's National Biodiversity Clearing House Mechanism
11 Session 5_The 15 B and the Jaza Miti App, functions

A participant inquired about how the government intends to address cases of double counting or reporting of tree seedlings planted on the landscape by organizations and individuals. Norah Koima acknowledged the possibility of double counting and explained that the AI deployed in tree-growing monitoring is programmed to flag such cases. Susan Boit further clarified that to avoid double counting, the government is transitioning from individual reporting to the Kenya Forest Service (KFS) as the focal point for reporting in areas where tree planting is taking place. Additionally, the government is advocating for Community Forest Associations (CFAs) to adopt sites and report directly to KFS, which will then report to the national platform.

Mieke Bourne from CIFOR-ICRAF informed the meeting of a plan to work with Taita Taveta and Makueni counties in one of the projects led by ICRAF to ground-truth tree seedlings planted and understand survival rates. She also emphasized the application of the Regreening App, which uses remote sensing to map polygons of areas and evaluate changes in tree cover over time.

Anastacia Mwaura recommended that seedlings distributed for the 15 Billion Tree Growing Initiative include species such as fruit, timber, fodder, and medicinal trees. She also inquired whether the Jaza Miti App provides guidance on species suitability for different areas. Norah Koima clarified that the app offers broad guidance on recommended species across ecosystems.

Meshack Muga sought clarification on the security of data within the Jaza Miti App, expressing concerns about potential misuse for personal benefit. Norah Koima clarified that while the underlying software is secured, the reports generated are open to the public. Rose Akombo from MECC&F added that Kenya has a regulation on data protection in place.

Concern was raised about overlaps in national ecosystem classifications under the National Ecosystems and Landscapes Strategy (2023–2032), with marine and forest ecosystems cited as examples. It was noted that forests also exist within marine ecosystems.

Mieke Bourne from CIFOR-ICRAF presented the **Kenya Ecosystems and Landscapes Restoration Monitoring Framework,**[12] developed through a consultative process led by the Kenya Landscape Restoration Monitoring Technical Working Group (TWG), comprising members from both state and non-state actors. The monitoring framework addresses gaps in coordination mechanisms, structured reporting on landscape restoration actions, and supports the government in reporting its national, regional, and global restoration commitments. The framework includes 30 headline indicators and 45 sub-indicators, categorized into process (restoration efforts/actions) and outcome (impacts) indicators. The framework has been reviewed through the UK PACT funded Project to align it with Kenya's new national restoration strategy, enhance its focus on aquatic ecosystems, consider the new restoration target (T2) under the KM-GBF incorporating new terminology like 'effective restoration', and integrate GESI aspects across the framework. A reconvened TWG is finalizing the framework to ensure it reflects Kenya's diverse ecosystem restoration aspirations and stakeholders' needs.

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12 Session 5_Kenya Landscape and Ecosystem Restoration Monitoring Framework

SESSION 6: MAPPING RESTORATION PRIORITIES, DATA FLOWS, INSTITUTIONAL ARRANGEMENTS, AND RESTORATION CHALLENGES

The session, facilitated by Khalil Walji from CIFOR-ICRAF, engaged participants in exploring key restoration challenges and data gaps across various ecosystem types. Participants formed four breakout groups—Rangelands, Aquatic, Agroecosystem, and Forests—to delve into specific issues based on their technical expertise (refer to Annex II).
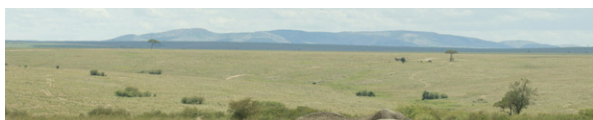
Rangelands Ecosystem: The targeted area for restoration under the Rangelands Ecosystem is 5.19 million hectares, representing 49% of the total land mass to be restored under the National Ecosystems and Landscapes Restoration Strategy (2023–2032). Key challenges identified by the group included:

- Policy incoherence, with no clear alignment or guidance, and the existence of unsupportive policies that exacerbate degradation.

- Capacity and human resource gaps, including challenges in technology transfer and extension services.

- Data structures exist but lack mechanisms for coherent data collection from the local to national levels. Existing mechanisms, where present, are not utilized effectively.

- Lack of valuation for biodiversity and restoration activities, as well as insufficient consideration for monitoring and evaluation (M&E), which is often overlooked and underfunded[13] (refer to Annex III).
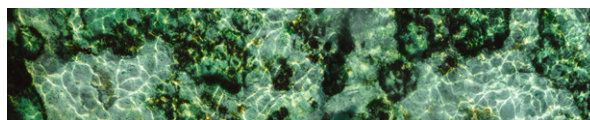
Aquatic Ecosystem: The Aquatic Ecosystem group referenced KM-GBF Target 2 as a benchmark for aquatic ecosystem restoration, covering both inland waters and marine ecosystems. Data collected by stakeholders is submitted to Kenya's Clearing House Mechanism (CHM), following a chain from community-level institutions to wetland committees and the Ramsar focal point. Key institutions for this ecosystem include the Kenya Marine and Fisheries Research Institute (KEMFRI), National Museums of Kenya, Kenya Wildlife Service, and the Wildlife Research and Training Institute. Challenges faced in data collection and reporting included:

- Financial constraints and inadequate capacity.

- Seasonal climatic changes that affect data consistency.

- Lack of standardization in data collection methodologies, including the absence of measurement standards and standard operating procedures[14] (refer to Annex III).


13 Kenya National dialogue_data flow_Rangeland Ecosystem
14 Kenya National dialogue_data flow_Aquatic Ecosystem

Agroecosystems: Group The Agroecosystems group referenced the National Ecosystems and Landscapes Restoration Strategy (2023–2032), which aims to restore 3.0 million hectares of degraded farmlands through agroforestry, and KM-GBF Targets 2 and 10, which focus on bringing 30% of degraded ecosystems under effective restoration and enhancing biodiversity in agricultural lands, respectively. However, the group noted a lack of clarity on national-level targets. Key challenges to restoration included:

- Poor governance and lack of coordination and collaboration across departments, particularly in data sharing.

- Lack of political goodwill in leveraging local resources.

- Multiple monitoring and reporting platforms leading to data synchronization issues, highlighting the need for a unified reporting system.

- Insufficient budget allocation for monitoring activities.

- Limited capacity among stakeholders to implement best practices and monitoring approaches[15] (refer to Annex III).
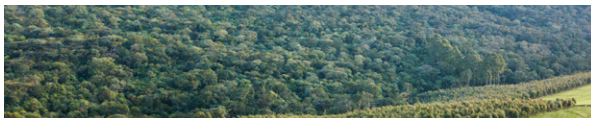
Forests ecosystem: The Forests Ecosystem group referred to the National Ecosystems and Landscapes Restoration Strategy (2023–2032), which targets the restoration of 1.1 million hectares of degraded forested landscapes by 2032. The group identified the following challenges:

- A silo-based approach to reporting, with no synergies between institutional reporting platforms.

- Lack of baseline data to inform progress toward targets.

- Unharmonized restoration monitoring indicators[16] (refer to Annex III).

Dr Lucy Nganga shared her thoughts on the diverse monitoring frameworks presented during the workshop. She acknowledged and appreciated the available frameworks but emphasized the need to harmonize restoration targets and identify superior guiding documents, whether the NBSAP or the National Ecosystems and Landscapes Restoration Strategy (2023–2032). She underscored the importance of developing a structured and coordinated monitoring framework for restoration monitoring and reporting. To enhance data sharing, she suggested further collaboration with FAO and CIFOR-ICRAF to create a data-sharing platform for CBD reporting.

Dr Nganga also highlighted the need to harmonize classification typologies to enable unified and coordinated reporting. Regarding engagement structures, she recommended that MECC&F establish a framework to coordinate departments across both levels of government, similar to the Joint Agricultural Sector Consultation and Coordination Mechanism (JASCOM). Such a structure would streamline and clarify the coordination of restoration efforts.

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15 Kenya national dialogue_data flows_agroecosystems
16 Kenya national dialogue_data flows_forest ecosystems

SESSION 7: FERM REGISTRY AND DATA INTEROPERABILITY

Temitope Abisoye presented **FERM,**[17] the official framework for monitoring global progress and disseminating good practices for the UN Decade on Ecosystem Restoration. The FERM includes a registry, geospatial tool, search engine, and an upcoming dashboard. Temitope emphasized that FERM is an approved framework for monitoring and reporting on KM-GBF Target 2. It is built on 10 principles and standards of ecosystem restoration, which include contributions to the UN Sustainable Development Goals (SDGs) and the goals of the Rio Conventions.

Most importantly, FERM facilitates the sharing of geospatial data related to Target 2 and ensures standardized data collection. It also supports the identification of indicators (building on existing frameworks) to measure progress across key ecosystems at various levels. Temitope guided participants on using the FERM registry for reporting, covering steps from sign-up and documentation to review and publication. A demo exercise enabled participants to interact with the tool.

Questions and Answers

Khalil Walji asked about the relationship between Kenya's framework and FERM reporting. Temitope clarified that the FERM platform is designed for interoperability and will provide insights on data input through official reporting lines to the CBD reporting tool.

Zhuo Cheng defined **data interoperability**[18] as the ability of two systems or components to exchange information, including between ministries, reporting processes, and metrics. She outlined three core functions of the data-sharing system:

- Review and identification: Assess existing data sources on restoration and define their interoperability.

- Data dashboard: Compile and make restoration data available in the FERM to support country-level data collection.

- Data source identification: Clearly identify data sources in compiled data, connecting country reporting in the FERM and the CBD Online Reporting Tool.

Zhuo emphasized that the interoperability process involves reviewing, validating, and reporting areas under restoration by documenting details such as activity type, implementer, purpose, platform, and timeline. She shared examples of interoperability across national and regional platforms, including Kenya's, and invited participants to reflect on the following questions:

Q1: At the county level, officers responding to specific reporting tasks (e.g., reporting on the 15 Billion Tree Growing Initiative, FRA, Barometer) will have different data. How can this data be aggregated before being sent to the Clearing House officer?

Dr Lucy Nganga highlighted the need for a coordination mechanism to ensure consistent data reporting and clarify who is submitting the data. She reiterated the importance of developing a standard reporting template for uniform and coordinated reporting.

Veronica Wanyora echoed the importance of structured coordination and reporting at the county level to ensure the entire county is treated as a unit, avoiding double reporting.

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17 Session 7_Overview of the FERM Registry-fin
18 Session 7_Overview of the FERM_Data Interoperability

Q2: How do we minimize double counting during the aggregation process?

Rose Akombo explained that data on the 15 Billion Tree Growing Initiative at the county level is collected by KFS through the County Ecosystem Conservators' office, which coordinates with County Commissioners and reports to the 15 Billion Tree Growing Strategy Secretariat. Ground-truthing is essential to validate reported data. For transboundary reporting, political administrative boundaries are used to ensure data accuracy and prevent duplication.

Norah Koima highlighted the need to map indicators and foster synergy among stakeholders to improve data reporting.

Q3: The FERM dashboard includes data from non-state actors collected through Restor. How can this data be used during data review and validation?

Rudolf Makhanu shared that Nature Kenya, through a GCF project, is restoring 10,000 hectares of degraded landscapes. Mapped restoration areas with captured coordinates can support informed decision-making.
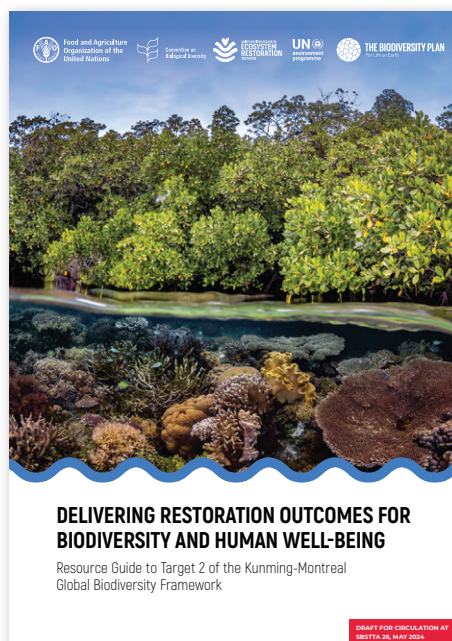
Elijah Korir stressed the importance of structured and coordinated monitoring and reporting, proposing that this should be a key output of the meeting to address duplication in reporting, as highlighted during the discussions.

SESSION 8: TARGET 2 RESOURCE GUIDE

Mr Khalil Walji from CIFOR-ICRAF outlined the objectives of the **KM-GBF Target 2 Resource Guide,**[19] its development process, and its key sections. He explained that the guide aims to assist countries and partners in translating restoration commitments into actionable plans and operationalizing restoration at scale. Khalil informed the meeting that the guide was developed through a consultative process and took participants through its three sections, with particular focus on Section 3, Operationalizing Ecosystem Restoration. He noted that most feedback suggested this section should be the first in the guide, as it provides guidance on the definition of effective restoration and explains the difference between rehabilitation and ecological restoration. The guide remains in draft form and will be launched at COP 16, with parties invited to submit comments to the CBD Secretariat.

DELIVERING RESTORATION OUTCOMES FOR BIODIVERSITY AND HUMAN WELL-BEING
Resource Guide to Target 2 of the Kunming-Montreal Global Biodiversity Framework

DRAFT FOR CIRCULATION AT SBSTTA 26, MAY 2024

SESSION 9: DEVELOPING A ROADMAP FOR TARGET 2

The session, facilitated by Khalil Walji, introduced participants to an exercise focused on roadmap development. Discussions centred on four critical issues identified during Kenya's national dialogue: capacity gaps and needs, harmonizing platforms, aligning policies, and defining coherent restoration terminology. Participants formed four breakout groups to identify challenges and propose solution-oriented strategies for these issues.

The **capacity gaps and needs** group identified a wide range of capacity gaps that must be addressed to achieve KM-GBF Target 2. The key gaps included systemic funding for scaling restoration monitoring; national and local-level technical capacity for mapping, assessment, and monitoring; lack of harmonized reporting systems across ecosystems, including guidelines, standards, and technical knowledge; and the need for greater coherence in understanding what constitutes effective restoration and what is being captured as restoration. Other gaps included the failure to mainstream restoration as a technical skill

in Kenya; communication gaps in restoration, such as fragmented messaging and guidance; politically driven restoration initiatives rather than science-based efforts; and limited knowledge of best restoration practices for specific ecosystems, leading to the use of inappropriate practices, among others.[20]

The group proposed several solutions and opportunities to address these capacity gaps and needs. These included utilizing the county structure to ensure capacity building trickles down from the national to county to local levels and exploring existing guidelines, restoration programmes, and ongoing training initiatives. They also highlighted the 15 Billion Tree Growing Strategy by the national government, which has successfully implemented an effective communication strategy (refer to Annex IV).

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19 Session 8_Target 2 Resource Manual-DRAFT
20 https://drive.google.com/file/d/12bKatL8_9R6w36zYl9CWhTSHkr8PgtOE/view

The group on **harmonizing data platforms for ecosystems reporting** identified several important steps. These included stocktaking of existing platforms to map and understand the number and types of data platforms available, and developing standard operating procedures for data collection to address the challenges of organizations working in silos and difficulties in accessing data needed for decision-making on restoration. They also highlighted the issue of disjointed restoration targets and the need to harmonize them. Concerns were raised about the narrow focus of the 15 Billion Tree Growing Initiative on Target 2, which neglects other critical aspects of ecosystem restoration beyond tree planting and would need to be expanded. Additionally, the group emphasized the need for standard indicators for restoration monitoring across ecosystems and reporting, as well as collaboration among partners to minimize double counting in data reporting[21] (refer to Annex IV).

Group 3 addressed **policy gaps, coordination mechanisms and platforms for data exchange.** The group proposed several key actions, including the creation of a coordinated and harmonized policy environment for an inclusive multi-stakeholder platform; the development of a well-coordinated and integrated policy platform across all levels of government and sectors to allow for effective data and information exchange; and the establishment of an overarching coordination mechanism for policy development and implementation. Specific activities suggested to address gaps in policy, coordination mechanisms, and data exchange platforms included the launch of the National Biodiversity Coordination Mechanism; finalizing the NBSAP and a data-sharing protocol; reviewing existing policies to identify strengths, weaknesses, opportunities, and gaps; conducting advocacy and sensitization on policies; and revitalizing or leveraging existing county reporting coordination structures. The group noted that these efforts could be supported by leveraging opportunities in existing frameworks, including the NBSAP, integrated natural resources and conservation policies, relevant sectoral policies, the Environment Management and Coordination Act (EMCA), and collaborations with the CoG, among others. The group also identified specific capacity needs, such as building capacity for NBCM implementation and knowledge management, and enhancing advocacy and sensitization efforts for the NBCM[22] (refer to Annex IV).

The fourth group discussed the importance of **coherent definitions of restoration** and emphasized the critical need for standardized definitions of restoration and degradation for each ecosystem. To achieve this, the group proposed four steps or activities. First, they recommended reviewing existing typologies, definitions, and classifications in Kenya. Second, they identified the need for mapping and reviewing metrics for measurement. Third, they emphasized conducting baseline assessments of degradation levels to understand the current status of ecosystems, identify those already receiving attention, and note underrepresented ecosystems. Fourth, they suggested defining restoration activities based on ecosystem types. The group further noted that for effective restoration, key capacity and strategic needs must be addressed, including the establishment of a mechanism for coordinated engagement and alignment of existing strategies and frameworks, resource mobilization (funding), building technical capacity within communities, and enhancing access to and availability of infrastructure (tools) for data storage, monitoring, evaluation, and reporting[23] (refer to Annex IV).

CLOSING REMARKS

Khalil Walji from CIFOR-ICRAF) expressed his gratitude to all stakeholders in attendance for their invaluable contributions to the process

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21 Roadmap_ Harmonize data platforms
22 Roadmap-policy gaps, coordination mechanisms and platforms for data exchange
23 Roadmap Coherent definitions of restoration

ANNEXES

Time	Description	Lead
Day 1: Wednesday, July 17, 2024 – What is Target 2?		
08:30-09:00	Registration	
09:00 - 10:00	Welcome, opening remarks and introductions	MOECCF- Dr Lucy Nganga; CIFOR-ICRAF – Khalil Walji
10:00 - 10:30	**SESSION 1:** The KM-GBF and the UN Decade on Ecosystem Restoration	FAO – Zhuo Cheng
10:30 - 11:00	**SESSION 2:** Presenting the KM-GBF Target 2 'pilots' project, and objectives	CIFOR-ICRAF- Khalil Walji
11.00 - 11:30	Tea Break + Group Photo	
11:30 – 13.00	**SESSION 3:** Kenya's Target 2 Progress. Presentation and Panel discussion • Overview of Kenya's NBSAP review process and target setting process (10min presentation) • Kenya Landscape and Ecosystem Restoration Strategy (10min presentation) • Overview of the ROAM and Restoration Barometer (10min presentation) Plenary discussion	MOEFF - Faith Nyokabi MOEF – Susan Boit IUCN – Joseph Njue Laura Mukhwana
13:00 - 14:00	Lunch	
14:00 - 15.30	Global Ecosystem Typology for Target 2	FAO – Temitope Abisoye
15:30 - 16:00	Tea Break	
16.00 - 17.00	GET - group work	FAO - Temitope Abisoye

Time	Description	Lead
Day 2: Thursday 18th July 2024 - How do we monitor and report on Target 2?		
08:30-9:00	Registration	CIFOR-ICRAF- Freidah Wanda
9:00 - 9:15	Recap of Day 1	CIFOR-ICRAF- Erick Wanjira
09.15 -10.30	Kenya's National Biodiversity Clearing House Mechanism Kenya Landscape and Ecosystem Restoration Monitoring Framework and MTWG 15 B and the Jaza Miti App, functions Plenary and questions	NEMA- Joseph Masinde CIFOR-ICRAF – Mieke Bourne KEFRI- Norah Koima
10.30 – 11.00	Tea Break	
11.00 – 12.30	**SESSION 6:** Mapping restoration priorities, data flows, institutional arrangements and restoration challenges by ecosystem (group work)	CIFOR-ICRAF – Khalil Walji

	Group work presentations. • Aquatic • Rangeland • Agroecosystems • Forests	All
12:30 - 13.00		
13:00-14:00	Lunch	
14:30 - 15.30	**SESSION 7:** Overview of the FERM Registry	FAO – Temitope Abisoye
15:30 - 16.00	Tea Break	
16:00- 17:00	**SESSION 7:** FERM Group Work Interoperability presentation	FAO – Temitope Abisoye FAO - Zhuo Cheng

Time	Description	Lead
Day 3: Friday July 19, 2024 – A Roadmap and action plan for Target 2		
08:30-9:00	Registration	
9:00 - 9:15	Recap of Day 2	CIFOR-ICRAF- Erick Wanjira
09.15 -10.30	**SESSION 8:** Target 2 Manual Presentation	CIFOR-ICRAF – Khalil Walji
10.30 – 11.00	Tea Break	
11.00 – 12.30	**SESSION 9:** Co creating a road and action plan to achieve Kenya's Target 2 ambitions	CIFOR-ICRAF – Khalil Walji
12:30 - 13.00	Group presentations • Capacity gaps & Needs • Harmonizing platforms • Aligning policies. • Coherent definitions Plenary discussion	
13.00 -13.10	Feedback Survey	CIFOR-ICRAF- Khalil Walji
13.10-13.30	**SESSION 10:** Next steps and closing	CIFOR-ICRAF – Khalil Walji
13.30	Lunch and departure	

A. IUCN GET Aquatic/Freshwater Group Summary

All functional groups were confirmed to be present in Kenya, except for ephemeral salt lakes, based on the global analysis of the Kenya report using GET. This confirmation aligns with IUCN global data and the online query available at global-ecosystems.org/analyse.

The group agreed that the IUCN GET accurately represents ecosystems in Kenya and that restoration reporting at the ecosystem functional group level (Level 3) is feasible. However, concerns were raised about the possibility of double reporting due to overlapping ecosystem functional groups. To address this, the group emphasized the importance of defining metrics for reporting. Reporting at the biome level (Level 2) was also deemed feasible, but the group noted that details might be lost, citing the example of Kenya's six RAMSAR sites.

When comparing GET with Kenya's current reporting framework, it was noted that GET classifications are more detailed than those outlined in the National Ecosystems and Landscape Restoration Strategy (2023–2032). Nonetheless, the group agreed that Kenya's ecosystem classification could be aligned with IUCN GET, though this would require additional resources, particularly for alignment at Level 3.

The benefits and limitations of aligning Kenya's ecosystem classification with IUCN GET were summarized as follows:

- Benefits of Level 2 (Biomes) Classification:
  Reporting using Level 2 is supported by available data, is straightforward, and requires fewer resources.

- Limitations of Level 2 Classification:
  Capacity is needed to accurately define biomes and ecosystem functional groups.

- Benefits of Level 3 (Ecosystem Functional Group) Classification:
  Level 3 allows for concise reporting and captures more detailed and underrepresented ecosystems.

- Limitations of Level 3 Classification:
  It requires additional capacity and resources to collect and report the detailed information it encompasses.

The group reached a consensus that national and county governments could adopt a dual-level reporting system, with national governments focusing on Level 2 reporting and county governments handling Level 3 reporting.

B. Terrestrial Group Activity

ID	Group	Biome ID	Biome	Realm ID	Realm	% major occurrence	% minor occurrence	Region ID	Region (EEZ)	Validate	
T1.2	Tropical/Subtropical dry forests and thickets	T1	Tropical-subtropical forests biome	T	Terrestrial	0.0063	0	ADM_16	Kenya	maybe	
T1.3	Tropical/Subtropical montane rainforests	T1	Tropical-subtropical forests biome	T	Terrestrial	2	0	ADM_16	Kenya	yes	
T3.4	Young rocky pavements, lava flows and screes	T3	Shrublands and shrubby woodlands biome	T	Terrestrial	0.97	0	ADM_16	Kenya	yes	
T4.1	Trophic savannas	T4	Savannas and grasslands biome	T	Terrestrial	6.2	0	ADM_16	Kenya	yes	
T4.2	Pyric tussock savannas	T4	Savannas and grasslands biome	T	Terrestrial	0.15	0	ADM_16	Kenya	yes	
T5.1	Semi-desert steppe	T5	Deserts and semi-deserts biome	T	Terrestrial	0.53	0	ADM_16	Kenya	yes	
T6.1	Ice sheets, glaciers and perennial snowfields	T6	Polar/alpine (cryogenic) biome	T	Terrestrial	0	0	ADM_16	Kenya	no	Negligible
T6.5	Tropical alpine grasslands and herbfields	T6	Polar/alpine (cryogenic) biome	T	Terrestrial	0.8	0	ADM_16	Kenya	yes	Found on Mt. Kenya
T7.1	Annual croplands	T7	Intensive land-use biome	T	Terrestrial	0.49	0	ADM_16	Kenya	yes	
T7.2	Sown pastures and fields	T7	Intensive land-use biome	T	Terrestrial	0.22	0	ADM_16	Kenya	yes	
T7.3	Plantations	T7	Intensive land-use biome	T	Terrestrial	0.15	0	ADM_16	Kenya	yes	
T7.4	Urban and industrial ecosystems	T7	Intensive land-use biome	T	Terrestrial	0.12	0	ADM_16	Kenya	yes	
T7.5	Derived semi-natural pastures and old fields	T7	Intensive land-use biome	T	Terrestrial	0.56	0	ADM_16	Kenya	yes	

Comments

The group confirmed that the IUCN GET classifications accurately represent diverse ecosystems in Kenya. However, they noted that the biome for "Full Desert" was not included, despite its presence in the country. After reviewing the 13 ecosystem functional groups under the IUCN GET, the group agreed with eleven of them, while expressing uncertainty about **T1.2 Tropical/Subtropical Dry Forests and Thickets** ("maybe") and recognizing that **T6.1 Ice Sheets, Glaciers, and Perennial Snowfields** were present but negligible. Some classifications, particularly within the **T5 Deserts and Semi-Deserts** biome, were found to be missing.

The group further confirmed that Kenya's ecosystems could be aligned with IUCN GET to a certain extent. Reporting at both Level 2 and Level 3 of the IUCN GET framework was deemed feasible, with more detailed reporting welcomed. However, the group emphasized that significant capacity-building efforts would be needed over time to support such detailed reporting.

Potential benefits of aligning with the IUCN GET include structured and uniform reporting. Nonetheless, the group identified several limitations, including the risk of double counting, particularly for annual croplands and plantations; insufficient financial and human resources; and a strong need for baseline data to support effective reporting.

C. Terrestrial Rangeland Group Activity

EFG ID	Ecosystem Functional Group	Biome ID	Biome	Realm ID	Realm	% major occurrence	Validated	Comment
T1.2	Tropical/Subtropical dry forests and thickets	T1	Tropical-subtropical forests biome	T	Terrestrial	0.0063	Maybe	% is too low look at the metrics
T1.3	Tropical/Subtropical montane rainforests	T1	Tropical-subtropical forests biome	T	Terrestrial	2	Yes	% is off
T3.4	Young rocky pavements, lava flows and screes	T3	Shrublands and shrubby woodlands biome	T	Terrestrial	0.97	Yes	% is too high – should be less
T4.1	Trophic savannas	T4	Savannas and grasslands biome	T	Terrestrial	6.2	Yes	% okay – majority
T4.2	Pyric tussock savannas	T4	Savannas and grasslands biome	T	Terrestrial	0.15	Yes	Not sure about the percentage
T5.1	Semi-desert steppe	T5	Deserts and semi-deserts biome	T	Terrestrial	0.53	Yes	Do not know how much it is but it should be more as this covers most of the northeastern Kenya
T6.1	Ice sheets, glaciers and perennial snowfields	T6	Polar/alpine (cryogenic) biome	T	Terrestrial	0	Yes	Should be around 0.01%
T6.5	Tropical alpine grasslands and herbfields	T6	Polar/alpine (cryogenic) biome	T	Terrestrial	0.8	Yes	0.8% is too low as its only found on mountains e.g. Mt Elgon, Mt Elgon, Nyandarua/Aberdares
T7.1	Annual croplands	T7	Intensive land-use biome	T	Terrestrial	0.49	Yes	Too low
T7.2	Sown pastures and fields	T7	Intensive land-use biome	T	Terrestrial	0.22	Yes	Not much sown pasture expects for in the highlands
T7.3	Plantations	T7	Intensive land-use biome	T	Terrestrial	0.15	Yes	Includes forests but the % is too low
T7.4	Urban and industrial ecosystems	T7	Intensive land-use biome	T	Terrestrial	0.12	Yes	Okay
T7.5	Derived semi-natural pastures and old fields	T7	Intensive land-use biome	T	Terrestrial	0.56	Yes	

The group on terrestrial rangelands agreed that the IUCN GET largely aligns with Kenya's ecosystem classification needs, but noted that the metrics are either too high or too low for practical application. Members observed that the land use classification is overly Western, with several categories that do not apply to the African or Kenyan context. They emphasized that classifications irrelevant at the global level are equally unhelpful at the national level. Additionally, the language and definitions used in the IUCN GET were deemed unsuitable for Kenya's specific contexts. The group also questioned the breakdown of rangelands, arguing that such distinctions may not be relevant due to the similar management practices employed across these ecosystems.

The group reached consensus that, currently, reporting is feasible under Level 1 of the IUCN GET, as it aligns with Kenya's National Landscape and Ecosystem Restoration Strategy and KM-GBF Target 2. This reporting is already being implemented. Similarly, reporting at Level 2 (biomes) and Level 3 (ecosystem functional groups) was considered potentially feasible, though it would require further adjustments to ensure relevance and applicability.

D.   Transitional Ecosystem Group Activity-Summary

The group members confirmed that most of the IUCN GET classifications for transitional ecosystems were correctly listed and are present in Kenya, with the following exceptions:

- Reed banks and saltmarshes were missing.

- Permanent marshes were not included.

- The group also questioned whether shrubland/grassland under the supralittoral coastal biome is present in Kenya.

The group affirmed that reporting under Level 2 (biomes) and Level 3 (ecosystem functional groups) is feasible but provided the following insights on the benefits and limitations of each level:

- Reporting at Level 2 is possible, but advancing to Level 3 will be challenging and should be viewed as a long-term goal, achievable by 2030.

- Establishing baselines for larger ecosystems should be prioritized before focusing on specific functional groups.

- Piloting and capacity building will be necessary for successful implementation.

- Building capacity to navigate the IUCN GET website would add significant value. The group suggested learning from South Africa's experience, asking what resources and expertise were required for their success.

- Reporting at Level 3 will only be effective if implementers are made aware of it, which necessitates significant investment in building human capacity at scale. The group raised questions about how such a system would be operationalized.

- For the GET framework to be meaningful, it must align with national priorities and planning. If its primary value lies in global reporting, it risks being limited to that purpose and reliant solely on global funding, rather than being integrated into Kenya's restoration priorities.

- The GET tool could be valuable for ground-truthing and ensuring that restoration under Target 2 is occurring as planned.

- Harmonization of the GET framework with Kenya's national classifications is required, along with efforts for its dissemination.

- Better guidance on applying the GET framework to regional assessments is necessary.

- Consistency across ecosystems is valuable at the global level, but it must be tied to a comprehensive valuation of Kenya's natural assets. Such a valuation has likely never been undertaken comprehensively, only at the sectoral level. This would require a decision at the presidential level, followed by an agenda, strategy, or work plan.

- The complexities of monitoring and reporting on the GET framework across Kenya's 47 counties and multiple sectors need to be addressed to ensure coherence and avoid duplication.

A.   Rangeland Ecosystem Group

i.   Data flow

What are the restoration targets set for this ecosystem?	Who are the key stakeholders involved in restoring this ecosystem/ landscape? Who should be further involved?	For each stakeholder list the step of the restoration process they are involved in. Planning, implementing, monitoring reporting	What are the main practices used to restore this ecosystem? FMNR, reseeding, planting etc.	What are the key indicators used to monitor restoration of this ecosystem? (now)	Other comments or notes.
Strategy to restore 10.6 million. Ha, under 11 priority areas. 5.19 m/ha of rangelands that are to be restored. 38 million under the ROAM in 2016. Target 11 priority areas including rangeland. The strategy has not been finalized, sensitized at the county level, or fully domesticated. Questions remain regarding whether restoration efforts rely solely on tree planting. The rangeland management and pastoralist strategy outlines activities but does not provide specific targets.	National level: • State Department of Livestock • National Drought Management Authority (NDMA) • Kenya Agricultural and Livestock Research Organization (KALRO) • Wildlife Research and Training Institute • Directorate of Remote Sensing and Remote Services (DRSRS) • Kenya Forestry Research Institute (KEFRI) • Kenya Wildlife Conservancies Association (KWCA)		• Fencing for regeneration • Tree planting (upstream and downstream) • Removal of invasive species (Acacia reficiens, Prosopis juliflora, Opuntia stricta) • Reseeding of grasslands • Social fencing • Integrated participatory management plans • Grazing plans • Soil and water management structures	Area under restoration: • Hectares cleared of invasive species. • Connectivity between different ecosystem components. • Number of grass seed banks established. • Number of trees planted. • Species diversity. • Bathymetric data, including flow and depth. • Socioeconomic indicators: urban/rural index, food production through cropping, poverty levels. • Evidence from pilot cases, such as increases in livestock after restoration. • Number of trainees and training sessions conducted. • Number of beneficiaries reached. • Investment levels directed toward restoration. • Policies implemented in practice or enforced. • Alignment of policies, which is currently lacking. • Wildlife population trends and carrying capacity.	**Drivers of degradation:** Overgrazing, reseeding grasslands, documented grazing patterns. **County Integrated Development Plans (CIDPs):** 75% of Kenya is rangelands. Only a fraction of 5.1 million ha was committed to restoration. **Indicators:** Use Target 2 – headline, complementary, supportive.

ii.   Priority/Key challenges

Priority	Key Challenges/Bottlenecks Hindering Kenya's Restoration Process in Planning, Implementing, Monitoring and Reporting
1	**Policy Incoherence:** Supportive and Contradictory Policies **Current Approach:** Often, the prevailing policy is the one most familiar or entrenched. **Policy Trade-offs:** Balancing different policy goals to achieve a middle ground for restoration efforts is essential. **Integrated Policy and Spatial Planning**: A holistic view is necessary to ensure cohesive and comprehensive planning. **County and National Levels:** Political influences, such as "pay-for-play" dynamics, play a significant role in policy implementation and outcomes.
2	**Capacity Challenges at the Local Level** **Community Forest Associations (CFAs)**: Many CFAs lack registration and awareness of national systems. **Government Officers**: At the county level, there is a significant need for capacity building. Officers require training on what data to collect and how to collect it effectively.
3	**Data Collection Challenges** **Data Structures but Lack of Collection Mechanisms**: There are established data structures, but no effective mechanisms for data collection, especially from local to national levels. **Purpose-Driven Data Collection**: Data is often collected only in response to donor requirements. **Funding Challenges**: Monitoring and Evaluation (M&E) is often undervalued and neglected in funding considerations. **Lack of Standards**: There are no standardized data collection or quality requirements. **Incoherent Data**: Currently, data collection efforts are fragmented, making it difficult to aggregate and use the data effectively.
4	**Understanding and Valuing Natural Resources** **Lack of Natural Valuation**: There is a significant gap in understanding the true value of natural resources, leading to perverse incentives that drive degradation. **Limited Appreciation for Restoration**: While there is some recognition of the value of specific elements, such as grass and water, there is a limited broader understanding of the overall benefits of restoration and the costs of degradation. **Sectoral Comprehension**: The understanding of restoration's value is often confined to specific sectors, lacking a holistic perspective.

B. Aquatic Ecosystem Group

i. Data flow

What are the restoration targets set for this ecosystem?	Who are the key stakeholders involved in restoring this ecosystem/ landscape? Who should be further involved?	For each stakeholder list the step of the restoration process they are involved in. Planning, implementing, monitoring reporting	What are the main practices used to restore this ecosystem? FMNR, etc	What are the key indicators used to monitor restoration of this ecosystem?	Map how this data flows from the data collection to the national system of reporting
Target 1	• Kenya Marine and Fishery Research Institute • National Museum of Kenya • Kenya Wildlife Service • Wildlife Research and Training Institute	**Planning:** • State Department of Economic Planning • State Department for Land and Physical Planning • Directorate of Resource Surveys and Remote Sensing **Implementing:** • Kenya Forest Service (KFS) • Kenya Marine and Fisheries Research Institute (KEMFRI) • Kenya Wildlife Service (KWS) • National Environmental Management Authority (NEMA) • WWF Kenya • Wetlands International • Nature Kenya • International Union for Conservation of Nature (IUCN) • Beach Management Units • Community Forest Associations • Community Wildlife Conservancies **Data Monitoring:** • National Museums of Kenya • State Department of Economic Planning	• Planting and protection of mangroves • Planting of bamboos in freshwater • Mobilization of communities • Removal of pollutants and plastics • Reintroduction of species (fish) • Management of invasive species • Watershed management	• Water quality • Species diversity • Species abundance	From Institutions (stakeholders) to the CHM Community to institutions to wetland committee to the Ramsar focal point

ii. Priority/Key challenges

Priority	Key Challenges/Bottlenecks Hindering Kenya's Restoration Process in Planning, Implementing, Monitoring and Reporting
1	**Lack of/ inadequate Finance**
2	**Capacity gaps**
3	**Seasonal changes in climate**
4	**Data collection mechanism, lack of standard of data collection (measurement), standard operating procedures**

C. Agroecosystems Group

i. Data flow

What are the restoration targets set for this ecosystem?	Who are the key stakeholders involved in restoring this ecosystem/ landscape? Who should be further involved?	For each stakeholder list the step of the restoration process they are involved in.	What are the main practices used to restore this ecosystem? FMNR, etc	What are the key indicators used to monitor restoration of this ecosystem?	Other comments or notes.
Ecosystem restoration strategy 3,00,000 hectares (4.2 B trees) KM-GBF Target 2 – 30% under effective restoration (restored degraded land) Target 10 –enhance biodiversity and sustainability in agriculture land - area under sustainable management (proportion of agricultural area under productive and unsustainable.	Farmers, public and private institutions (state and non-state actors in agriculture)	• **State Departments and Agencies:** Policy formulation and coordination. • **Research Agencies:** Conduct research, drive innovation, and provide training. • **Extension Service Providers:** Deliver county-to-ward extension services; include national and private providers. • **Farmers and Land Managers:** Act as decision-makers in implementing restoration activities. • **Consumers:** Influence demand for specific agro-products (e.g., fruit, timber) and product types (e.g., organic).	• Agroforestry: Tree planting and natural regeneration (self-seeding, stump regrowth). • Mixed cropping, crop rotation, and intercropping. • Organic farming and soil and water conservation. • Manure application and composting. • PELIS: Agriculture to forestry integration. • Conservation or regenerative agriculture: Reduced or zero tillage, use of cover crops, crop diversification in time and space. • Precision agriculture and Integrated Pest Management (IPM). • Livestock integration. • Use of appropriate seeds: Both research-recommended and locally suitable varieties.	**Process Indicators:** • Hectares/area under specific restoration practices (as outlined previously), measured against baseline degradation levels and practice implementation starting from a reference point. • Number of trees planted, gabions constructed, etc. **Outcome Indicators:** • Soil organic carbon levels. • Soil erosion reduction. • Vegetation cover improvement. • Water infiltration and holding capacity. • Diversity of plant and animal species or varieties present	Increase production per unit area to reduce land expansion / opening more land

ii. Priority/Key challenges

Priority	Key Challenges/Bottlenecks Hindering Kenya's Restoration Process in Planning, Implementing, Monitoring and Reporting
1	**Governance:** Misplaced institutions (e.g., aquaculture outside agriculture), lack of linkages, duplication of functions, weak coordination and accountability, and insufficient collaboration in data sharing (often hindered by attitudes).
2	**Political Goodwill:** Limited utilization of local resources. Need for a unified national goal (e.g., the 15 Billion Tree Growing Initiative). Multiple monitoring and reporting platforms causing missing data synchronization; a single operational and functional system for nationwide reporting is required.
3	**Finances:** Inadequate budget allocations, limited capacity for knowledge dissemination and data collection, and inefficiencies in resource utilization.
4	**Capacity:** Gaps across actors in implementing practices, approaches, and monitoring activities. Insufficient staffing levels and expertise to integrate systems, conduct technical monitoring, and analyze data. Lack of adaptive capacity to respond to emerging challenges and align practices with restoration goals.

D.   Forests Ecosystem Group

i.   Data flow

What are the restoration targets set for this ecosystem?	Who are the key stakeholders involved in restoring this ecosystem/ landscape? Who should be further involved?	For each stakeholder list the step of the restoration process they are involved in.	What are the main practices used to restore this ecosystem? FMNR, etc	What are the key indicators used to monitor restoration of this ecosystem?	Map how this data flows from data collection to the national reporting system
The overarching goal is 30% tree cover, which includes other land cover types. Specific targets for forest restoration under the National Ecosystems and Landscapes Restoration Strategy amount to 1.1 million hectares, broken down as follows: Forests: 1.1 million hectares • Natural forests: 350,507 hectares • Restocking gazetted forests: 54,000 hectares • Mangroves: 14,000 hectares • Commercial private forests: 750,000 hectares	**State actors:** MOECCF, KFS, Ministries, departments, county governments, agencies, academia and research, **Non-state actors:** NGOs, CFAs, CSOs, field-based organizations, community groups, youth groups, inter-governmental, development partners Learning institutions Also involve Faith based organizations, private sector, disciplined forces	• **Planning:** Primarily government, with contributions from development partners. • **Implementing:** Involves all stakeholders. • **Monitoring:** Achieved jointly by state and non-state actors, including communities. • **Reporting:** Government data originates from communities.	• Assisted natural regeneration, seeding, and planting through seedlings. • Sustainable Land Management (SLM), Forest Landscape Restoration (FLR), planting (including enrichment planting), growing, protecting (natural regeneration), terracing, aerial seeding, and specific practices tailored for mangroves. • Capacity building and creating an enabling environment were also discussed.	• Number of seedlings • Area under restoration • Number of trees • Number of species, • Amount of investment • Number of beneficiaries • Jobs created. • Number of people participated (participation) • Carbon stored. • Gender-indicators	Information flow is not linear, so it cannot easily be captured in a flowchart. • Local to National: Through platforms like JazaMiti. • Community to County to National Level: Via the County Integrated Reporting System. • Local to County to National Level: Through designated entities such as NEMA, which has staff at the county level. • Project-Specific Reporting: Often flows within silos, limiting integration. • Local-Based Reporting: Information generated remains at the local level and does not flow upward.

ii.   Priority/Key challenges

Key Challenges/Bottlenecks Hindering Kenya's Restoration Process in Planning, Implementing, Monitoring and Reporting
Siloed/Parallel Reporting: Project-specific reporting systems (e.g., GEF) are not linked to government systems and should be integrated.
Lack of Local-Level Monitoring: Citizens at the very local level are not involved in reporting; local monitoring is essential.
Geospatial Data Gaps: Some reporting systems lack geospatial information, making it difficult to locate where restoration activities are occurring.
Integration of County Plans: County-specific plans should be incorporated into national tools (e.g., Jaza Miti app) before developing new systems, leveraging and linking existing plans, tools, and technologies.
Lack of Structured Coordination: This is a cross-cutting issue affecting all stages of restoration.

The group noted that these challenges are largely due to limited funds, inadequate technologies, low human capacity, land tenure issues, and limited or lack of awareness. They emphasized the importance of mapping existing programmes and systems to break silos and improve coordination.

Specific challenges hindering forest ecosystem restoration include insecure tenure rights, inadequate incentives, user rights that do not support long-term investments in restoration, forest fires, and flooding.

A.   Capacity Gaps and Needs Group Activity

The group on capacity gaps and needs identified the following key challenges for effective restoration monitoring and reporting:

- Systemic funding for scaling restoration monitoring.

- Insufficient technical capacity at the national and local levels for mapping, assessment, and monitoring data.

- Lack of harmonized reporting systems across ecosystems, requiring improvements in guidelines, standards, and technical knowledge.

- Gaps in technical capacity for implementing best restoration practices across all ecosystems.

- Inadequate knowledge and capacity to select and implement the right species for the right place and purpose.

- Limited use of Indigenous knowledge on tree species and restoration practices.

- Lack of awareness about the restoration process and various stages of degradation.

- Inadequate and poor-quality planting materials for ecosystem restoration, with limited knowledge and capacity on producing quality seeds and seedlings.

- Limited involvement and empowerment of communities in reporting and monitoring restoration efforts.

- Lack of knowledge and guidance on policies and strategies, such as identifying areas for restoration of degraded land.

- Need for greater coherence on what qualifies as restoration and what is being captured under restoration efforts.

- Lack of mainstreaming restoration as a technical skill in Kenya's universities; technical training is needed for rangers, environmental graduates, and sectoral professionals.

- Inadequate capacity building for tree nurseries as part of the value chain.

- Weak resource mobilization for restoration efforts.

- Fragmented communication and messaging on restoration, creating a gap in awareness and guidance.

- Politically driven restoration initiatives often lack awareness of appropriate tree species, leading to ineffective tree planting.

To address these capacity gaps, the group proposed actions detailed in the table below.

Gap (list and any missing?)	Restoration process step?	Solutions (what activity or intervention takes place?)	Who would have to lead?	Opportunities that currently exist. List/none	Timeline (short, medium, long)
National and local capacity is missing for assessment and monitoring of 'restoration'	Assessment and Monitoring	Development of clear guidelines. Training of staff and IPLCs on appropriate skills for assessing where to restore, and how to monitor	Ministry of Environment + relevant ministries Universities, ILRI, KEFRI	Utilize the county structure to ensure capacity building trickles down. Explore existing guidelines	Medium 2025+
Gap in the awareness and the implementation practices, across all ecosystems.	Guidance on restoring with trees: How to plant, where to plant, what materials to use, and selecting appropriate species. Lack of capacity for restoration in ecosystems beyond tree planting.	Training and Mainstreaming Restoration: • Awareness training and capacity building at the local level, involving local NGOs. • Establishing field schools. • Targeting cross-sectoral stakeholders.	Local and International NGOs, County governments, Chief structures, Universities	Leverage existing restoration programme. CIFOR-ICRAF restoration education or curriculum. Explore ongoing training.	Short – Medium / explore university curriculums.
Availability of genetic resources and improvement of practices in the supply chain.	Assessment and planning	Training on all steps of nursery management, tree seed handling	KALRO, KEFRI other institutions + development partners	Utilize fields stations and extension services	Medium 2025+
Communication and messaging on Restoration	Ditto	Development of a coherent communication plan	Communication arm of the Ministry of Environment	Existing 15B strategy	Short – medium
Expansion of Jaza Miti and national strategy on restoration	Ditto	A revision of the national strategy to include new science + broader ecosystem restoration thinking	MECCF + implementing partners	Leverage the 15B messaging which is widespread. MTWF – interministerial working group (climate)	Short
Systemic funding gaps across all sectors and levels of restoration.	Ditto	Ditto	Ditto	Ditto	Ditto

B. Harmonizing Data Platforms for Ecosystems Reporting

The group on an integrated data management platform for ecosystem restoration refined the discussion topic and developed the following statements:

- Roadmap: Develop a roadmap toward harmonizing data platform standards.
- Stocktaking: Map and understand the number of data platforms currently in use.
- Standard Operating Procedures: Establish standardized procedures for data collection.
- Data Silos: Address siloed data collection by planning a centralized portal at KEFRI for integration.

Categories and Sub-Categories:

- Ensure grassroots data collection systems can feed into the clearing house mechanism.
- Clarify whether all data for NBSAP targets and monitoring are effectively integrated into the clearing house.
- Harmonization: Align some restoration targets, particularly focusing on Target 2.
- Jaza Miti App: Broaden its scope beyond the 15 Billion Tree Growing Initiative to include other restoration activities.
- Restoration Segment Reporting: Collect data under specific indicators, minimize duplication, and include geospatial data and other integrated outputs with distinct indicators.
- Data Processing: Determine whether raw or processed data should be collected and analyzed before submission to the clearing house.

The group emphasized the importance of developing an integrated data management platform with the capacity to provide reliable and verifiable data to support informed and holistic decision-making. The platform should:

- Produce accurate reports.
- Track progress and provide strategic direction.
- Identify stakeholders involved.
- Serve as a basis for financing and capacity-building efforts.
- Contribute to national accounting.
- Enhance consultation and government coordination.
- Aggregate data and enable reporting within agreed timeframes.
- Leverage geo-tagged data, AI, and other advanced technologies.
- Allow for free and accessible data sharing.

To achieve an integrated and harmonized data platform for effective ecosystem reporting, the group proposed the following critical actions:

1. Stocktaking of Existing Platforms: Build on the inventory initiated on July 15.
2. Finalize the Indicator Framework: Develop and align comprehensive indicators for monitoring and reporting.
3. Develop Standard Operating Procedures for Data Collection: Use existing materials and align with Target 2 guidelines.
4. Build an Integrated Platform: Link APIs of various platforms to enable interoperability and generate reports at county, national, and other levels.
5. Harmonize the Reporting Mechanism: Provide clear guidance on reporting processes, including roles, data analysis, and validation protocols. C. Policy Gaps, Coordination Mechanisms and Platforms for Data Exchange

C. Policy Gaps, Coordination Mechanisms and Platforms for Data Exchange

- Overarching Restoration Policy: Develop a comprehensive restoration policy (e.g., under the Environmental Management and Coordination Act - EMCA) to harmonize sectoral policies related to restoration and establish a coordination mechanism.

- Policy Review: Examine existing policies to identify conflicts in mandates and propose solutions to address them.

- Policy Naming: Ensure the overarching policy's name reflects and encompasses all related policies to promote stakeholder ownership.

- Integrated Natural Resource and Conservation Policy: Highlight the ongoing policy process led by the public service to integrate key sectors such as wildlife, energy, agriculture, land use, biodiversity, environment, and land degradation.
  - This policy includes a biodiversity investment component focused on bioprospecting natural resources for investment.
  - Its implementation will be coordinated by the Head of Public Service, the Department of Public Policy, and the President's Priority Initiative.
  - The involvement of a neutral and respected organization ensures directives to all stakeholders are effectively issued and followed.

Additional Proposals:

- Establish a coordinated and harmonized policy environment that supports an inclusive multi-stakeholder platform.

- Create a well-coordinated and integrated policy platform across all levels of government and sectors to facilitate data and information exchange.

- Develop an overarching coordination mechanism to streamline policy development and implementation.

The group also proposed actions for coordinating and harmonizing existing policies (details provided in the table below).

What are the steps/ activities we need to take to achieve this?	Who would have to lead this step?	Who are the critical stakeholder(s) to involve?	Opportunities that currently exist to leverage or to build on	Timeline (short, medium, long) [6 months, 1 year, 2-3 yrs]	What are the capacity & needs to actualize this step?
Launch of the National Biodiversity Coordination Mechanism	MOECCF	NBSAP Technical Working Group	1. Existing NBSAP Team 2. Integrated natural resource and conservation policy development process 3. Existing sectoral policies in agriculture, environment e.g., EMCA, Clearing House Mechanism the National Landscape and Ecosystem Restoration Strategy, The Monitoring Framework 4. The CoG County coordination mechanisms 5. FLLOCA implementation	August 2024	■ Funding ■ Developing an Implementation plan for the NBCM ■ Capacity building on the NBCM ■ Knowledge management ■ Advocacy and sensitization on the NBCM

What are the steps/ activities we need to take to achieve this?	Who would have to lead this step?	Who are the critical stakeholder(s) to involve?	Opportunities that currently exist to leverage or to build on	Timeline (short, medium, long) [6 months, 1 year, 2-3 yrs]	What are the capacity & needs to actualize this step?
Finalizing the NBSAP	State Department of Environment and Climate Change	NBSAP Technical Working Group	The Rapid Baseline Assessment	Short term – End of August 2024	Ditto
Data sharing protocols	National focal point for CBD, UNCCD and UNFCCC National focal point AFR 100	Ditto	Ditto	Ditto	Ditto
Review of the existing policy to identify strengthens, weakness, opportunities and gaps	Head of public service	Kenya Institute of Public Policy and Research (KIPPRA), State Department of Environment and Climate Change, State Department of Forestry, CoG	Communication arm of the Ministry of Environment	Existing 15B strategy	Short – medium
Advocacy and sensitization on policies	Non state actors	Nature Kenya, Conservation International, TNC, IUCN WWF	MECCF + implementing partners	Leverage the 15B messaging which is widespread. MTWF – interministerial working group (climate)	Short
Revitalizing and/or leveraging existing county reporting coordination structures	Ditto	Ditto	Ditto	Ditto	Ditto

D.   Coherent Definitions of Restoration

Regarding coherent definitions of restoration, Group 4 outlined steps to establish standardized definitions of restoration and degradation for each ecosystem. These definitions aim to support a harmonized reporting system in Kenya, aligning local actions with national restoration strategies and fulfilling Kenya's obligations to global agreements. The effort seeks to shape and adapt restoration activities effectively. Toward this goal, Group 4 proposed several actions, detailed in the table below.

What are the steps/ activities we need to take to achieve this?	Who would have to lead this step?	Who are the critical stakeholder(s) to involve?	Opportunities that currently exist to leverage or to build on	Timeline (short, medium, long) [6 months, 1 year, 2-3 yrs]	What are the capacity & needs to actualize this step?
Step 1: Review the existing typologies, definitions, and classification in Kenya.	Ministry of Environment	MECCF, Ministry of Water and sanitation, Ministry Mining, blue economy and Fisheries, Ministry of Agriculture and Livestock Development, Ministry of East Africa Community and ASALs, Ministry of Land, Kenya Agriculture and Livestock Research Organization, Kenya Forest Service, Kenya Wildlife Service, Kenya Forestry Research Institute, Kenya Marine and Fisheries Research Institute, Wildlife Research Training Institute, Water Resource Management Authority, Tana and Athi River Development Authority, Academia, non-state actors-IUCN, Wild Wide Fund, African Wildlife Foundation, Conservation International, World Resources Institute, Kenya Wildlife Conservancy Associations, Communication Authority of Kenya, The Nature Conservancy, Council of Governors, CIFOR-ICRAF, FAO	■ Ministry involvement in the KM-GBF Target 2 ■ Existing National Ecosystem Strategies (mangrove, wetland, etc.) ■ Availability of capacity (human capacity from different institution) ■ Partnership	1 year	■ Ministry mechanism coordination for engagement and alignment ■ Financial Resources ■ Availability of Resources
Step 2: The need for mapping, review metrics for measurement, and fill the gaps for updating including creating guideline	Ministry of Environment	Same as above plus DRSRS and RCMRD	Same as above plus leveraging ongoing projects (e.g., wetland International)	2 years	■ Ministry mechanism coordination for engagement and alignment ■ Financial Resources ■ Technical capacity ■ Availability of infrastructure (tools)
Step 3: the baseline assessment of degradation level (to understand the status of the ecosystem) Identify ecosystems already receiving attention and not	Ministry of Environment	Ditto	Ditto	2 years	Ditto

Step 4: define restoration activities based on ecosystem types	Ministry of Environment	Ditto	Ditto	Continuous process	Ditto

The group went ahead to summarize the collaborative roadmap for coherent definitions of restoration as below.

The stepwise process involves **reviewing existing typologies, definitions, and classifications within Kenya**. This step may take up to one year and leverages opportunities such as ministry involvement in the KM-GBF Target 2, existing national ecosystem strategies, available human capacity, and partnerships. **Key capacity needs** for this step include coordination mechanisms for ministry engagement, financial resources, and the availability of existing resources.

In addition, **addressing the need for mapping, reviewing metrics for measurement, and filling gaps for updating.** This two-year process will involve the same stakeholders and will build on current national ecosystem strategies and data, ongoing projects, and available capacity and partnerships. **Capacity needs** include financial resources, technical capacity, and infrastructure (tools) to support the process.

Furthermore, **conducting a baseline assessment of degradation levels** to understand the ecosystem status and identify ecosystems that are already receiving attention and those that are not. This step, also spanning two years, will utilize the same stakeholder network and opportunities as the previous steps. **Needs** include financial resources, technical capacity, and necessary infrastructure.

Lastly, the process entails **defining restoration activities based on ecosystem types.** This will be a continuous process, informed by the baseline assessment, existing national ecosystem strategies and data, and the capacity from different institutions. The ministry will continue to coordinate with the same stakeholders and leverage available opportunities.

ANNEX V: NATIONAL DIALOGUE PARTICIPANTS LIST

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Yvonne Khaemba	IUCN Kenya office
Mary Ngenyi	State Department for Planning, The National Treasury
Pauline Wairimu	State Department of Fisheries, Aquaculture and Blue Economy
Monicah Njogu	State Department for Wildlife, Ministry of Tourism and Wildlife
Susan Boit	15 billion Tree Growing Secretariat, State Department of Forestry, Ministry of Environment, Climate Change and Forestry
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James Mwang'ombe	Kenya Forest Service (KFS)
Faith Mutwiri	Head of Forest Information, Kenya Forest Service (KFS)
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Silas Mulehi	Department of Resource Surveys and Remote Sensing (DRSRS)
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